Cyberactivism in the Egyptian Revolution: How Civic Engagement and Citizen Journalism Tilted the Balance

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Introduction

"If you want to free a society, just give them Internet access." These were the words of 30-year-old Egyptian activist Wael Ghonim in a CNN interview on February 9, 2011, just two days before long-time dictator Hosni Mubarak was forced to step down under pressure from a popular, youthful, and peaceful revolution. This revolution was characterized by the instrumental use of social media, especially Facebook, Twitter, YouTube, and text messaging by protesters, to bring about political change and democratic transformation. This article focuses on how these new types of media acted as effective tools for promoting civic engagement, through supporting the capabilities of the democratic activists by allowing forums for free speech and political networking opportunities; providing a virtual space for assembly; and supporting the capability of the protestors to plan, organize, and execute peaceful protests.

Additionally, it explores how these new media avenues enabled an effective form of citizen journalism, through providing forums for ordinary citizens to document the protests; to spread the word about ongoing activities; to provide evidence of governmental brutality; and to disseminate their own words and images to each other, and, most importantly, to the outside world through both regional and transnational media.

In discussing these aspects, special attention will be paid to the communication struggle which erupted between the people and the government, through shedding light on how the Egyptian

people engaged in both a political struggle to impose their own agendas and ensure the fulfillment of their demands, while at the same time engaging in a communication struggle to ensure that their authentic voices were heard and that their side of the story was told, thus asserting their will, exercising their agency, and empowering themselves. The article concludes that these aggregate efforts resulted in tilting the political and communication balance in Egypt in favor of freedom-fighters and political activists.

To better understand these phenomena, and how they played out before, during, and after the Egyptian revolution, a brief overview of the dynamics of the transformative Arab media landscape, with a special focus on the role of new media, is mandatory.

The Transformative Arab Media Landscape: The Impact of New Media:

For a number of years, the Arab media landscape has been witnessing a perplexing paradox, namely: a gap between the vibrant and active media arena, where many resistant and oppositional voices could be heard, on one hand, and on the other hand the dormant and stagnant political arena, which did not exhibit any serious signs of active change, popular participation, or true democratization. This puzzling gap, which was prevalent in many parts of the Arab world, was explained by some Arab media scholars (Seib, 2007; Khamis, 2007, 2008) by using the "safety valves" notion, i.e., that Arab media, especially the opposition press, were being exploited by the autocratic ruling regimes as a platform for people to vent their angry feelings and resentment towards their authoritarian governments, instead of taking decisive steps in the direction of radical reform and transformation, thus substituting words for action (Seib, 2007). It was not until the latest wave of political upheaval that swept the Arab region that Arab media, or more precisely new media in the Arab world, started to become effective tools for "public will mobilization" (Salmon, Fernandez & Post, 2010).

Prior to 1990, most media ownership in the Arab world lay with governments, and most media functioned under strict governmental supervision and control. A number of authors (Abdel Rahman, 1985, 2002; Boyd, 1999; Mellor, 2007; Rugh, 2004) argued that in this era Arab media were mostly controlled by governments mainly to keep lay people uninformed, and thus incapable of effectively participating in political controversies and rational debates.

A new media revolution erupted in the Arab world after 1990, inspired by the introduction of both satellite television channels and the Internet (Khamis & Sisler, 2010). In the 1990s Internet penetration started to spread throughout the Arab world. Although the region generally suffered from being on the low end of the digital divide (Abdulla, 2007, p. 35) and faced many challenges, including the lack of human and economic information technology (IT) resources, illiteracy and computer illiteracy, the lack of funds for IT research and development, and the lack of solid telecommunication infrastructures (Abdulla, 2007, p. 35), this situation is rapidly changing, since many Arab countries are currently striving to increase Internet penetration rates.

Ironically, although many Internet websites and blogs were used to defy and resist autocratic governments and dictatorial regimes in the Arab world, a number of these governments took steps to encourage Internet proliferation and accessibility, mainly in order to boost economic development, as in the case of the Egyptian government (Abdulla, 2006, p. 94). This provides more evidence of the highly ambivalent and complex relationship between media and governments in the Arab world (Khamis & Sisler, 2010).

Overall, it could be said that the introduction of satellite television channels and the Internet represented an important shift from the monolithic, state-controlled, and government-owned media pattern to a much more pluralistic and diverse media scene, where many diverse and competing voices representing different political positions and orientations could be heard at the same time, adding to the richness of ongoing political debates and the formation of a wide array of public opinion trends (Khamis, 2007, 2008; Atia, 2006).

The rise in social media usage in the Arab world followed a rise in overall Internet and mobile phone penetration in the region. A study by Philip Howard (2011, pp. 19-20), encompassing predominantly Muslim countries throughout the world, shows that mobile phone and Internet penetration has increased dramatically over the last 10 years, with technology adoption rates in these countries among the highest of all developing nations.

The Internet allows for the dissemination of cultural content in the Arab world (Howard, 2011, p. 163). Much of the user-generated content is transmitted using social media, such as Facebook, the video-sharing portal YouTube, Twitter, and short message service (SMS) or text messaging.

These media enable peer-to-peer communication between users and can be linked to each other,

allowing users to transmit their ideas and images to large numbers of people. Therefore, it is safe to say that one of the most important avenues through which public opinion trends and public spheres are both shaped, as well as reflected, in modern Arab societies is the Internet (Zelaky et al., 2006, p. 5). The significance of the introduction of the Internet stems from the fact that it defies boundaries, challenges governmental media censorship, and provides an alternative voice to traditional media outlets, which echo official, governmental policies and views. In other words, it enables the in-flow and out-flow of information simultaneously through a "virtually defined ...emerging cyberworld that knows no physical boundaries" (Salmon, Fernandez & Post, 2010, p.159). Therefore, it provides invaluable opportunities to public mobilization across borders.

The Internet is also a rapidly growing and expanding medium, especially among young people. Recent research studies indicate that Internet use is increasingly more prevalent among younger age groups within the Arab world, especially the 20 to 30 year old age group, which uses the net more avidly compared to the rest of the population (Abdulla, 2007, p.50). This can very well explain why and how new media were effectively deployed by young people in the Arab world to trigger political reform. In Egypt, for example, the 15 to 17 percent of the population who are active Internet users are mostly youth, who were the driving force behind the Egyptian revolution.

Howard (2011, p. 182) notes that through social media, citizen journalists who are dissatisfied with traditional media's version of events are telling their own stories, and that "these patterns of political expression and learning are key to developing democratic discourses." He observed that social media not only help start democracies, but also help entrench existing ones, and that the "networked design" of social media is the key factor threatening authoritarian regimes, since "These are the communication tools for the wealthy, urban, educated elites whose loyalties or defection will make or break authoritarian rule" (Howard, 2011, p. 11).

