ESSAY

JASMINE REVOLUTIONS

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Will the Internet help topple tyrants, or will it further cement their control? Prominent skeptics challenge the notion that the Internet will help rid the world of dictators and, worse yet, hold that it may even assist autocrats in manipulating popular opinion. I defend the liberalizing promise of cyberspace. Where others discredit the value of the Internet to dissidents, I respond to the main critiques of that position—that Internet activism is futile, that the Internet is simply the new opiate of the masses, and that autocrats will benefit more from the Internet than dissidents. I argue that dictators have revealed their own appraisals of the Internet: when threatened, they shut it down. Tyrants today fear the Internet more than they benefit from it. Last summer's events again confirmed this truth: on the day when the rebels marched into Tripoli, they restored Libya's connection to the Internet.

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Introduction

Can Facebook topple a Pharaoh? Can the Internet help depose dictators and free captive peoples?

The upheavals in Tunisia and Egypt saw autocrats with some five decades of power between them hounded out of office by newly invigorated populations, connected in part by the Internet.¹ Observing these spontaneous uprisings, autocrats the world over now fear their own homegrown Jasmine Revolutions.² Indeed, Chinese leaders so fear the possibility that they have declared jasmine plants contraband.³ Wael Ghonim, the Egyptian revolutionary and Google executive, offers a concise formulation of the hope that many have: "If you want to have a free society, just give them the Internet."

But the early enthusiasm about Internet-fueled revolutions delivering the world from tyrants has met a powerful riposte. In the *New York Times*, Frank Rich labels the claim that the Internet had a central role in liberating Egypt a "bloviation." As evidence, Rich cites the fact that the biggest Egyptian protests occurred on a day when the authorities had shut down the Internet. The *New Yorker's Malcolm Gladwell argues that revolutions occurred long before Facebook*. *A Mother Jones writer offers his scorn: "Twitter bears about as much responsibility for the Egyptian uprising as George Soros, Mrs. O'Leary's*

¹ See Elaine Ganley & Bouazza Ben Bouazza, Tunisia Uprising Drives Iron-Fisted Ruler from Power, Huffington Post (Jan. 13, 2011, 11:54 PM), http://www.huffingtonpost.com/2011/01/15/tunisia-uprising-drives-i_n_809459.html; Hosni Mubarak Resigns as President, AL JAZEERA (Feb. 11, 2011, 4:39 PM), http://www.aljazeera.com/news/middleeast/2011/02/201121125158705862.html.

² See Let the Scent of Jasmine Spread, Economist, Jan. 22, 2011, at 15, 15 (opining that "[1]eaders in the rest of the Arab world are nervous" and that Tunisia, as an example, has already "opened an Arab Pandora's box"); Zaid Jilani, REPORT: Five Arab Countries That the Jasmine Revolution' May Spread to Next, Think Progress (Feb. 12, 2011, 4:00 PM), http://thinkprogress.org/security/2011/02/12/143743/report-five-arab-states/?mobile=nc (suggesting that Algeria, Bahrain, Jordan, Syria, and Yemen are all currently experiencing protests and may be next in line to have their own Jasmine Revolution).

³ See Andrew Jacobs & Jonathan Ansfield, Catching Scent of Revolution, China Moves to Snip Jasmine, N.Y. Times, May 11, 2011, at A1.

⁴ Egypt Uprising: Hosni Mubarak Steps Down; Interview with Wael Ghonim (CNN newscast Feb. 11, 2011) (transcript available at http://transcripts.cnn.com/TRANSCRIPTS/1102/11/bn.02.html).

 $^{^5}$ $\,$ Frank Rich, Op-Ed., Wallflowers at the Revolution, N.Y. Times, Feb. 6, 2011, at WK8.

⁶ See id. (quoting Jim Clancy, CNN Saturday Morning News (CNN newscast Jan. 29, 2011) (transcript available at http://transcripts.cnn.com/TRANSCRIPTS/1101/29/smn. 02.html)).

⁷ See Malcolm Gladwell, Does Egypt Need Twitter?, New Yorker (Feb. 2, 2011), http://www.newyorker.com/online/blogs/newsdesk/2011/02/does-egypt-need-twitter.html (arguing that "[p]eople with a grievance will always find ways to communicate with each other" and that the means by which they choose to communicate are intrinsically less interesting than the reason driving them to communicate in the first place).

cow, and the Flying Spaghetti Monster."8 Let us call this the "Internet Democratization Skeptic" position.

Two recently published books frame this argument well. In his editorial, Rich relies on a new book by Evgeny Morozov. Morozov, a young writer born in Belarus, has penned a widely noted book on the possibility of Internet-led democratization. Morozov has little patience for the enthusiasm of those who extol the democratizing features of the web. Morozov acidly characterizes such people as "delusional." How could Twitter have been important to Iranian protests, Morozov complains, when there are merely 19,235 accounts registered to Iranians? A second, less well-publicized book is less tendentious. Access Controlled, whose editors include two prominent Harvard law professors John Palfrey and Jonathan Zittrain, is the project of the OpenNet Initiative. It surveys and analyzes the efforts by Organization for Security and Cooperation in Europe (OSCE) countries to control the Internet.

Between these two books, we can identify three central claims. First, the role of the Internet in liberalizing repressive societies has been overhyped. This is one of Morozov's claims—offered in the vein of the serious realist, pinching awake the starry-eyed utopian. Second, the Internet may in fact be a regressive force, often more useful for repressive governments than for their antagonists. Both Morozov and *Access Controlled* suggest this, the latter without Morozov's conviction that this is the most likely scenario in authoritarian countries

 $^{^8}$ Adam Weinstein, Malcolm Gladwell Tackles Egypt, Twitter, MOTHER JONES (Feb. 2, 2011, 4:29 PM), http://motherjones.com/mojo/2011/02/malcolm-gladwell-tackles-egypt-twitter.

⁹ See Evgeny Morozov, The Net Delusion: The Dark Side of Internet Freedom (2011).

¹⁰ See, e.g., id., at xii ("Much of the present excitement about the Internet, particularly the high hopes that are pinned on it in terms of opening up closed societies, stems from such selective and, at times, incorrect readings of history, rewritten to glorify the genius of Ronald Reagan and minimize the role of structural conditions and the inherent contradictions of the Soviet system.").

MOROZOV, supra note 9.

¹² See id. at 15. I address this claim below at infra notes 20–33 and accompanying text.

