The Power of 140 Characters? #IranElection and Social Movements in Web 2.0

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Scholars often discuss the Internet's social and political impact in extreme terms. The optimistic school celebrates the birth of a new "civilization of the Mind in Cyberspace" (Barlow, 1996), whereas pessimists caution against selling the Internet as a snake oil cure for all kinds of social problems (Noam, 2001). However, assessing the impact of the Internet in such stark terms is misleading, especially in the case of social media and social movements. In moving away from an optimistic versus pessimistic dichotomy, it becomes possible to see that the effects of the Internet may be ambiguous and variable.

Specifically, an assessment of the role of the micro-blogging site Twitter during the contested 2009 Iranian presidential election reveals that this social medium assisted in the spread of information and thereby supported democracy by countering the censorship of an authoritarian state, yet simultaneously failed to assist the citizens of an oppressive regime in their actual attempts to mobilize on the ground. The Iranian case suggests that interactions between old and new modes of communication and mobilization, between traditional media and micro-blogging, between on-the-ground protests and online activism, allow a social media site like Twitter to become more than the sum of its tweets and play an important role on the global stage.

Setting the Stage

Whatever happens today, Iran can never go back.

You can't put this genie back in the bottle. #iranelections June 12, 2009 11:23pm GMT (oxfordgirl)¹

On June 12, 2009, Iran held a presidential election that pitted incumbent Mahmoud Ahmadinejad against opposition candidate Mir-Hossein Mousavi. On June 13, the Iranian election commission announced Ahmadinejad as the undisputed victor. That same day, massive civil unrest erupted as crowds took to the streets to protest what they believed to be

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¹ All Tweets taken from Cardwell (2009).

election fraud. Protests continued well up to Ahmadinejad's inauguration in August, turning tragic at several points as the state attempted to quell the opposition.

In some ways, this story sounds like a rather typical, if sad, tale of citizen protest in the wake of elections within an authoritarian state. However, this situation was novel, for it marked one of the first times that social media played a key role during such a period of election-related civil unrest. In particular, Twitter became a medium through which citizens could protest and communicate about the contested Iranian elections and a global conversation could occur, even as some participants were located within a closed-off authoritarian regime in which the government routinely censored its citizens. In fact, in the days after the election, some optimists went so far as to assert that these protests merited the label "Twitter Revolution" due to the integral role played by the micro-blogging site. According to the Project for Excellence in Journalism (PEJ) (2009), in the week of June 15-19, Iran was the subject of an astounding 98% of the links on Twitter (pp. 1-2). Moreover, PEJ maintains that, "for many in the mainstream press, Twitter became a symbol of a new kind of activism that can occur online" $(p. 2)^2$.

However, truly understanding Twitter's role in Iran requires a closer look. It is first necessary to consider what Twitter, as a communication medium, afforded within the Iranian context. Next, it is important to scrutinize how the opportunities afforded by Twitter actually affected the social movement itself. Only then is it fair to draw conclusions about the meaning of the protests and just what it means to call Iran a "Twitter Revolution."

Using Technology to Go on the Offensive pls everyone change your location on tweeter to IRAN inc timezone GMT +3.30 hrs -#Iranelection – cont... 5:24 p.m. June 16 (persiankiwi)

Internet-based technologies and social media may create new opportunities for social movements. The Internet allows protestors to collaborate so that they can quickly organize and disseminate a message across the globe, at a lower cost than with traditional methods. By facilitating the rapid diffusion of protest ideas, tactics, and strategies, the Internet thus allows social movements to overcome problems historically associated with collective mobilization (Ayres, 1999). The anonymity of the Internet can also allow citizens to speak out without fear of state

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² In fact, data from the PEJ *News Coverage Index* as well as the PEJ *New Media Index* reveal the extent to which Iran was the top story in both social media and traditional media until the death of Michael Jackson in late June began to attract considerable media attention. Specifically, in news coverage from June 15-19, among blogs and social media the topic accounted for 63% of the week's links, the most attention that any single story received in a particular week since mid-March of that year. In the traditional press, the Iranian situation also led the agenda, with 28% of the week's links. (Project for Excellence in Journalism, 2009).

retribution. In Iran, the Internet might have helped give citizens a voice, because they could instantaneously and perhaps even anonymously share the details of their situation with each other and with others worldwide, even if they lacked political authority or representation in traditional media. The Iranian case may therefore lend credence to the optimistic school.