Social media can also serve as channels for expressing collective consciousness and national solidarity. Daron Acemoglu (Freeland, 2011) argues that opponents of a dictator need to feel that their views are widely shared and that enough of their fellow citizens are willing to join them. "What really stops people who are oppressed by a regime from protesting is the fear that they will be part of an unsuccessful protest," he says. "When you are living in these regimes, you

have to be extremely afraid of what happens if you participate and the regime doesn't change." Therefore, he contends, satellite television and social networking have made it easier to let each individual know that his/her views are shared by enough people to make protesting worthwhile and safe (Freeland, 2011).

After providing this overview of the impact of the introduction of new media in the Arab world, and before turning our attention to the significant role they played before, during, and after the Egyptian revolution, we have to first provide conceptual definitions of basic terms.

Cyberactivism, Civic Engagement and Citizen Journalism: Conceptual Definitions

The role of new media before, during, and after the Egyptian revolution was especially important in three intertwined ways, namely: enabling cyberactivism, which was a major trigger for street activism; encouraging civic engagement, through aiding the mobilization and organization of protests and other forms of political expression; and promoting a new form of citizen journalism, which provides a platform for ordinary citizens to express themselves and document their own versions of reality. Therefore, it is crucial to provide definitions for these terms, in order to better understand their relevance and applicability in the context of the Egyptian revolution.

Howard (2011, p.145) defines cyberactivism as "the act of using the internet to advance a political cause that is difficult to advance offline," adding that "the goal of such activism is often to create intellectually and emotionally compelling digital artifacts that tell stories of injustice, interpret history, and advocate for particular political outcomes." Cyberactivism differs from mobilization because of the latter's focus on planning, execution, and facilitation of actions. However, they are both closely interrelated, since cyberactivism can help to foster and promote civic engagement, which, in turn, gives birth to various forms of mobilization.

The term civic engagement refers to the process through which civil society is invited to participate in ongoing political, economic and social efforts that are meant to bring about change. According to the Coalition for Civic Engagement and Leadership at the University of Maryland:

Civic engagement is acting upon a heightened sense of responsibility to one's communities. This includes a wide range of

activities, including developing civic sensitivity, participation in building civil society, and benefiting the common good. Civic engagement encompasses the notions of global citizenship and interdependence. Through civic engagement, individuals - as citizens of their communities, their nations, and the world - are empowered as agents of positive social change for a more democratic world.

A better understanding of the term civic engagement requires a deeper comprehension of a closely intertwined term, namely: civil society. Edwards (2004) defined civil society as "a reservoir of caring, cultural life and intellectual innovation, teaching people...the skills of citizenship and nurturing a collection of positive social norms that foster stability, loosely connected under the rubric of 'social capital'" (p. 14). According to Diamond (1999):

civil society is the realm of organized social life that is open, voluntary, self-generating, at least partially self-supporting, autonomous from the state, and bound by a legal order or set of shared rules. It is distinct from 'society' in general in that it involves citizens acting collectively in a public sphere to express their interests, passions, preferences, and ideas...to hold state officials accountable (p. 221).

Most importantly, "According to much contemporary democratic theory, civil society forms the bedrock of good democratic governance – and this sentiment is echoed in more popular political discourse" (Browers, 2006, p. 5). Therefore, "The most noticeable change has been a distinct shift of focus in discussions of democratization from the state to society – that is, from theories that view the state as the locus of political change to theories that see the impetus for change as arising in a non-governmental realm." (Browers, p. 19).

A concept closely interlinked with civic engagement is public will mobilization. The term "public will" refers to "a social force that can mobilize organically, or with external support and influence, to become a political lever for social change...[it] has the potential, if adequately resourced, organized, and mobilized, to serve as the impetus for social change" (Salmon, Fernan-

dez & Post, 2010, p.159). Public will usually "crystallizes around a social condition that is recognized as problematic; it coalesces into a collective consensus about how the problem can and should be ameliorated; and it can erupt, through coordination of resources and collective resolve, into social action" (Salmon, Fernandez & Post, 2010, p.159).

An equally significant concept worth defining is citizen journalism, which provides ordinary citizens the opportunity to document their own version of reality and tell their own side of the story. It is distinguished from professional journalism in that ordinary citizens use digital media tools to report on events on the ground, uploading text and videos directly to the Internet or feeding the information and videos to media outlets. Therefore we can contend that citizen journalism "is a promising new breed of news-making that has been championed by various scholars...[for] granting ordinary citizens a novel, hands-on role" (Reich, 2008, p. 739). Citizen journalism "gives people a voice and therefore power. The people's participation itself and what they produce are regarded with the hope to contribute to an informed citizenry and democracy" (Nip, 2006, p. 212). Citizen journalism assumes that "average citizens are capable of intelligent judgment, mature understanding, and rational choice if offered the opportunity; in other words, that democracy as 'self-government' is not a dream but a practical premise" (Rosen, 1994, p. 18).

After providing conceptual definitions of these key terms, we should now turn our attention to the role that cyberactivism played before, during, and after the Egyptian revolution.

Cyberactivism Before the Egyptian Revolution: Paving the Road for Change:

Before the Tunisian revolution lit the spark for Arab uprisings, the stage had been already set in Egypt by existing protest movements and a network of activist groups that had learned from their previous attempts at affecting change. According to Egyptian political activist Mohamed Mustafa, who was one of the coordinators of the National Coalition for Change campaign and one of the organizers of the January 25 revolution: "Unlike the Tunisian revolution, which was triggered spontaneously through the act of a single person that led to a massive wave of national protest, without any prior planning, the Egyptian revolution was already being planned [since] a long time ago." In fact, a protest was already in the planning stages: the National Coalition for Change had proposed holding a protest for political reform in Cairo's Tahrir Square on January

25, 2011, when Egypt's then-president Hosni Mubarak was going to give a speech to celebrate Police Day (Baker, 2011) in honor of a police revolt suppressed by the British (Hopkins, 2011).

This was not the first time a protest had been called in Egypt. In fact, because the Egyptian people were already fed up with the degree of corruption, dictatorship, economic distress, and humiliation they had been suffering for a long time, several protest movements were already active in the Egyptian political arena. These included, according to Mustafa (2011), the *Kefaya* movement; the Muslim Brotherhood, which was active despite its officially banned status; and Ayman Nour's political party (*Hizb el Ghad*), to mention only a few. He explains that the reason behind their ineffectiveness in bringing about real change had been their failure to achieve public mobilization on a massive scale. Most of their marches and protests attracted only a few hundred, which made it easy for the police to crack down on them.