¹³ Access Controlled: The Shaping of Power, Rights, and Rule in Cyberspace, at ix (Ronald Deibert et al. eds., 2010) [hereinafter Access Controlled]. The OpenNet Initiative is an international collaboration between the University of Toronto's Citizen Lab, Harvard University's Berkman Center for Internet and Society, and the SecDev Group. *About ONI*, OpenNet Initiative, http://opennet.net/about-oni (last visited July 9, 2012).

¹⁴ See Ronald Deibert & Rafal Rohozinski, Beyond Denial: Introducing Next-Generation Information Access Controls, in Access Controlled, supra note 13, at 3, 6. The OSCE, formed as an East-West forum during the Cold War, now includes fifty-six countries, including the former Commonwealth of Independent States countries, Eastern and Western Europe, Canada, and the United States. Id.

¹⁵ See, e.g., Morozov, supra note 9, at 14 (claiming that Twitter could hardly be seen as "playing a crucial role in the Iranian unrest" and that the Iranian censorship was the equivalent of a "digital witch hunt[]").

around the world.¹⁶ Third, and finally, efforts to control the Internet in liberal states are likely to be used as models by repressive regimes. This last claim forms a central motif in *Access Controlled*, which, unlike most earlier studies, reviews Internet controls in both illiberal and liberal societies.¹⁷

While many have pressed the positive potential of the Internet for undermining totalitarian states, there has been surprisingly little effort to respond to the claims of those who draw a darker future. In this Essay, I take up the challenge by the Internet Democratization Skeptics directly, using *The Net Delusion* and *Access Controlled* as the principal articulations of that position.

The Essay proceeds as follows: In Part I, I evaluate the claim that the Internet is largely irrelevant to today's revolutions, simply replacing the pen and ink tools of earlier revolutionaries. If both Martin Luther and Martin Luther King, Jr. managed their feats without electronic media, why do today's reformers need the Internet? Is our current generation of dissidents that much more pusillanimous? I will argue that the Internet improves on prior communications technologies in a revolutionary way and that the Internet contributed to the Arab Spring in ways that print could not. I reimagine recent events in

¹⁶ See, e.g., id., at xvii (claiming that "[the Internet] empowers the strong and disempowers the weak"); Ronald Deibert & Rafal Rohozinski, Control and Subversion in Russian Cyberspace, in Access Controlled, supra note 13, at 15, 16 (observing that "state actors have also come to recognize that these technologies make opposition movements vulnerable, and that disruption, intimidation, and disinformation can also cause these movements to fragment and fail" and pointing to the opposition movements in Belarus and Azerbaijan as examples where information controls limited the opposition's effectiveness). Morozov also points to China as an example of an authoritarian government that engages in outright censorship by blocking websites, forcing private companies to block access to websites, and requiring software—that not only blocked banned resources, but analyzed users' actions and guessed whether the behavior was permitted—be installed on all computers sold in China. See Morozov, supra note 9, at 98, 101–02.

¹⁷ See Access Controlled, supra note 13, at 109–598 (providing an overview of internet monitoring, restrictions, and filtering in the Commonwealth of Independent States, Europe, North America, Australia and New Zealand, Asia, the Middle East, and North Africa); Hal Roberts & John Palfrey, The EU Data Retention Directive in an Era of Internet Surveillance, in Access Controlled, supra note 13, at 35, 35 (describing the European Union's requirement that Internet and telecommunications providers retain user information as a threat to privacy and security); cf. Morozov, supra note 9, at 287 ("[N]ew technologies often entrench old practices and make them more widespread.").

One exception to this is Clay Shirky, who devotes only three pages to the task of responding to the Skeptics, arguing that (1) Internet activists supplement their activities with offline mobilization and (2) governments have shown their worry about Internet activism by arresting and killing Internet users. See Clay Shirky, The Political Power of Social Media: Technology, the Public Sphere, and Political Change, 90 Foreign Aff. 28, 38–40 (2011) (noting that "[r]-ecent protest movements . . . have used social media not as a replacement for real-world action but as a way to coordinate it" and that the real reason to believe that social media may bring about political change is that both activists and governments think that it can, as shown by governments' willingness to harass, arrest, exile, or kill users).

the absence of the Internet to show the even greater hurdles that the revolutionaries would have faced.

In Part II, I go further to argue that the Internet will likely prove more useful to dissidents than to despots—this is the "Internet Democracy Optimist" position. History, I believe, is on my side: in case after case, authoritarian governments threatened with rebellion have pulled the plug on the Internet. In Burma, China, Egypt, Libya, and Syria, governments faced with rebellion have shut off the Internet. ¹⁹ The Internet Democratization Skeptics might read those governments' shuttering of the Internet as proof that Internet activists can be trivially defeated. Just pull the plug, and voilà, the activists can no longer foment trouble. If the earlier Skeptics' claim is that Internet activists can be easily fooled, this claim is that they can be easily foiled. I suggest that pulling the plug proves a different point: authoritarian governments currently fear the Internet more than they rely upon it.

In the final Part, I turn to the possibility that Western efforts to control the Internet might be used as precedents by totalitarian governments keen to cement their control. This is indeed a worrying possibility and one that liberal states would do well to keep in mind.

I Tweeting Against Tanks

How could a technology that distributes messages 140 characters long change the world? How could a blog post or a webpage spark a revolution?

Morozov is skeptical that information revolutions can lead to political revolutions, offering three principal arguments against Internet-fueled political change. First, he contends that the Internet allows people to believe that they are contributing to change, when they are in fact tweeting into the darkness (the "slacktivism" argument). Second, he believes that the Internet is likely to serve as just another opiate of the masses, distracting them from politics with base entertainment, especially pornography (the "opiate of the masses" argument). Third, he says that historical change such as the fall of the Soviet Bloc governments occurred largely because of economic, not technological, reasons (the "economic determinism" argument). I

¹⁹ See infra notes 100–28 and accompanying text; see also Sean Ludwig, Internet Shut Down in Syria amid Mass Protests, VentureBeat (June 3, 2011, 11:34 AM), http://venturebeat.com/2011/06/03/internet-shut-down-in-syria-amid-mass-protests/ (noting that "[w]hen a Middle Eastern country is in the thick of an uprising, it's almost expected that challenged governments will shut down the Internet to hinder protesters from communicating" and that Syria is the latest among Egypt, Bahrain, and Libya to kill the internet); Reaching for the Kill Switch, Economist, Feb. 10, 2011, at 67, 67–68 (noting that the authorities in Egypt "simply told internet service providers (ISPs) to switch off their computers").

take up each of these arguments for the ineffectual nature of Internet activism in turn.