Repressing the Opposition, Online and in Iran

Advice- your location can be identified from mobile signal - + delete all sms after sending in case u are arrested - #Iranelection 6:37 p.m. June 19 (libra0071)

However, optimism about the Internet's role in social movements must be qualified, for the Iranian state was also able to counter-mobilize via the Internet. Indeed, according to *Network World*'s Brad Reed (2009), "[w]hile the government's initial efforts to censor the Internet were blunt and often ineffective, it has started employing more sophisticated tools to thwart dissidents' attempts to communicate with each other and the outside world" (pp. 1-2). Significantly, the Iranian government had the technology to undertake deep packet inspection (DPI), which Reed (2009) emphasized is "the most refined method that the government has for blocking Internet traffic...[because] deep packet inspectors examine not only a packet's header but also its payload" (p. 2). DPI, especially when deployed in tandem with simpler methods of censorship, allowed the government to exert a great deal of control over information flows both within and out of the country.

In fact, reports of Iranian censorship around this time were numerous. For example, the BBC detected "heavy electronic jamming of one of the satellites the BBC uses in the Middle East" (Horrocks, 2009, p. 1) and there was also evidence, cited by Boston Globe reporter Hiawatha Bray (2009), that Iran temporarily shut down all Internet traffic for a brief period of perhaps 45 minutes (p. 1). Iran could also enforce censorship in more surgical ways: since the government-run company DCI routed all Iranian Internet traffic, the state could have had DCI's Internet routers block access to certain sites (Bray, 2009). While it might still have been possible to use a proxy service located outside of the country to access a forbidden website, a proxy may not have been available, or the government could have located and shut down outside proxy servers.

It is worth noting that, even in the face of such efforts to censor, the Internet should retain some power as a communication medium; for economic reasons, a nation like Iran cannot continue to shut down the Internet for long periods because it would unduly impede international commerce (Bray, 2009). Nonetheless, on the balance, such programs of censorship compromise the ability of citizens to speak freely, especially in a time of political conflict, and suggest that the Internet is not a foolproof way to ensure that democracy will triumph in the face of repression.

Twittering Against the Iranian State (in Theory)

"@twitter Twitter is currently our ONLY way to communicate overnight news in Iran, PLEASE do not take it down." #Iranelection 6:06 p.m. June 15 (mousavi1388)

However, there are still important limitations to such censorship, and the medium of Twitter may be uniquely poised to circumvent government censors, since its architecture allows messages to spread despite government blocks on the flow of information. Because Twitter is a tool as well as a website, government censorship is more problematic (Cohen, 2009). A citizen need not go to Twitter.com to tweet or to read other users' posts, but rather can post and access tweets in a variety of ways that do not involve the Twitter website. Whereas a website like Facebook can be shut down, censoring Twitter would require individually locating and blocking each user. Indeed, in discussing the insights of Harvard Law School professor and Internet scholar Jonathan Zittrain, journalists Brad Stone and Noam Cohen (2009) explained that

Twitter was particularly resilient to censorship because it had so many ways for posts to originate—from a phone, a Web browser or specialized applications—and so many outlets for those posts to appear. As each new home for this material becomes a new target for censorship... a repressive system faces a game of whack-a-mole in blocking Internet address after Internet address carrying the subversive material. (p. 2)

The platform of Twitter may therefore have unique potential in the David vs. Goliath battle against an oppressive regime. However, before drawing broader conclusions, it is important to distinguish between the unique potential afforded by a medium and how that medium is employed in a real-world situation.

Twittering on the Ground (in Practice)

I'm only posting this to say I'm still alive & not in Tehran, I had a bad incident with Basij and couldn't use computer about 11 hours ago from web (4:32) (Change_for_Iran)

A body of literature addressing netwar provides a useful perspective for evaluating the actual successes and failures of Twitter in Iran. Netwar is defined by political scientists John Arquilla and David Ronfeldt (2001) as "an emerging mode of conflict (and crime) at societal levels, short of traditional military warfare, in which the protagonists use network forms of organization and related doctrines, strategies, and technologies attuned to the information age" (p. 6). Although the study of netwar considers other categories of online mobilization, including "hacktivism" and "cyberterrorism," for the scope of this paper, only the branch of the

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³ This scholarly literature on netwar proves relevant, even though it seems to focus more on permanent forms of networked organization as opposed to the relatively spontaneous uprising in Iran. It is true that the Iranian protests emerged in response to a particular event, and therefore may differ in some ways from other long-term conflicts involving the Internet, such as those concerning the Zapatistas or Hamas. Nonetheless, Iran's extended period of protest seems to fit Arquilla & Ronfeldt's (2001) conceptualization of netwar involving "antagonists...organizing into sprawling, loose, 'leaderless' networks, overcoming their former isolated postures as stand-alone groups" (p. 4).

literature involving activism will be addressed. Activism is construed by Naval Postgraduate School professor Dorothy Denning (1999) as "the normal, nondisruptive use of the Internet in support of an agenda or cause" (p. 241).