This was not the case in Egypt's 2011 popular revolution. "The use of new technologies this time helped to spread the word out about this planned protest, to ensure a popular base of support for it and, thus, to assure those organizing the January 25 (protest) that there will be enough numbers of people supporting them," Mustafa (2011) explains. However, he also acknowledges the role of street activism, which preceded the actual revolution and paved the way for it, "Because not everyone in Egypt has Internet access, we had to also make sure through street activism that those who do not have Internet access could also be reached and that their sentiments are in support of the revolution. That was secured in previous campaigns through collecting signatures from lay people to document their support of the "Change Declaration" that was drafted by Dr. ElBaradei; knocking on peoples' doors and rallying their support; and even rehearsing for this major event through sporadic, mini-protests to guarantee public support."

Another group called the April 6 Movement was also active before the revolution. The group was named for its first effort, a labor strike it supported in the Nile Delta city of El-Mahalla el-Kubra on April 6, 2008 (Kirkpatrick & Sanger, 2011; Gopal, 2011; Rosenberg, 2011; Ishani, 2011). The April 6 movement used cell phones, blogs, Twitter, Facebook, and YouTube to document police excesses, organize meetings and protests, alert each other to police movements, and get legal help for those who had been arrested (Ishani, 2011; Nelson, 2008). However, the April 6 protests showed the limits of social media for democratic movements: Facebook attracted many sympathizers online but was unable to organize them well offline (Rosenberg, 2011).

A popular Facebook group affiliated with the April 6 movement, "We Are All Khaled Said," also existed before the uprising and was famously linked to young Google executive Wael Ghonim, its (initially) anonymous creator. The Facebook page had over 350,000 members before January 14, 2011, and it was named for Khaled Said, a young Egyptian man dragged from a café and beaten to death in the street by police in June 2010 (Giglio, 2011, p. 15). Ghonim used the site to educate and inspire Egyptians about democracy, driving home the message that "This is your country; a government official is your employee who gets his salary from your tax money, and you have your rights" (Kirkpatrick & Sanger, 2011). Ghonim claimed that the "We are all Khaled Said" Facebook page was successful because it used surveys to determine the majority's opinion, which then prevailed (Joyce, 2011).

Egyptian tech-savvy activists were fighting back against state control of the Internet prior to the 2011 protests. Many had reached out to the international community to educate themselves on new technologies for bypassing state controls. The April 6 Movement received technical advice from the Italian anarchist party on how to use "ghost servers," which "bounce Internet searches to nonexistent servers to confuse any online monitoring, allowing users to share information and continue coordinating their activities in heavily monitored digital and telecom environments" (Ishani, 2011). Others in the movement worked with the Kenyan NGO Ushahidi to develop their "capabilities for securely and credibly capturing raw video and reporting on the ground with mobile phones and building online content around it," and yet more received training from a U.S. NGO on how to use mapping tools, such as Google Maps and UMapper, to document protests and choose demonstration sites (Ishani, 2011).

Therefore, as Marc Lynch (2011) indicates, Egypt was unlike Tunisia, where the very controlled and restricted information environment before the revolution meant that people were largely unaware of the degree of dissatisfaction with the ruling regime that may be shared with their fellow citizens, and the protests thus resulted in an "information cascade", where "a small act of protest became a wide act of public revolt when proliferated via new media technologies." The Egyptian case was very different: according to Lynch (2011), Egypt enjoyed a much more lively and vibrant communication environment over the last decade, where many oppositional voices were loudly heard and many active political groups were already expressing their discontent with the ruling regime. Therefore, as Lynch (2011) puts it, it was not a matter of knowing, or not

knowing, how their fellow citizens felt about the regime, rather "it was only a matter of calculating the risk involved in protesting and the chances of success; how much people are ready to sacrifice; and whether they are willing to pay the price of freedom."

However, despite the degree of political dissatisfaction that was generally shared among the Egyptian people at large and the availability of shared knowledge and information in the political arena, there was a need to find the missing link between public anger and resentment of the ruling regime on the one hand, and actual public mobilization to bring about real change on the other hand. Political activism in the real world, aided by cyberactivism in the virtual world, succeeded to find this missing link.

Cyberactivism during the Egyptian Revolution: Triggering Public Mobilization

As shown above, social media had already been used by protest movements in Egypt to help in mobilization efforts in previous protests, and so it is no surprise that they were put to use again in the run up to the January 25 revolution. The National Coalition for Change used a well organized and intertwined communication network that included Facebook, Twitter, and YouTube to get the word out and sent text messages, such as "Tell your friends," and "Look what is happening in Tunisia. This is how people change their country" (Baker, 2011). Facebook's largest impact was in the mobilization of protesters (Vila, 2011). In fact, it could be said that the Egyptian revolution witnessed the first incident of the "politicization of Facebook" on a grand scale to orchestrate major reform and drastic change.

Ghonim invited "We Are All Khaled Said" Facebook members to protest on January 25, and within 3 days more than 50,000 people responded that they would attend. As Giglio (2011, p. 16) explains: "Ghonim implored his Facebook fans to spread word of the protest to people on the ground, and he and other activists constantly coordinated efforts, combining online savvy with the street activism long practiced by the country's democracy movements. Ghonim seemed to view the page both as a kind of central command and a rallying point—getting people past 'the psychological barrier."

The social network best suited for the task of organizing the protesters was Facebook, "where information could be spread to thousands of people in an instant and then shared between

friends," and this "dissemination was far faster than leaflets, with the added benefit that those receiving the messages were already interested and trusted the source" (Idle and Nunns, 2011, p. 20). This highlights the value of social media in terms of creating networks that enable peer-topeer communication between users. Networks are multifaceted communication systems comprised of relations that allow for "dynamic, emergent, adaptive, and flexible associations" (Howard, 2011). However, different social media tools lend themselves to different types of networks. Facebook, for example, is built on linkages between "friends", whereas Google Moderator and Twitter allow anyone to comment on a subject. Google Moderator allows for commentary and voting on subjects by all users. Twitter allows users to create a subject for discussion and post a comment, or "tweet," about that subject (which could include a link to other content), which can then be picked up by other users and "retweeted" multiple times, until it becomes widespread. Thus, tools like Twitter lead to an environment where the best ideas and content, regardless of who posted it, can spread and gain great influence in a type of "meritocracy" of ideas and information (Maher, 2011). By combining these multiple functions of different types of online media together in one effective communication network during the January 2011 revolution, it is easy to understand how Egyptian political activists won their battle against the regime, both online and, most importantly, offline.

The "We are all Khaled Said" Facebook page, for example, became an important source of information and advice for protesters, with links to tools like Hotspot Shield, which circumvents web filters, and advice such as "Egyptian flags only, no political emblems, no violence, don't disrupt traffic, bring plenty of water, don't bring your national I.D. card, etc." (York, 2011a). In another example of cross-border exchange of ideas using social media, Tunisian activists on Facebook posted "Advice to the youth of Egypt: Put vinegar or onion under your scarf for tear gas" and brainstormed with their Egyptian counterparts on how to evade state surveillance, resist rubber bullets, and construct barricades (Kirkpatrick & Sanger, 2011).