A. Merely Slacktivism?

Morozov argues that the Internet just simply allows for "shallow commitment." Political opinions expressed through Facebook status updates rather than real world actions are, Morozov believes, ineffectual. This is the phenomenon that some have labeled "slacktivism." Malcolm Gladwell similarly suggests that the Internet does not nurture the "strong ties" or the deep commitments needed to accomplish real change. 22

But one does not need every citizen to be the next Thomas Paine or Wael Ghonim. Indeed, that is why we remember their names. Even if two million people gathered at the height of the Tahrir Square protests,23 that still amounts to just 18 percent of the population of Cairo, and 2 percent of the population of Egypt (though, of course, there were protests elsewhere in Egypt as well).²⁴ Yet, even that small share of Egypt caused regime change in a state where an autocratic regime had held close control for decades. Even if only a few thousand Iranians used Twitter to tell their story, and even if some of those were government supporters, Twitter helped inform the world about the protests and the police crackdown in Iran when traditional media were severely handicapped in doing so. Twitter was certainly not the only such tool used by the Green Movement: Victoria Grand, You-Tube's head of policy and communication, says that during the protests "people were holding up their cameras as it were a sword in a way. They really understood that if you can get the global community to see what's happening that will be your greatest defence."25 Moreover, any effort to enumerate how many Twitter users hail from Iran must reconcile the fact that many in Iran might have thought it unwise to declare their true location to the world.

²⁰ See Morozov, supra note 9, at 185–86.

²¹ See, e.g., id. at 189–90. As Morozov notes, while Facebook and Twitter updates can be instrumental in raising awareness, this awareness is often not leveraged in a way that converts awareness into action. *Id.*

²² See Gladwell, supra note 7.

This is the high end of the reported figures. Carl Bialik, *Sizing Up Crowds Pushes Limits of Technology*, Wall St. J., Feb. 5–6, 2011, at A4 ("The protests filling Tahrir Square have been composed of anywhere from tens of thousands to two million people, according to news accounts.").

²⁴ The World Factbook: Egypt, Cent. Intelligence Agency, https://www.cia.gov/library/publications/the-world-factbook/geos/eg.html (last updated July 2, 2012) (estimating the population of Egypt to be 83,688,164 and the population of Cairo to be 10,909,000)

 $^{^{25}}$ Matthew Weaver, The 'Twitter Revolution' That Never Materialised, Guardian, June 10, 2010, at 19.

For his part, Morozov writes as if the Internet Democratization Optimists believe that a tweet coupled with a sufficient number of "likes" on a social network page will end decades-old despotism. One would have to defy experience to believe that the circulation of even the most graphic YouTube video of state sanctioned violence would, by itself, lay a government low. Change is always much harder than that. Change comes from brave people marching in the streets, risking their own lives and the lives of their families. It requires pressure and support from the outside world, which must show the willingness to forgo the short-term benefits that might flow from supporting the authoritarian regime in control of the country's resources. Indeed, that was the experience in the Arab Spring-individuals and groups organizing, marching, and risking their lives in the ruthless police states they lived in to try to build a better future for their children. But, contrary to Gladwell's claim, the information channels of electronic media were central to their organization, information sharing, and self-empowerment.²⁶

Not only is the online dissident activity important, it is also dangerous for the dissidents. Nearly half of all media workers jailed worldwide are "journalists whose work appeared primarily online."²⁷ These individuals are often quite vulnerable; as Joel Simon of the Committee to Protect Journalists observes, "[t]he image of the solitary blogger working at home in pajamas may be appealing, but when the knock comes on the door they are alone and vulnerable."²⁸ It is useful to recall that Wael Ghonim used Facebook to highlight the brutal killing of Khaled Said in Egyptian police custody.²⁹ Why was Said killed? Reports suggest that Said was targeted because he was about to release a video online "showing Egyptian police dividing up spoils of a

²⁶ See John Pollock, Streetbook: How Egyptian and Tunisian Youth Hacked the Arab Spring, Tech. Rev., Sept.—Oct. 2011, at 70, 78 (citing social media's "crucial role" in connecting individuals in the movement). Contra Gladwell, supra note 7 ("People with a grievance will always find ways to communicate with each other. How they choose to do it is less interesting, in the end, than why they were driven to do it in the first place.").

²⁷ Iran, China Drive Prison Tally to 14-Year High, COMMITTEE TO PROTECT JOURNALISTS (Dec. 8, 2010), http://www.cpj.org/reports/2010/12/cpj-journalist-prison-census-iran-china-highest-14-years.php.

²⁸ CPJ's 2008 Prison Census: Online and in Jail, Committee to Protect Journalists (Dec. 4, 2008), http://www.cpj.org/imprisoned/cpjs-2008-census-online-journalists-now-jailed-mor.php; see also Bloggers Under Fire, Electronic Frontier Found., https://www.eff.org/issues/bloggers-under-fire (last visited July 9, 2012) (discussing a Committee to Protect Journalists statistic that in 2008, "45% of all imprisoned journalists were arrested for activities conducted online").

Wael Ghonim: Creating a 'Revolution 2.0' in Egypt (NPR broadcast Feb. 9, 2012), available at http://www.npr.org/2012/02/09/146636605/wael-ghonim-creating-a-revolution-2-0-in-egypt.

drug bust."³⁰ Such risks persist. The Electronic Frontier Foundation continues to document risks to bloggers across the world.³¹ While I write this, Syrian-citizen journalists are risking their lives to document the government's brutality. In December 2011, a young Syrian, Basil al-Sayed, was shot fatally in the head by security forces while filming in Homs, Syria.³² In February 2012, Rami al-Sayed was killed after documenting the shelling of Homs through some 800 videos.³³

B. Opiate of the Masses?

Morozov's second concern is that the Internet offers the new opiate of the masses, a vehicle for mass distraction. Thus, for Morozov, even access to better informational tools will prove largely unavailing. When citizens obtain tools to access uncensored information, Morozov suggests, they will simply use them to download pornography. To illustrate his argument, he offers the example of a Russian website, "The Tits Show," involving a Russian man groping his way through Moscow.³⁴ He notes that efforts by the OpenNet Initiative to provide uncensored information via an Internet tool called Psiphon were used in China to search for nude pictures of American celebrities.35 This is part of Morozov's general worry—the use of the Internet to access popular culture rather than political information. For example, he notes that on June 25, 2009, tweets about the death of Michael Jackson overshadowed ones about the Iranian political demonstrations.³⁶ Chinese people use the Internet to download and subtitle episodes of Lost rather, Morozov seems to imply, than educating themselves on their civil liberties predicament.³⁷ Morozov suggests astonishingly, "[o]nce Burma is fully wired . . . the government won't have to try hard [to control political speech] anymore; their citizens will get distracted on their own."38 If only the Buddhist monks had been given smartphones, they might not have bothered to protest the

³⁰ Geoffrey Mock, *Egypt: Stand Up for Khalid Said!*, Hum. Rts. Now: Amnesty Int'l USA Web Log (June 19, 2010, 9:45 PM), http://blog.amnestyusa.org/iar/egypt-stand-up-for-khalid-said/.