Such online activism can take many forms, and scrutinizing which forms Twitter did and did not afford in Iran elucidates the impact of social media in the country. Specifically, activists may use the Internet in five distinct ways, which include collection, publication, dialog, coordination of action, and direct lobbying of decision makers (Denning, 2009, p. 243). Two of these categories do not seem particularly applicable in the case of Iran: because the state was not and is not a democracy, direct lobbying of decision makers was not a viable option, on- or off-line; moreover, since the opposition wanted to speak out rather than cull information, collection was not a relevant mode. The question thus becomes how much Twitter allowed the Iranian opposition to engage in publication, dialog, and coordination of action.

In fact, in many cases, Twitter did permit some citizens to publish information. In Iran, as discussed previously, Twitter allowed communication despite state censorship, since the opposition could take advantage of the Internet in general and the architecture of Twitter in particular. Twitter proved quite powerful because users could not only publish their own information, but could also easily link to other websites, especially other social media sites like Flickr and YouTube, which broadcasted multimedia images of the conflict. Indeed, the U.S. State Department justified its request that Twitter delay a scheduled maintenance by explaining, "The discussions were meant to 'highlight to [Twitter] that this was an important means of communication, not with us but horizontally in Iran'" (Labott, 2009, p. 2). To the extent that Twitter allowed information dissemination within Iran, it might have promoted democracy, even in the face of conflict.

Yet, there is a difference between broadcasting information and engaging in dialog or coordinating action, and it is unclear how much Twitter facilitated the latter two objectives. First, even if it was technically possible to use Twitter, Iran's censorship capabilities and repressive tendencies made posting information dangerous enough that Iranians often could not engage in robust discussion or even any discussion at all. In addition, Twitter itself is not necessarily built for conversations: it exists so that a single user can "tweet," which contrasts with sites like Facebook that are built around interactions between users. Moreover, statistics on Twitter usage belie the idea that most Iranian citizens could use the medium to talk to each other. According to the Sysomos Blog, which tracks Twitter usage, as of June 21, 2009, there were 19,235 Twitter users

in Iran, with 9.93% of all Iranian Twitter accounts created in June. Those users who joined in June certainly may have taken advantage of Twitter to dialog, but they represented a very small percentage of the estimated tens of thousands to several million protestors at various rallies in Iran and an even smaller percentage of the 72 million total Iranian citizens. In fact, the majority of tweets on Iran came from outside the country with only a handful of highly influential individuals inside providing vital information (Christensen, 2009). Twitter thus allowed an elite subset of technologically savvy users to communicate without involving most of the population.

Actually, most mobilization within the country occurred via more traditional means. In the words of social network researcher Mike Edwards, "There is this romantic notion that the people tweeting are the ones in the streets, but that is not what is happening...The hubs are generally not people on the ground, and many are not in the country" (Schectman, 2009, p. 2). Social media may work well for pre-organized citizen activism movements, such as the often-cited example of the 1998 protests against the Multilateral Agreement on Investment; however, the case may be different during a grassroots, spontaneous protest against a specific event. Rather than rely on Twitter or other social media to mobilize, especially when the state had blocked mobile-phone text messaging, reduced the speed of Internet connections, and jammed satellite television, journalist Nahid Siamdoust (2009) reported, "everyone began turning to regular phone calls and e-mail, then the only means of communication among the majority of Iranians, apart from word of mouth at rallies" (p.1). The "Twitter Revolution" may not have actually relied on Twitter all that much to mobilize action in Iran. But just because Twitter did not prove particularly helpful in organizing protests on the ground, it does not follow that the use of Twitter in Iran was in no way revolutionary.