Zack Brisson et al. (2011, p. 28) reported that Facebook was used as an "advocacy and press management tool by certain opposition groups". For example, they mention that "one leading organizer with the Democratic Front Party described how they turned to Facebook as a spin machine whenever the government provided an opportunity." According to this organizer, "When the security forces broke in our front door on January 26, we immediately put up a Facebook group to collect popular anger and let the media know" (Brisson et al., 2011, p. 28).

Similarly, political activist Mohamed Mustafa describes how the organizers of this revolution used their hand-held mobile devices, especially cell phone cameras, to document any incidents of arrest or police brutality and to upload them immediately to Facebook and tweet about them, thus attracting attention and rallying support.

However, because of security concerns, most of the activists' sensitive planning occurred offline to avoid detection, , especially during the beginning stages, and, if it was not face-to-face, "when technology was used, it was private and one-to-one (SMS, phone calls, GChat), unlike social media, which is public and many-to-many" (Joyce, 2011). In general, Brisson et al., (2011, p. 28) report that "technology was only marginally, if at all, used by several factions critical to the revolution. Even mobile phones, while near ubiquitous, were little used in campaigns by the labor movement and the judiciary." This was due to the groups being mobilized by the labor and judiciary movements (many of them not Internet users), institutional tradition, and fears of Internet surveillance. This again reminds us of the crucial role played by on-the-street public mobilization both before and during the revolution.

And once people were in the streets, Facebook and similar platforms were "less immediately relevant," although online tools were still important for coordination, such as maps made with Google tools and SMSs to alert protesters to sniper locations (Vila, 2011). Twitter was used simultaneously for citizen journalism and mobilization during the revolution. For example, Nadia Idle and Alex Nunns (2011, p. 31) report that "protesters marched through the back streets in districts like Shubra and Boulaq, gathering people as they went, all the while tweeting news of their location and progress." On Twitter, images were posted showing satellite maps marked with arrows indicating where protesters could go to avoid pro-government thugs (Meier, 2011).

Furthermore, protesters on the street used Twitter to "announce new initiatives, like marching to the parliament building, and to boost their collective morale with reports of other developments around the country" (Idle and Nunns, 2011, p. 20). "Planning discussions also took place on Twitter, using the hashtag #Jan25 to enable anyone to join the conversation, and activists talked to each other directly using the @ reply function" (Idle and Nunns, 2011, p. 20).

Cyberactivists used digital artifacts effectively during the Egyptian revolution through "digitally encoding text, video, or audio" and then uploading them directly or synthesizing content by

aggregation ("bringing together content of the same type," such as photos and news articles) and mash-up ("bringing together content of different types," such as "GPS data, video, music, text, and maps)" (Joyce, 2011). These were aggregated and distributed by the protesters to achieve a set of strategic goals during the revolution and beyond.

In brief, it could be said that cyberactivists deployed new media for multiple reasons throughout the revolution. For example, as Mary Joyce (2011) stated, Egyptian activists used digital technologies to broadcast general information; mobilize protesters by sharing information with a "call to action"; co-create by collective "design and planning"; protect each other by "evading censorship and surveillance"; and transfer money.

It is worth noting that the Egyptian revolution entailed not only a political struggle, but also a communication struggle between the government and the activists. Egyptian protesters had been forced to contend with some Internet monitoring before the uprising, but not to the extent seen in Tunisia before its uprising, as previously mentioned. During the uprising, protesters were highly successful in circumventing Internet controls, using tools like the aforementioned Hotspot Shield and Tor, which maintains the anonymity of the user while online (York, 2011a; *Daily Mail*, 2011), and other techniques they had learned before. After the regime blocked Twitter, people tweeted the websites of proxy servers to circumvent the control (Idle and Nunns, 2011, p. 41).

However, once the protests began to threaten the Mubarak regime's existence, the state used a more aggressive — and cruder — method than Tunisia's government to impede Internet and mobile phone access. On January 28, 2011, the Egyptian government shut off the Internet and mobile phone services for the entire country, resulting in a blackout that lasted almost one week (Ishani, 2011). The economic impact of the Internet and mobile phone shutoff was staggering, with preliminary estimates of \$90 million in losses by the Organization for Economic Cooperation and Development (OECD) (Noble, 2011). A survey conducted during the Egyptian uprisings (which covered some days before and after the Internet shutdown) shows the impact that state censorship had on the public:

More than half of the survey respondents stated that governmental restrictions had impeded their ability to use their mobiles and/or the Internet.... On the other hand, only around 20 percent reported having

used the technologies in question to follow or share the news since the start of the uprising – a period which included at least four or five days when Internet and mobile access were not yet blocked. One possible explanation for this apparent contradiction is that interest in acquiring and sharing news via peer-to-peer media grew as the protests mounted, but once the crackdown on these media began, new entrants into the world of social media ran up against the government blockade and were unable to make effective use of these communications methods. If this hypothesis is correct, it is reasonable to assume that the overall usage of mobiles and social networks to gather and share information would have [been] substantially greater in the absence of governmental censorship (IBB Office of Research, 2011).

The blackout, which lasted nearly a week, forced activists to find more innovative workaround solutions, such as setting up FTP (file transfer protocol) accounts to send videos to international news organizations (Ishani, 2011). Another solution they found was using landlines to connect to internet services in neighboring countries by calling international numbers with older dial-up modems, a connection that was slow but sufficient for posting tweets about events on the ground (Sigal, 2011; Seibt, 2011). They even resorted to using Morse code, fax machines, and ham radio to get the word out about events on the ground, and the website for the activist group We Rebuild transcribed transmissions from Egyptian amateur radio stations and posted resources for circumventing the blackout (Seibt, 2011; Daily Mail, 2011). They also smuggled satellite phones and satellite modems into Egypt, which did not depend on Egypt's infrastructure to function (Daily Mail, 2011). The BBC (2011b) noted that "Dial-up [modem] numbers featured heavily in Twitter messages tagged with hashes related to the protests such as #egypt and #jan25". However, the report added, few domestic phone lines in Egypt could call internationally to reach those modems, and so the Egyptian blog Manalaa "gave advice about how to use dial-up using a mobile, bluetooth and a laptop. It noted that the cost of international calls could be 'pricey' but said it was good enough for 'urgent communication'. The advice was posted to many blogs, copied and sent out by many others." The BBC (2011b) added that although most Internet connections were cut, the ISP (internet service provider) Noor was working because it was used by the Egyptian stock exchange and Western companies, and "many people and businesses" who

subscribed to Noor "removed the passwords from their wi-fi routers" so that others could "piggy-back on their connection."