³¹ Bloggers Under Fire, supra note 28.

Ahmed Al Omran, *Basil Al-Sayed, Who Chronicled the Syrian Uprising, Is Dead*, NPR (Dec. 29, 2011, 6:14 PM), http://www.npr.org/blogs/thetwo-way/2011/12/29/144448 779/basil-al-sayed-who-chronicled-the-syrian-uprising-is-dead.

³³ See Ruth Pollard, Deadly Risk for Those Who Bear Witness, Sydney Morning Herald, Feb. 25, 2012, http://www.smh.com.au/world/deadly-risk-for-those-who-bear-witness-2012 0994-1ttlf html.

³⁴ Morozov, supra note 9, at 57–59.

³⁵ *Id.* at 71.

³⁶ Id. at 66.

³⁷ Id. at 69.

³⁸ Id. at 69-70.

condition of their country—or so Morozov's reasoning seems to go.³⁹ Morozov concludes that it is "highly naïve to assume that political ideals—let alone dissent—will somehow emerge from this great hodgepodge of consumerism, entertainment, and sex."⁴⁰

Yet, the tools of communication, once dispersed via the Internet, are difficult to contain to pure entertainment. One might begin by noting that history is replete with critiques of authorities embedded within fictional works. For their part, Chinese activists have cleverly used literary devices to criticize their governors.⁴¹ China scholars Ashley Esarey and Xiao Qiang conclude after a survey of Chinese blogs that Chinese bloggers have developed a "hidden transcript" that allows them to share political speech that they previously confided to only small circles of trusted friends.⁴² Through the Internet, the "Chinese are speaking truth to each other, and by doing so in a widely accessible manner, are speaking truth to power."43 Chinese bloggers have become inventive to elude both automatic and human censors: "To slip past censors, Chinese bloggers have become masters of comic subterfuge, cloaking their messages in protective layers of irony and satire."44 For example, unable to criticize their own government, Chinese dissidents instead censure "West Korea." 45

In addition, tools such as Psiphon are indeed used by dissidents to evade government censors.⁴⁶ Furthermore, in any free society, the

³⁹ For a report on the brutal suppression of the monks, see Special Rapporteur on the Situation of Human Rights in Myanmar, *Human Rights Situations That Require the Council's Attention*, United Nations Human Rights Council, U.N. Doc. A/HRC/6/14 (Dec. 7, 2007) (by Paulo Sérgio Pinheiro).

⁴⁰ Morozov, *supra* note 9, at 70.

⁴¹ See, e.g., Michael Wines, Mythical Beast (a Dirty Pun) Tweaks China's Web Censors, N.Y. Times, Mar. 12, 2009, at A1 (detailing the foul-named Chinese pun that has become an "icon of resistance to" and "an impish protest against censorship").

⁴² See Ashley Esarey & Xiao Qiang, Political Expression in the Chinese Blogosphere: Below the Radar, 48 ASIAN SURV. 752, 752 (2008).

⁴³ Id. at 753.

⁴⁴ Brook Larmer, Where an Internet Joke Is Not Just a Joke: It's a Form of Defiance—and the Government Is Not Amused, N.Y. Times, Oct. 30, 2011 (Magazine), at MM34 (describing the rise of "egao," meaning "mischievous mockery," in Chinese blogosphere).

⁴⁵ See Editorial, The Great Firewall of China: The Communists Can't Keep 1.3 Billion Offline Forever, Wash. Times, May 11, 2011, at B2; West Korea, China Digital Space, http://china digitaltimes.net/space/West_Korea (last visited July 15, 2012).

⁴⁶ See Morozov, supra note 9, at 71 (noting a 2007 experiment in which a Western organization lent computer bandwidtch, via Psiphon, to Internet-users in foreign countries "in the hope that, once they got their first taste of unfettered online freedom, they would use [it] to educate themselves about the horrors of their regimes . . . the users searched for 'nude pictures of Gwen Stefani and photos of a panty-less Britney Spears'" (quoting Andy Greenberg, Porn-Surfing by Proxy, Forbes.com (May 30, 2007, 6:00 AM), http://www.forbes.com/2007/05/30/psiphon-server-censorship-tech-intel-cx_ag_0530techpsiphon.html)). However, in a later story, Greenberg argues that "[w]eb anonymity tools like Tor and Psiphon have offered users in repressive countries a valuable safeguard from Big Brother governments monitoring their broadband." Andy Greenberg, A Wolf in Your Browser's Cloth-

sacred and the profane are likely to mix in various measures. Consider two examples—one from the eighteenth century and one from the 1980s. Some publishers active in Northern Europe during the Enlightenment produced not just major scholarly works but also erotica.⁴⁷ More recently, an American pornographer provided a prominent precedent in the United States for political speech. In the case of *Hustler Magazine, Inc. v. Falwell*, the Supreme Court held that a profane parody of a religious figure could not justify a civil damages action against the pornographer.⁴⁸ In ruling for the pornographer, the Court referred to a precedent in an early cartoon "portraying George Washington as an ass."⁴⁹

As if to prove that faster communication has eroded our public discourse in the past, Morozov says "[t]he brevity of the telegraph's messages . . . may have opened access to more sources of information, but it also made public discourse much shallower."50 This hardly seems likely. After the advent of the telegraph, rather than conjecture about far-off events, one could obtain current dispatches about the world at large.⁵¹ There are those who would complain about the replacement of the handwritten letter, in which each sentence is carefully composed because ink does not allow mistakes, with e-mails, in which grammar, punctuation and even the full word give way to speedy communication. Yet, having just experienced the death of a friend, I have received e-mails that are as powerful or moving as any pen and ink letter. And some of these were delivered via listsery to large groups of individuals simultaneously. Furthermore, the wonder of Twitter or Weibo⁵² is not just the occasional pithy insight but also the mosaic that is created through small contributions by multiple people. Finally, individuals today hardly limit themselves to expression only via Twitter. Indeed, social media allows them to use video, blogs, and websites to communicate.