Rethinking the Role of Twitter

"Crackdown on Journalists: Journalists are reportedly arrested in Boushehr, Mashad and Rasht" #Iranelection 1:59 p.m. June 21

The role played by Twitter becomes clearer if its impact is reconceptualized not in terms of whom the medium allowed to speak, but in terms of who could listen because of the medium. In fact, although it did not necessarily change the way that people mobilized within Iran, Twitter had a more global impact, because it allowed citizens to publish information that helped win international support for the opposition

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⁴ Sysomos Inc. determined these statistics by "reindexing over 13 million Twitter accounts...to avoid counting those who changed it [location] later to Tehran." It was necessary to reindex in this way because many Twitter users worldwide changed their location to Tehran, even if they were not in the country, in an effort to help Iranian citizens circumvent government censorship (Sysomos Inc., 2009).

movement and provided traditional media with much-needed details on what was happening inside the country's borders.

Critically, Twitter allowed a global audience to listen to the voice of the Iranian opposition rather than hear only the point of view of the state. To return to the analysis of New York Times tech reporter Noam Cohen (2009), even if "only a small number of people used Twitter to organize protests in Iran...Twitter did prove to be a crucial tool in the cat-andmouse game between the opposition and the government over enlisting world opinion" (p. 1). Unlike political conflicts within authoritarian regimes in the past, the state could not suppress free speech and frame the events as effectively; thus, the global audience could better determine for itself which side to support. The impact of Twitter in this regard may have been particularly strong: as Professor Zittrain explained in Cohen's (2009) piece, "[T]he qualities that make Twitter seem inane and half-baked are what makes it so powerful." Cohen himself elaborated, "[E]ach update may not be important. Collectively, however, the tweets can create a personality or environment that reflects the emotions of the moment and helps drive opinion" (p. 2). The frenzy of election-related Twitter postings might have drawn worldwide attention to the movement. Then, the global audience could join in and tweet on behalf of the movement. Even if this support did not translate directly into collective action on the ground, it still possessed a potent expressive function: the collective voice of tweets on Iran sent a message around the world that, in the Internet age, it was simply no longer possible to stamp out the opposition.

Moreover, further examination of just who was listening to Twitter and why illustrates even more about what the Internet might mean for social movements. In the case of Iran, government censorship and a tendency to villainize the media meant that traditional media actually became reliant on social media for information. It is important to recognize just how much the Iranian state handicapped journalists and prevented them from covering the events. As *Time* reporter Siamdoust (2009) explained, "[L]ike other journalists who work for foreign media organizations, I was banned early on from reporting on the protests against the official victory of Mahmoud Ahmadinejad" (p. 1). In fact, it was unsafe for foreign journalists like Siamdoust to even remain in the country after Ayatollah Khamenei attributed the civil unrest in part to the influence of foreign countries and enemies in the media (Siamdoust, 2009). Even in the modern era, state censorship can still shut down traditional media.

However, since state censorship cannot completely stop the flow of information through social media, Twitter became a way for those outside Iran's borders to remain up-to-date on events inside the country, especially given the speed of information dissemination online. Traditional media outlets began to follow information published via social media, with "news organizations across the board...directing resources to the task of vetting sources on social networking sites like Twitter and Facebook as well as their tip lines for authenticity and angles" (Guthrie, 2009, p. 1).

While the Iranian state could (and did) try to quell the opposition inside the country, the interaction between Twitter feeds and traditional journalism in Iran revealed a new relationship between state authority, traditional media and new technology. Although it might be premature to make sweeping generalizations, this relationship may point to broader changes that social media engenders in global power relations (Christensen, 2009). Even if it did not cause the revolution itself, Twitter certainly played a significant role in covering it.

Twittering: Necessary, but not Sufficient? I am crying. Iran are [sic] crying... 12:41 p.m. June 20 (madyar)

While the optimistic school may herald the success of the Internet in improving political life across the globe, it remains prudent to consult the scholarly literature on netwar and recognize the limitations of social media like Twitter. Experts advise that

Netwar is not simply a function of 'the net'...it does not take place only in 'cyberspace' or the 'infosphere.' Some *battles* may occur there, but a *war's* overall conduct and outcome will normally depend mostly on what happens in the real world." (Arquilla & Ronfeldt, 2009, p. 11)

Such a reality check reveals that it might be a mistake to place too much emphasis on what happens in cyberspace in analyzing real-world social movements. In the 2009 Iranian elections, Twitter was limited in its ability to help orchestrate on-the-ground mobilization or facilitate dialogue between citizens. Yet, there is still considerable room for hope. Social technologies like Twitter may have a unique potential to serve as a bridge on the information highway, providing traditional media with new sources and materials and allowing global citizens to tune in when their neighbors turn to alternative media to cry out.

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