To circumvent the mobile phone blockade, "protesters circulated alternative message centre numbers," which "allowed some locals to continue texting and using services such as Twitter" (BBC, 2011b). Moreover, when the Egyptian government closed down the office of Al Jazeera television channel in Cairo, detained its bureau chief, and blocked Al Jazeera transmission via Nilesat, Egyptians resorted to watching Al Jazeera transmission via Hotbird and Arabsat instead. In every case, they were both resilient and creative in circumventing these blockages.

The protesters also took advantage of international efforts to help them. During the Internet blackout, Google and Twitter scrambled to offer the "Speak-2-Tweet", a service whereby users could call an international telephone number to post and hear Twitter messages without the Internet (BBC, 2011). The Small World Newsproject "Alive" partnered with Speak-2-Tweet to translate voice messages from protesters at Tahrir Square, and one of their reports was that of a 15-year-old boy telling his story about being "abducted from the street, beaten, and detained for 22 days" (Silver, 2011). Some recordings appeared on the Speak-2-Tweet Twitter account from Egyptians who learned about the service during the blackout, possibly via phone calls with friends and family outside of Egypt (York, 2011c). This last point highlights an interesting phenomenon, whereby Egyptian activists were supported by the flow of information coming to them from abroad, while simultaneously influencing international public opinion abroad, through their own coverage of the Egyptian uprising and the information they provided on it. This clearly signals the "indispensable role for the mobilization of communication networks across borders in an attempt to recruit political support and...resources required for public will to emerge and gain traction" (Salmon, Fernandez & Post, 2010, p. 162).

In brief, the Egyptian regime's shutdown of the Internet was not only costly, but it also backfired. It enraged Egyptians accustomed to Internet and mobile phone access (*Daily Mail*, 2011). Young, educated Egyptians were affected by their years of access to the Internet, which shaped their outlook and connections to each another and led to a sense of entitlement to Internet access, "so much so that when this access was revoked [when the regime turned off the Internet during protests] they ended up flooding the streets" (Vila, 2011). Also, speaking at a recent forum, Amira Maaty of the National Endowment for Democracy said that in the absence of the Internet,

people were afraid there would be a massacre, and so they took to the streets in large numbers to protect each other (Maaty, 2011). And when young activists were not able to find their friends and counterparts on Facebook, they took to Tahrir Square to meet them there. Therefore, it could be said that, in this particular case, the lack of information in the virtual world fueled activism in the real world, instead of halting it.

According to Adel Iskander, an adjunct faculty at Georgetown University and an expert on Arab media, the Egyptian people felt insulted by the government's blockage of the Internet and cell phones: "their reaction to this was strong...they became more resilient and more determined, because they refused the government's attempt to 'infantilize' them. Their message to the regime was 'Egypt can't be blocked and its people can't be unplugged'." He also explains that as much as Facebook can be an effective tool for public mobilization and organization, it can also easily become "a weapon of mass distraction", when people spend too much time on it, thus indulging themselves in "virtual activism instead of real activism". Therefore, he contends that shutting down the Internet led to a surge in real activism on the streets, as evident in the huge numbers of protesters (Iskander, 2011).

The regime realized too late that many, if not most, of the people in the streets were not Internet users (Ishani, 2011). In fact, "some of the protesters in Tahrir Square have never heard of Facebook before, but they were energized and inspired by the huge numbers of people flooding to the streets each day" (Iskander, 2011). Therefore it is clear that while the Egyptian activists combined their strong public will and determination for change with the effective utilization of new media to achieve political reform and democratization, the Egyptian government combined its incompetent political strategy with an equally ineffective communication strategy that not only failed to halt political activism, but even fueled it further.

Beside the evident role of civic engagement in the Egyptian uprising, citizen journalism also played a major role. It was inspired by examples from other uprisings, such as those in Iran and Tunisia, where state-controlled television prevailed before their uprisings. According to Idle and Nunns (2011, p. 26), people "no longer had to read stifled accounts in state-run newspapers when they could go on the Internet and hear from...protesters directly through social networks."

During the Egyptian protests, activists worked to connect reports from the protesters to international human rights monitors and to feed images taken by activists to the international

media (Ishani, 2011). Idle and Nunns (2011, pp. 20-21) noted that activists were not only tweeting to other Egyptians but "to the international media and the world" and that they "went to great lengths to get online during the five-day internet blackout, when their tweets could not easily be read by other Egyptians." To do this, activists telephoned friends living abroad to upload tweets, pooled their resources to access Noor, and offered interviews to international news outlets "in return for access to their satellite internet connections," thus ensuring that the regime would not be able to "cut them off from the world" (Idle and Nunns, pp. 20-21).

Protesters uploaded raw videos of police brutality to YouTube and other video sharing sites (Abrougui, 2011). And, during the Internet blackout, while professional journalists struggled to get their stories out, "street protesters were using land lines to call supporters, who translated and published their accounts on Twitter for an international audience hungry for news of the unfolding events" (Ishani, 2011).

Jillian York (2011b) said that as violence escalated on Cairo's streets, professional journalists found it difficult to report on events on the ground, but young Egyptians "were in the thick of things, mobile phones at the ready, often live-tweeting as skirmishes broke out". She added: "Others in various parts of the city uploaded photographs and pictures from the day's events, not just from Tahrir Square but from side streets as well, documenting graffiti, ordinary life, and those now-famous leagues of neighborhood protection committees. Still others tweeted from more remote locations, and from cities without the benefit of dispatched reporters." (York, 2011b)

Furthermore, York said that in situations such as the protests, the advantage of citizen journalism might outweigh the risk of them providing false information because "Egyptians know their country better than CNN, MSNBC, or even Al Jazeera possibly could" (York, 2011b). Therefore, citizen journalists can be the most reliable and credible source of news and information during these significant political events.

Brisson et al. (2011, p. 29) reported that "beyond immediate communications, the near-ubiquitous mobile phone also provided protesters the opportunity to document the events that were unfolding," adding that as "tools for crafting the revolution's narrative, mobile phones gave protesters a sense of ownership" of events, and that their text, videos, and photos "will also be

used to shape the story that will live on." Idle and Nunns (2011, pp. 19-20) noted that Twitter was mostly used as a type of alternative press by professional journalists, bloggers, and ordinary citizen-journalists producing "(usually) accurate bites of information and a flow of videos and pictures," with the result being "like a company of artists painting a constantly updated picture of events".

One of the features of the uprising was the gradual undermining of state TV and newspapers, to the extent that journalists began to resign as the public saw the ludicrous coverage for what it was. Also, instrumental in this process was the contrast provided by transnational satellite TV channels, like Al Jazeera, whose reporting was often influenced by information and footage coming from citizen journalists on the ground (Idle and Nunns, 2011, p. 20).