C. Economics, Not Information?

Hailing from a country once behind the Iron Curtain, Morozov seeks to study an important precedent for revolutionary political

ing, Forbes.com (Feb. 19, 2009, 3:30 PM), http://www.forbes.com/2009/02/19/hacker-internet-browser-technology-security_hacker.html.

⁴⁷ See Adrian Johns, The Nature of the Book: Print and Knowledge in the Making 454 (1998) ("Joseph Streater's house produced Newton's *Principia*, pirated almanacs, and pornography at the same time. Such juxtapositions were probably the rule, not the exception.").

^{48 485} U.S. 46, 57 (1988).

⁴⁹ See id. at 54.

MOROZOV, supra note 9, at 277.

⁵¹ *Id.* at 276–77.

 $^{^{52}}$ Weibo is the Chinese version of Twitter. See Weibo, http://www.weibo.com (last visited July 15, 2012).

change—the fall of that Curtain beginning in 1989.⁵³ Morozov claims that Westerners have fallen for the romance that it was information that felled the authoritarian governments of Eastern Europe.⁵⁴ He cites a Rand Corporation study and a book by Scott Shane, a *Baltimore Sun* correspondent, to this effect.⁵⁵ Morozov himself prefers to explain the changes through "structural, historical factors—the unbearable foreign debt accumulated by many Central European countries, the slowing down of the Soviet economy, the inability of the Warsaw Pact to compete with NATO."⁵⁶ This is evidence for his broader claim that information technologies are not key drivers in revolutionary change.⁵⁷

Is it really the case that many believe that "1989 was a popular revolution from below"?⁵⁸ Even Yahoo! Answers, unreliable as it is, offers a more convincing (and crowd-sourced) popular explanation for the demise of the Soviet empire: "The Soviet economy was slowly becoming stagnant, whilst military spending went through the roof."⁵⁹ In any case, the fact that 1989 might not have been the result principally of the dissemination of information does not mean that information was irrelevant to the transformations that took place. The underground dissident publications in Eastern Europe, known as *samizdat*, were important in cultivating dissident voices and circulating dissident speech behind the Iron Curtain.⁶⁰

A believer in economic determinism might point to the fact that the person who (tragically and literally) ignited the first Jasmine Revolution was protesting against police actions that threatened his livelihood. Mohamed Bouazizi, "a Tunisian fruit vendor who found that official harassment made his job impossible," set himself on fire to call attention to governmental abuses.⁶¹ Yet, his mother insists that "Mohammed did what he did for the sake of his dignity."⁶² The Washington Post also reported on his mother's explanation: "The Bouazizi

⁵³ See Morozov, supra note 9, at 33–56.

⁵⁴ Id. at 48-50.

 $^{^{55}}$ Id. at 49–50 (referencing Scott Shane, Dismantling Utopia: How Information Ended the Soviet Union (1994)).

⁵⁶ *Id.* at 51.

⁵⁷ Id. at xi-xiv, xvi-xvii.

⁵⁸ *Id.* at 51

⁵⁹ Why Did the Soviet Union (USSR) Fall During the 1990s?, YAHOO! ANSWERS, http://answers.yahoo.com/question/index;_ylt=An1xRhqkCjbKsmgXx9aguuEjzKIX;_ylv=3?qid=20110310090928AAEnaVs (last visited July 15, 2012).

⁶⁰ See Hank Johnston & Carol Mueller, Unobtrusive Practices of Contention in Leninist Regimes, 44 Soc. Persp. 351, 366 (2001) ("Samizdat publication was critical because dissident activity could assume political importance only insofar as it was disseminated to the larger public.").

⁶¹ See Editorial, The Economics of the Arab Spring, Fin. Times, Apr. 24, 2011, http://www.ft.com/intl/cms/s/0/ea3a4776-6e9a-11e0-a13b-00144feabdc0.html#axzz1m0oK8Qkb.

⁶² Rania Abouzeid, Postcard: Sidi Bouzid, Time, Feb. 7, 2011, at 8, 8.

family has no money, no car, no electricity, but it was not poverty that made her son sacrifice himself, she said. It was his quest for dignity."⁶³ It is noteworthy that prerevolutionary Egypt and Tunisia were not in particularly dire economic straits relatively speaking. Tunisia's growth rate in 2007 was 3.7 percent and had ranged from 3.1 percent to 6.3 percent in the last five years.⁶⁴ Egypt's gross domestic product (GDP) had grown at a rate of between 5.1 percent and 7.2 percent from 2006 to 2010, ending at a healthy 5.1 percent in 2010.⁶⁵ Of course, GDP growth rates fail to reflect the distribution of advantage and disadvantage in society. The latest unemployment data for Tunisia pegged that figure at 14.2 percent in 2008, down from 16 percent in 1999.⁶⁶ The latest figures available show Egyptian unemployment fell from 11.2 percent in 2005 to 9.4 percent in 2009.⁶⁷

In any case, how exactly does economic failure manifest itself in regime change? Even if there is widespread discontentment with economic conditions, governments can control traditional media to seek to contain information about the pervasiveness of the dissatisfaction. While economics is clearly important to the rise and fall of empires, 68 even totalitarian governments that mismanage their economies often manage to outlast their democratic contemporaries. More importantly, broadening our historical lens reveals that information revolutions have indeed often proved crucial to political change. I turn to this issue in Part II below.

II Big Brother 3.0

Do we have more to fear than to hope from the Internet? Most accounts of authoritarian governments' approach to the Internet focus on censorship and surveillance. The "Great Firewall" of China

Marc Fisher, *The Spark That Ignited a Revolution*, Wash. Post, Mar. 27, 2011, at Al. Amnesty International's Secretary General, Salil Shetty, describes Bouazizi as follows: "In December 2010, Mohamed Bouazizi, a street vendor living in Sidi Bouzid, Tunisia, set himself on fire outside the City Hall to protest police harassment, humiliation, economic hardship and the sense of powerlessness felt by young people like himself in Tunisia." Amnesty Int'l, Amnesty International Report 2011: The State of the World's Human Rights, at xii (2011).

 $^{^{64}}$ $\,$ GDP Growth (Annual %), World Bank, http://data.worldbank.org/indicator/NY. GDP.MKTP.KD.ZG (last visited July 15, 2012).

⁶⁵ Id.

 $^{^{66}}$ $\it Unemployment, Total~(\%~of~Total~Labor~Force), WORLD~Bank, http://data.worldbank.org/indicator/SL.UEM.TOTL.ZS~(last visited July 15, 2012).$

⁶⁷ Id.