A credibility crisis emerged in terms of the public's perception of national, state-controlled media, which eventually led to mounting pressure to dismantle and abolish the Egyptian Ministry of Information, in the hope of creating a truly free and liberal media system, thanks to coverage from transnational satellite channels such as Al Jazeera, and the reporting of citizen journalists, who provided minute-by-minute unedited accounts of actions on the ground.

Cyberactivism after the Egyptian Revolution: Transitioning to Democratization

The flame of cyberactivism that sparked the Egyptian revolution was not extinguished when Mubarak left office. In fact, there is sufficient evidence to prove that it is still glowing. National issues are still being discussed and debated online, as well as in traditional media. Global Voices reports that the debate over the recent constitutional referendum "raged in the blogosphere" as well as in newspapers and video advertisements, and that the "yes" and "no" votes were "almost even" on Twitter and Facebook. The "We Are All Khaled Said" Facebook page also polled its members regarding the vote. Although many of the online activists urged citizens to vote "no" on the referendum (in order to allow the constitution to be rewritten instead of simply amended), "the voters overwhelmingly passed the referendum for the new amendments to the constitution," which caused some to question the effectiveness of social media in terms of shaping the opinions of the "masses in the streets" (Amr, 2011c).

Political activist Mohamed Mustafa explains that the "yes" vote by the majority of voters was not an indication of the ineffectiveness of social media or the failure of cyberactivism efforts, but was primarily due to the lack of sufficient awareness among the voters of the nature of the issue they were asked to vote on. He explains that:

The military council didn't allow enough time for a public awareness campaign to take place before the set date of this referendum. This, in turn, resulted in a shortage of knowledge and a vague idea in the voters' minds, many of whom thought that the 'yes' vote is an expression of their patriotic sentiment and their support of the revolution and what it stands for. Therefore, despite the fact that we were hoping for a total change, rather than an amendment of the constitution, the 'yes' vote could still be considered a victory for the revolution and an indication of public support for it. (Mustafa, 2011)

However, regardless of whether the activists can use it to sway opinions, Brisson et al. (2011, p. 17) report that "every week sees the launch of new citizen-driven websites eager to provide an online meeting place for civic debate. Likewise, internet and satellite connections continue to broadcast and build audiences for foreign news entities." Also, in Egypt Wael Ghonim's current project is using Google Moderator, a product of his company, "to help sketch out the direction of the country's future" (Hopkins, 2011). Also, according to Adel Iskander, "more than 2 million Facebook accounts have been created in Egypt since the revolution." Brisson et al. (2011) quote an average Egyptian citizen, who never had a Facebook account before, as saying "Technology is powerful. It allows dialogue... Everyone should be on Facebook. It is our duty."

Cyberactivists in the Egyptian online community have continued to defend free speech advances since the resignation of Mubarak. Global Voices reported that Egyptian blogger Maikel Nabil was arrested by police on April 11, 2011, for posting remarks critical of the military, and by the next day more than 2,700 Egyptians had joined the "Free Maikel Nabil" Facebook site, and a "dedicated Twitter account (@MaikelNabilNews) was created within hours of Nabil's sentencing." Nabil sent a message to his countrymen from jail urging them to "shoulder the burden of newfound freedom" (Masouras, 2011). Users on Twitter also accused the media of

ignoring Nabil's case, and they put pressure on Yosri Fouda, a prominent anchorman in the private Egyptian satellite channel ON-TV, to provide more coverage (Amr, 2011b).

Political activists have also used Google tools for cyberactivism purposes, such as creating an online spreadsheet that documents Mubarak's assets: if anyone knows of an asset not shown on the spreadsheet, he or she can add the information anonymously (Vila, 2011). They also continued to post material online.

However, Luke Allnutt (2011) of the blog Tangled Web points out that one problem with the uploading of videos to sites such as Flickr, YouTube, and the like is that the "information gatekeepers" of those sites are not obliged to support the efforts of the activists. "After protesters broke into the headquarters of the Egyptian security agency, they removed a slew of digital evidence, some of which ended up on Flickr. But Flickr removed the images, citing a violation of its Community Guidelines…" (Allnutt, 2011). He explains that:

Sensitive information -- uploaded in the heat of the moment -- is often taken down, or pages are disabled, because enough people (government lackeys, extremists, whatever) are flagging the content for abuse. As sites like Facebook or YouTube can't personally deal with every flag, automation kicks in. (In a commercial world where Flickr is set up for people to share their family's baby photos, rather than be a repository for sensitive documents from the Egyptian secret services, those terms of service and community guidelines make sense). (Allnutt, 2011)

Also, when the generals of the military transitional government met with representatives of the youth movement, activist Wael Ghonim posted notes from the meeting on a Facebook page he manages (AP/The Huffington Post, 2011). Interestingly, the military, too, has been using social media – in the form of SMS messages – to update the masses on its view of events (Brisson et al., 2011, pp. 29-30). They also lately created their own Facebook page, which was seen as "an attempt on their part to catch up with the wave of technological advancement that is sweeping the country", as Egyptian activist Mohamed Mustafa puts it. He also indicated that the new Egyptian prime minister, who was nominated by the popular revolution, has set up a Facebook page for his government "in an effort to modernize its means of communication."

However, one problem facing digital media is that many do not see it as a secure means to communicate, especially given the regime's history of surveillance:

"Thus, while services such as Facebook could be used in advocacy activities such as recruitment campaigns, they could not be trusted for sensitive organizing. Most senior organizers we spoke with still ran their core activities in a very analog, cellbased fashion. Top strategies were set by leadership committees that gathered regularly in hubs like Cairo.

Upon returning to their communities, these leaders would distribute handwritten organizing documents to collaborators. Using such tactics, one group was able to slowly but confidently disseminate a confidential organizing strategy to a network of 8,000 activists nationwide." (Brisson et al., 2011, p. 30)

Social media's horizontal and non-hierarchical structure was empowering for women, who not only engaged in online activism and citizen journalism through social media, but also effectively and courageously participated in demonstrations and protests. At the peak of the protests in Egypt, for example, roughly one quarter of the million protesters who poured into Tahrir Square each day were women and "Veiled and unveiled women shouted, fought and slept in the streets alongside men, upending traditional expectations of their behavior" (Otterman, 2011). Even after the revolution, Egyptian women are mobilizing to ensure a "gender inclusive democracy" that provides them with full social and political rights, including the right to run for presidential elections, and are insisting on constitutional reforms that safeguard these rights, amid concerns by women activists that the post-revolution committee revising the constitution is all male (Krajeski, 2011).