⁶⁸ For one perspective on this relationship, see Amy Chua, World on Fire: How Exporting Free Market Democracy Breeds Ethnic Hatred and Global Instability 16 (First Anchor Books 2004) (2002).

blocks undesirable content with inconsistent results.⁶⁹ More dangerously, the Internet may prove the perfect handmaiden to the repressive state, noiselessly watching and cataloging all dissident activity.⁷⁰ Both *Access Controlled* and Morozov suggest an important additional use of the Internet by governments: propaganda and manipulation. *Access Controlled* classifies these as "third-generation controls," whereas the first generation of Internet control consisted of efforts to deny access to certain prohibited resources, and the second generation of control was comprised of efforts to create a legal and technical environment allowing the authorities to block access on a case-by-case basis.⁷¹

There are indeed a growing number of authoritarian states that seek to use the Internet to promote their own message. At the time this was written, Hugo Chávez could boast of 3,250,607 Twitter followers.⁷² Countries have developed "Internet Brigades" to guide online conversations towards more government-friendly positions.⁷³ The Kremlin, Morozov tells us, hosts a School of Bloggers.⁷⁴ China has embraced "public opinion channeling" (*yulun yindao*) ⁷⁵ and has even gone so far as to offer financial incentives for progovernment comments, creating what has been derided as the "Fifty-Cent Party." Iran has launched thousands of blogs to support its paramilitary force, the Basiji. ⁷⁷ Governments hope that they can match a single dissident tweet (or *weibo*) with a dozen "patriotic" tweets. Will governments em-

⁶⁹ For an illuminating study of various blogs' uneven censorship rates, see Ethan Zuckerman, *Intermediary Censorship, in Access Controlled, supra* note 13, at 71, 74; Rebecca MacKinnon, *China's Censorship 2.0: How Companies Censor Bloggers*, 14 First Monday (Feb. 2, 2009), http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/2378/2089.

⁷⁰ See, e.g., Anupam Chander, Googling Freedom, 99 Calif. L. Rev. 1, 4–5 (2011) (describing ways the Internet can be used on a large scale to crack down on dissidents).

⁷¹ See Deibert & Rohozinski, supra note 16, at 22–27.

Hugo Chávez Frías, Twitter, http://twitter.com/chavezcandanga (last visited July 22, 2012). At the time this was written, Chávez was following only twenty-one people, including Dilma Rouseff and Rafael Correa, the Presidents of Brazil and Ecuador, respectively. Hugo Chávez Frías, Twitter, http://twitter.com/#!/chavezcandanga/following (last visited July 22, 2012). Enumerating the number of Twitter followers is always a fraught task because of the prevalence of phantom accounts used either for spam or other manipulation.

⁷³ See Deibert & Rohozinski, supra note 16, at 28.

Morozov, *supra* note 9, at 129.

David Bandurski, *Listen to the Citizens, and Control Them*, China Media Project (June 22, 2010), http://cmp.hku.hk/2010/06/22/6281/ (quoting Yang Yanyin, executive deputy secretary of the Working Committee of Central and State Organs).

⁷⁶ See MOROZOV, supra note 9, at 130; see also Pascale Trouillaud, China's Web Spin Doctors Spread Beijing's Message, Sydney MORNING HERALD, May 12, 2011, http://news.smh.com.au/breaking-news-technology/chinas-web-spin-doctors-spread-beijings-message-20110512-lek4i.html.

⁷⁷ Iran's Basiji Blogosphere, Al Jazeera (June 9, 2011), http://stream.aljazeera.com/story/iran-social-media.

ploy the Internet to discredit opponents, plant false trails, and organize flash mobs only to round up those who appear?⁷⁸

To demonstrate the folly of relying on information technologies as liberating forces, Morozov observes that radio, despite being heralded for its possibility of promoting peace, was used to inflame ethnic passions during the Rwandan genocide.⁷⁹ Not only Franklin Delano Roosevelt and King George VI, but also Hitler, Mussolini, and Stalin, used the radio.⁸⁰

Yes, certainly, governments have and will deploy the tools of the Internet to try to maximize their control over the population, typically by winning the population over to the view that the government in power is best suited to protect peace and security. Yet, as it stands today, the Internet is more likely to aid dissidents than to thwart them. In the first section below, I argue that information technology has long proven a key vector for change. In the following section, I argue that the Internet has unique features in this regard, making it a far more powerful medium for dissent than any history has thus far seen. In the final section, I argue that authoritarian governments (who are in the best position to know the value of the Internet to their surveillance and manipulation) have demonstrated that they in fact currently fear the Internet more than they benefit from it.

A. From Gutenberg to Tim Berners-Lee

History shows that information technologies have been crucial to political change. That does not mean that such change has been uniformly in the direction of human liberty, but access to information has undeniable power.

Critics of the role of information technology on contemporary revolutions may perhaps have in mind people like Martin Luther, who according to legend started a revolution by nailing his theses on a church door. If parchment, a quill pen, a hammer, and a nail sufficed for Luther, then the Internet might seem like overkill. Yet, a closer look at history reveals the relevance of information technology even to Luther. Luther was lucky enough to be born in 1483, after Gutenberg's printing press with moveable type had already spread through Europe.⁸¹ Luther's *95 Theses* were translated and reproduced

⁷⁸ See, e.g., Quincy Yu, Aborted Chinese 'Jasmine Revolution' a Trap Say Analysts, EPOCH TIMES, Feb. 22, 2011, http://www.theepochtimes.com/n2/china/aborted-chinese-jasmine-revolution-a-trap-say-analysts-51732.html (reporting on the speculation that Chinese authorities staged calls for protests in cities across China and high-profile arrests of protesters to demonstrate control).

⁷⁹ Morozov, supra note 9, at 278.

⁸⁰ *Id.* at 279–80.

 $^{^{81}}$ $\,$ Elizabeth L. Eisenstein, The Printing Revolution in Early Modern Europe 150 (2d ed. 2005).

by mechanical printing throughout the continent.⁸² Others before Luther may well have complained of the Church's doling out of indulgences at a fixed price, but Luther happened to complain in the age of mechanical reproduction. As one scholar writes, "[t]he printing press allowed Evangelical publicists to do what had been previously impossible, quickly and effectively reach a large audience with a message intended to change Christianity."⁸³

America's own revolution received enormous support from the widespread dissemination of Tom Paine's *Common Sense*—a pamphlet that proved a 1776 bestseller. Constitutional historian Eric Foner describes the impact of *Common Sense* as follows: "[It] had an enormous impact on the subsequent decision for independence. By the end of [1776], no fewer than twenty-five editions had been printed, reaching hundreds of thousands of Americans. . . . In an age of pamphleteering, [it] was unique in the extent of its readership and its influence on events."⁸⁴

Helping to change nations might seem too giant a task to assign to technology. Yet, Benedict Anderson has elegantly argued that the printing press proved vital to the very emergence of the nation-state. Previously, I have summarized Anderson's argument as follows: "The printing press helped *create* modern nationalisms, as books and newspapers came to be written in the vernacular, encouraging a conception of a shared community among groups of people who would never actually meet." If technology helped create political orders, technology may also help upend them.

The Internet Democratization Skeptics might then offer an alternative critique. Assuming the printing press is indeed a valuable tool of dissent, the Skeptics might argue that the printing press renders all other tools superfluous. That is, if the printing press could provoke titanic religious shifts, should not the Internet be superfluous to change today? Maybe the printing press was the key technological innovation, and further communications improvements are simply minor footnotes.

But consider the importance for political life of the innovations in communications technology post-Gutenberg. The telegraph helped unite a nation as vast as the United States, making it possible

⁸² See, e.g., 1 Martin Luther, The Papacy at Rome, in Works of Martin Luther: With Introductions and Notes 327, 330 (Henry Eyster Jacobs ed., A. Steimle trans., A.J. Holman Co. 1915) (1520) ("Fortunate it was, that the infancy of modern printing and the birth of Luther were contemporary").

⁸³ Mark U. Edwards, Jr., Printing, Propaganda, and Martin Luther 1 (1994).

ERIC FONER, TOM PAINE AND REVOLUTIONARY AMERICA, at xxvii (updated ed. 2005).

Anupam Chander, *Whose Republic?*, 69 U. Chi. L. Rev. 1479, 1479 (2002) (emphasis added) (citing Benedict Anderson, Imagined Communities: Reflections on the Origin and Spread of Nationalism 37–46 (rev. ed. 1991)).

to imagine oneself a member of a community that stretched across a continent from the Atlantic to the Pacific.⁸⁶ The radio made it possible to imagine that we were gathered around President Franklin Delano Roosevelt's fireplace as the nation sent its men and women to distant battlefronts.⁸⁷ The role of television in bringing the reality of war home to the American living room is less than clear. The video technology of 1968 had significant limitations in its ability to capture live events: "Cumbersome three-man teams assured few close-ups of violence, even in daylight. The correspondent, holding the microphone, was connected by an electrical cord to the sound man, with his tape recorder, and both were linked to a muscular cameraman, carrying a 50-pound battery pack on his back." ⁸⁸

Three examples from recent events suggest the role of the Internet in producing change today. Women in Saudi Arabia used Facebook to nurture a campaign to replace the male staff of lingerie stores throughout the Kingdom with women.⁸⁹ Perhaps a letter-writing or telephone campaign might have substituted, with women using in-person meetings, snail mail, or phone networks to promote their cause, even if the traditional media found it too controversial. In China, criticism amplified by the Internet has put pressure on the government to act on air pollution.⁹⁰ Most vividly, of course, the events of the Arab Spring themselves testify to the importance of the Internet. Consider a chronology of the Egyptian revolution, including the following crucial digital events, each sparking or fanning further protest:

February 10, 2008—A Facebook group to support the Egyptian national soccer team counts 45,000 fans, laying the groundwork for mass mobilization via the social network.

March 2008—Activists Ahmed Maher and Israa Abdel Fattah establish a Facebook page to promote a workers' strike planned for April 6.

May 7, 2008—Ahmed Maher is detained and tortured, and upon release, shares his experience via social media and conventional media.

⁸⁶ See Morozov, supra note 9, at 276–77.

⁸⁷ See id. at 279.

⁸⁸ David Culbert, Television's Visual Impact on Decision-Making in the USA, 1968: The Tet Offensive and Chicago's Democratic National Convention, 33 J. Contemp. Hist. 419, 421 (1998).

⁸⁹ Doyle McManus, Op-Ed., *Change in the Kingdom*, L.A. TIMES, Dec. 25, 2011, at A32 ("The rule was changed only after women spent two years agitating through a Facebook campaign called 'Enough Embarrassment,' and only after the (male) minister of labor was emboldened to obtain and enforce a decree from King Abdullah.").

⁹⁰ Sharon LaFraniere, *Activists Crack China's Wall of Denial About Air Pollution*, N.Y. Times, Jan. 28, 2012, at A4 ("Weary of waiting for the authorities to alert residents to the city's most pernicious air pollutant, citizen activists last May took matters here into their own hands: they bought their own \$4,000 air-quality monitor and posted its daily readings on the Internet.").

June 6, 2010—Twenty-eight year old Khaled Mohamed Said is beaten up by detectives in an Internet cafe in Alexandria and killed soon thereafter.

June 8, 2010—Using a pseudonym, Wael Ghonim launches a Facebook page named "We Are All Khaled Said" with the following post: "Today they killed Khaled. If I don't act for his sake, tomorrow they will kill me."

January 14, 2011—"As news of Tunisia's revolution spreads across the Arab world, Twitter erupts with discussions about following Tunisia's lead," and Ghonim and Maher encourage a national protest on January 25.

January 18, 2011—Asmaa Mahfouz, a member of the April 6 Youth Movement, posts a video urging her compatriots to join the January 25 demonstrations.

January 19, 2011—University student Alya El Hosseiny makes up a hashtag for those discussing the planned January 25 protests. "#Jan25 becomes the eighth most popular hashtag of 2011."

January 24, 2011—Ghonim posts a publicly editable document using Google Docs titled "Everything You Need to Know About the Day of Rage."

January 25, 2011—Massive protests begin.

January 28, 2011—Mubarak begins to shut down the Internet.

February 11, 2011—Mubarak resigns.⁹¹

While Fattah, Maher, Ghonim, Mahfouz, and El Hosseiny might have found nondigital alternatives to Facebook, YouTube, and Google Docs (not to mention their encrypted chats), their task would have been immeasurably more difficult. As Philip Howard states, when he concludes his study of Internet activism and surveillance in the Middle East, "[i]t is clear that, increasingly, the route to democratization is a digital one."

B. A Bullhorn in Every Hand

The telegraph, radio, television, and telephone all lack a key feature that makes the Internet the most radical technology for subversion—many-to-many communication.⁹³ Radio and television allow communication from one point (the radio or television station) to many others (the listening or watching audience). The telegraph and telephone allow communication from one person to another (who

 $^{^{91}}$ This draws heavily on a timeline by David Wolman. David Wolman, *The Digital Road to Egypt's Revolution*, N.Y. Times, Feb. 10, 2012, http://www.nytimes.com/interactive/2012/02/12/opinion/sunday/20120212-tahir-timeline.html.