Since the overthrow of Mubarak, social media has served as a platform for civic engagement, especially for women. Activist Bothaina Kamel, a former television anchor, used Twitter to announce her plans to run for president. Reactions from Twitter users to the announcement were mixed, with some supporting her candidacy (Amr, 2011a). Egyptian blogger and activist Dalia Ziada, who is the North Africa bureau director for the AIC (American Islamic Congress), says that social media "will be vital in building a democracy that respects the rights of women and minorities" and she feels it will "provide a virtual forum that will lead to more tolerance and

exchanges of ideas" (Bortot, 2011). Ziada, who, soon after Mubarak left office, organized Egypt-wide debates on "the role of cyber and traditional media in the democratic process and the question of a civil versus a religious state," said, "When you debate with someone online, they never care who you are, they never care if you are a man or a woman, they never care if you are from an upper-class family or a poor family. ... They just care about your point of view and really focus on what you say. It is mind-to-mind talking." (Bortot, 2011)

A Final Word.....

Cyberctivists in Egypt used new media effectively to express themselves politically, inform others of abuses by the state, organize protests and acts of resistance against the authoritarian regime, and ensure that their voices are heard and that their side of the story is told. In other words, new media were deployed effectively before, during, and after this revolution as tools for protesters to enhance their agency and capabilities and to exercise public will mobilization (Salmon, Fernandez & Post, 2010). Clay Shirky (2011) states that as the "communications landscape gets denser, more complex, and more participatory, the networked population is gaining greater access to information, more opportunities to engage in public speech, and an enhanced ability to undertake collective action. In the political arena...these increased freedoms can help loosely coordinated publics demand change."

One of the most striking aspects of the Egyptian uprising was its loose structure and lack of identifiable leaders. It was largely a grassroots, across the board, horizontal movement that had a bottom-up, rather than a top-down, structure. Charlie Beckett (2011) notes that the Egyptian uprising was "not the work of conventional opposition parties or charismatic leaders." Therefore, he indicates that during this revolution:

... the momentum was animated by collective, marginal actions (e.g., demonstrations) rather than a tactical objective (e.g., seize the Presidential palace). These coalesced in Egypt into that extraordinary physical statement of the crowds in Tahrir Square. Take the battle for Tahrir Square, for example, when protesters faced up to the organised

violent pro-Mubarak incursion into the demonstration. It was resisted in a collective but relatively spontaneous way. (Beckett, 2011)

Becket (2011) added that the "diffuse, horizontal nature of these movements made them very difficult to break. Their diversity and flexibility gave them an organic strength. They were networks, not organisations." It can also be said that they were more about "processes" than "persons". In other words, they were characterized by collective and effective processes of group mobilization, both online and offline, rather than individual acts of leadership by one or more charismatic persons. That's why they were generally described as "leaderless revolutions".

The fact that the uprising was largely leaderless is further evidence that it was a genuine expression of the public's will. The protests were organized and led largely by a loose network of young people, most of whom demonstrated significant capacity for organization, discipline, restraint, and integrity, resulting in a unique peaceful and youthful revolution. This opinion was echoed by Shibli Telhami, Anwar Sadat Chair of Peace and Development at the University of Maryland, who indicated that this revolution did not have any actual or symbolic leaders but rather some "accidental leaders", such as Wael Ghonim, who had been invisibly administering the "We Are All Khaled Said" page, but only became famous after he was detained for 12 days by the Egyptian security forces. "Although he insisted that he is not a hero and should not be given credit for the revolution, he soon started to gain fame and to achieve a celebrity status, which he did not intentionally seek." (Telhami, 2011)

Likewise, Egyptian political activist Mohamed Mustafa emphasized the fact that we cannot single out one person as the "leader" of this revolution, since it was the fruit of many collaborative efforts by different activist groups, many of which had different trends and ideologies, but who all shared one common goal, namely "getting rid of Mubarak and his corrupt, dictatorial regime." He mentions that even someone such as Dr ElBaradei could be at best described as the "godfather" of the Egyptian revolution, since he gave strategic guidance, legal advice, and moral support to the young organizers. However, he still left much room for them to act autonomously and to take their decisions independently (Mustafa, 2011).

The empowerment of protesters was enhanced by social media, which helped to create a type of public commons for free speech, as evidenced by the free expression of views seen in Facebook,

Twitter, YouTube videos, and blogs; provided means for people to find and associate with others of similar political views, as seen by their defiant assembly in public spaces organized by social media; provided a virtual space for assembly, as seen by the popularity of "We Are All Khaled Said" and other popular Facebook pages; supported the capability of the protesters to plan, organize, and execute peaceful protests, as seen by the use of social media by the April 6 movement and other activist groups; and allowed the public to engage in citizen journalism, as seen by the proliferation of cell phone-captured images and videos online and in international media stories.

Social media also empowered activists to associate and share ideas with others globally, enabling collaboration between activists in Egypt and Tunisia, as well as between protesters and Arabs in the diaspora; democracy activists in other countries; and Internet activists, who assisted them in their struggles. Thus, new media not only energized political activism inside Egypt, they also created a "virtual global public sphere" (el-Nawawy & Khamis, 2009), where acts of political resistance could be proliferated and supported internationally. This provides an excellent example of "exogenous mobilization", which takes place, according to Salmon, Fernandez & Post (2010), when governments "actively suppress a group that is attempting to voice its will and express its grievance. In such a case, communication networks outside the social system mobilize support in a variety of forms" (p.163). As the case of the Egyptian revolution reveals, "For these types of efforts, communication is particularly important because of the structural disconnect between the group impacted by the change and those groups mobilizing on their behalf" (Salmon et al., p.163).

That social media were a powerful instrument in the protest movement was revealed when the regime felt it necessary to impede or shut off Internet service to thwart the protesters, despite the damage the disruption caused to the economy. The restrictions and shutdown, however, revealed the protesters' empowerment and determination, as they resisted efforts by the government to block access to the Internet and found innovative ways to circumvent controls. This reminds us that "communication technologies have led to unprecedented amounts of information sharing across borders in spite of efforts by governments to control the flow" (Salmon et al., p.160). These governmental strategies could be attributed to the regime's realization of the significance of global information flow in bringing about social change at the grassroots level and boosting public will mobilization.

However, it would be a mistake to characterize the uprising as a Facebook or Twitter revolution. Although social media played a key role in the Egyptian revolution, it must be stressed that these new media were nothing more than powerful tools and effective catalysts: social media were only effective because of the willingness of large numbers of people to physically engage in and support peaceful social protest, sometimes at great personal cost, including grave injuries and even loss of life. In short, social media were not causes of revolution, but vehicles for empowerment. This opinion is echoed by Adel Iskander who says: "Facebook amplified, magnified and expedited the process of revolt, through providing unique networking opportunities. The strategic use of new media helped the revolution to snowball, through using certain strategies, maneuvers and tactics that turned small protests into a huge challenge to the regime that led to its ultimate demise." However, Iskander (2011) makes it clear that, "If it was not for the power and determination of the Egyptian people to act, organize, and mobilize on the streets, this revolution would have never succeeded."

This reminds us that in referring to the Internet's role in this revolution, it is not realistic to exaggerate the power of new media technologies in a way that reflects "technological determinism," which "falls short in considering the social, cultural and economic contextual factors" (Paulussen, 2008, p. 28), as well as the overall political context that triggered this revolution. Recently, "technological deterministic accounts of online journalism have become outnumbered by social constructivist approaches in which the adoption of online journalism practices...is no longer seen as the result of a technology-driven process, but as the outcome of the complex interaction between professional, organizational, economic and social factors" (Paulussen, 2008, p. 28). Iskander (2011) reminds us that, "We have to respect the complexity and multifaceted nature of revolutions, rather than resorting to categorizing them and labeling them in a manner that oversimplifies or undermines their true nature and special dynamics." He indicates that:

It is very important to understand the nuances of the relationship between technology and activism in the context of the Egyptian revolution, through placing it within its proper historical and sociological framework. In doing so, we have to realize that political activism in the real world was the backbone of this revolution, while technology was at

best a utility that contributed to the success of the revolution. It was still possible for the revolution to take place without this utility, even if it would have taken longer or could have been harder. (Iskander)

Howard (2011, p. 12) said technology does not cause political change, but it does "provide new capacities and impose new constraints on political actors." It will be difficult to quantify the exact contribution of each type of social media to each revolution, but in the words of Wael Ghonim (AFP, 2011) "Without Facebook, without Twitter, without Google, without You Tube, this would have never happened....If there was no social networks it would have never been sparked." We can argue, in an effort to avoid either overestimating or underestimating the role of new media, that although the Egyptian revolution might have still erupted without these new tools, it certainly would not have spread so quickly and achieved its outcomes so effectively.

Given the extensive use of communication technologies by cyberactivists in Egypt, we saw how the government tried hard to limit or suppress access to the Internet and mobile phone services. We also saw how such repressive measures only led to further resistance by young activists, and how they even backfired in some cases. Therefore, in mapping the transformative political and communication landscapes in Egypt, it can be noted that efforts by the state to repress its citizens' empowerment through social media can be dangerous for the state, as well as its citizens. Zeynep Tufekci (2011) points out that repressive regimes face a "dictator's dilemma," in that allowing Internet access for their citizens poses a threat to their regime, but limiting or banning the Internet can lead to isolation that can harm the country economically, as well as socially. During unrest, the dilemma becomes most pronounced as people's empowerment and capacity for free speech is enhanced by the sheer volume of dissent and overwhelms the regime's ability to effectively filter or block the Internet:

The ability to ensure that their struggle and their efforts are not buried in a deep pit of censorship, the ability to continue to have an honest conversation, the ability to know that others know what one knows all combine to create a cycle furthering dissent and upheaval. (Tufekci, 2011)

What's Next?

The success of the Egyptian revolution, and the effective role that new media played in it, has broad implications for repressive states in the Arab region and, indeed, throughout the world. Given the demographic, economic, and political conditions in the broader Middle East region, uprisings and political movements are likely to continue to ferment, especially with the examples of Tunisia and Egypt exemplifying the successful overthrow of authoritarian regimes by peaceful protest. The echoes and ramifications of these two successful revolutions are already being witnessed in Libya, Syria, Yemen, Bahrain, and Jordan, and the ripple effect will not stop there. Howard (2011, pp. 20-21), presciently, given the Egyptian example, noted that nations with significant Muslim populations show "modular political phenomena", i.e., "political action based in significant part on the emulation of successful examples from others," that "successful democratization strategies in particular countries are transported into the collective action strategies of movements in other countries," and that "democratization movements appear to be learning to use information technologies from each other, linking up to share experiences and transporting successful organizational strategies."

In future uprisings in the region, and possibly other parts of the world, it is likely that social media will continue to play a significant role. "New information technologies do not topple dictators; they are used to catch dictators off-guard. Today, being an effective social movement means utilizing social media" (Howard, 2011, p. 12). Also, "The initial conditions for social movement organizing are very different from those of the pre-internet era" (Howard, p. 12).

The final outcome of Egypt's transition to democratization and reform remains to be seen and is likely to depend partially on the continuing successful use of social media by the public to ensure that democracy takes root and leads to permanent and profound change. Brisson et al. (2011) say:

To democratize the fruits of technology, tools must be tailored for wider accessibility. Adapting online tools for use via SMS is one possibility that could serve populations that lack computer access. Basic text messaging remains among the most inclusive technologies. If online services make greater use of this channel, the share of Egyptians able to use them will expand correspondingly. In the meantime, for excluded populations,

technology will continue to impact them only in a proximate manner and through exposure to other, technologically enabled parties. (p. 31)

Most importantly, however, the success of this transition to democratization will depend on the Egyptian people's will and determination to continue putting pressure on the military council that is in charge during this transitional phase, through political activism, such as organizing massive protests and demonstrations, as well as cyberactivism, through which these protests and demonstrations can be organized and orchestrated.

In the past, "it all came down to how much force the authoritarian state was willing and able to deploy – which in turn, depended on the willingness of the security apparatus" (Tufekci, 2011). Today, the state is hindered because images of their actions will be broadcast and seen by "their citizens, their neighbors and their children and grandchildren" (Tufekci, 2011), and, one can also add, by the rest of the world at large. In other words, it could be said that the ability of these new forms of communication to expose the wrongdoings of the ruling regimes and to demonstrate their brutality has led to a new era of accountability and responsibility on the part of these governments that did not exist before this information revolution. Today, no government can afford to totally ignore the power of public opinion on its own streets, or to completely block its ears to the cries of its own people, thanks to the new media in the protesters' hands.

The true implications of the current wave of political upheaval in the Arab world, and the extent to which it will be influenced by social media, remain to be seen over the course of the coming years. As Jeffrey Ghannam (2011) states in a report to the Center for International Media Assistance, "Social networking has changed expectations of freedom of expression and association to the degree that individual and collective capacities to communicate, mobilize, and gain technical knowledge are expected to lead to even greater voice, political influence, and participation over the next 10 to 20 years." Indeed, as Shirky (2011) says, the "potential of social media lies mainly in their support of civil society and the public sphere – change measured in years and decades rather than weeks or months." The fact remains, however, that this new communication revolution has succeeded in providing people in the Arab world with new "weapons" to engage in their simultaneous political and communication struggles against their authoritarian regimes and long-time dictators, namely: their cell phones and computers. It is

through these technological weapons that they can continue to exercise their agency and capabilities, empower themselves, and mobilize their public will.

It is obvious that the Egyptian people were able to successfully use these weapons to win their battle against President Mubarak and his autocratic regime; however, it remains to be seen if they will be equally successful in using them to win their ongoing battle to achieve a swift, safe, and smooth transition to democratization.

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