⁹² PHILIP N. HOWARD, THE DIGITAL ORIGINS OF DICTATORSHIP AND DEMOCRACY: INFORMATION TECHNOLOGY AND POLITICAL ISLAM 201 (2011).

⁹³ For a discussion of the impact of the Internet on the development of the public sphere in repressive states, see Yochai Benkler, The Wealth of Networks: How Social Production Transforms Markets and Freedom 270–71 (2006); Chander, *supra* note 70, at 12–14; Shirky, *supra* note 18, at 35–36.

might then further disseminate the information by other means, including, of course, the newspaper): it constitutes one-to-one communication. However, it is the Internet alone that allows many people to reach many others directly.

These spatial features turn out to be crucial for subversive activity. Like local printing presses, radio and television stations and transmission towers are generally easy for a government to control. Indeed, the government can rely on methods of control ranging from broadcaster licensing to swift penalties for subversion. The limited number of such stations makes them relatively easy to monitor for subversive activity. Pirate radio stations are subject to jamming and often offer only weak signals in the absence of large, local transmission facilities. Moreover, the proprietors of print, radio, and television must exercise editorial functions because each of their media platforms offers limited content. Because of these editorial functions, the proprietors make for easy loci for repression. The Internet, on the other hand, offers a far more dispersed architecture and larger volume of content than broadcast television, and is therefore much more difficult (though far from impossible) to control.

The emergence of satellite television offers the possibility of receiving information from content providers who are not subject to the wrath of local authorities. Citizens of repressive systems have taken to using hidden satellite dishes to obtain banned news. Blogger Yoani Sanchez writes that in Cuba, "[h]idden in water tanks and behind sheets hanging on clotheslines, illegal satellite dishes bring people the news that is banned or censored in the national media." However, many satellite dishes are one-way communication devices, lacking an upload facility. Thus, the local citizenry cannot share their own information about what is happening with the world, in particular, their affecting video footage of the dead and dying.

A simple thought experiment illustrates my argument. Imagine Egypt in January 2011 without the Internet. The government, sensing rising discontent in diffuse quarters decides to crack down further on dissent and especially the channels for its dissemination, shuttering opposition radio and television channels and confiscating satellite dishes. Those who would expose government atrocities would simply be subject to brutal retaliation—like Khaled Said, who died in police custody after threatening to expose corruption. If protestors gathered nonetheless in Tahrir Square, the government might use the cover of night to roll in the tanks or send in men on camels to terrorize those who dared to complain. There would be no YouTube videos

⁹⁴ Yoani Sánchez, Country for Old Men, Foreign Pol'y, Nov. 1, 2011, at 36, 38.

⁹⁵ See Matt Bradley, Anger on the Streets of Cairo, NAT'L, June 14, 2010, http://www.thenational.ae/news/world/middle-east/anger-on-the-streets-of-cairo.

taken on cell phones to document the massacre. Rather, the government might falsely attribute the deaths to self-defense against allegedly violent protestors. There is no way to know how many actual atrocities were covered up in this manner, lost to history.

In July 2011, smuggled video from Syria showed efforts by the government to violently suppress opposition.⁹⁶ That video has made it more difficult for the world to sit on the sidelines in the dispute, increasing the Syrian regime's diplomatic isolation.⁹⁷ The *New York Times*' Robert Mackey contrasts what the world could see of the crushing of a 1982 Hama uprising with what the world sees of another military action in that city today:

A generation ago, in 1982, before YouTube and ubiquitous camera phones, Mr. Assad's father, Hafez, also used military force to crush an uprising in Hama, away from the world's eyes. Before journalists were eventually allowed into Hama that year, after the bombardment was complete, at least 10,000 people are thought to have been killed.

That history makes every video clip showing tens of thousands of protesters packed into Hama's central Assi Square somewhat remarkable. 98

Certainly, the fact that a video of an atrocity might go viral does not by itself necessarily stop that atrocity from occurring, but it might nevertheless affect events in a variety of ways. Exposure through this new communications mechanism would seem likely to enter into the calculations of many, if not all, dictators. Moreover, the video that does actually make its way to the world's eyes might increase the domestic pressure on other leaders to act.

Return to the archetypal Jasmine Revolution in Tunisia in January 2011: after the self-immolation of Mohamed Bouazizi, "[p]rotesters took to the streets with 'a rock in one hand [and] a cell phone in the other.'"99

 $^{^{96}}$ Robert Mackey, On YouTube, Glimpses of Syrian Crackdown, N.Y. Times Lede (July 7, 2011, 4:40 PM), http://thelede.blogs.nytimes.com/2011/07/07/on-youtube-glimpses-of-syrian-crackdown/.

⁹⁷ Documentation by monitoring groups such as Human Rights Watch also played a key role in this. Sarah Leah Whitson, Exec. Dir., Middle E. and N. Afr. Div., Human Rights Watch, First Provost's Lecture in Human Rights at the University of California, Davis: At Last, an Arab Spring: Black Swans of the Middle East Human Rights Watch Reports from the Ground (March 5, 2012) (transcript on file with author) ("The information and the nonstop media focus of events on the ground played a critical role in shocking the conscience of people around the world, putting tremendous pressure on Egypt's allies—most prominently the US and the EU—to condemn the abuses, and in turn forcing Mubarak to realize that he was isolated and alone").

⁹⁸ Mackey, supra note 96.

⁹⁹ Yasmine Ryan, *How Tunisia's Revolution Began*, AL JAZEERA (Jan. 26, 2011, 2:39 PM), http://www.aljazeera.com/indepth/features/2011/01/2011126121815985483.html (quoting Rochdi Horchani, one of Bouazizi's relatives).

C. The Kill Switch and a Loosening Grip

The actual practices of authoritarian governments with respect to the Internet reveal that, at least thus far, contemporary governments that feel threatened by popular unrest are more likely to shut down the Internet than to seek to exploit it. Thus, their own actions admit that they fear the Internet more than they depend on it to support their rule.

Even China—unable to deny the ubiquity and influence of Twitter-like "microblogs" called "weibos"—seems to have conceded the power of the Internet to hold the government accountable. The official Chinese news service, Xinhua, offers the opinion that "China's microblogs enhance [the] public's supervision of government."100 Xinhua continues, "the Internet has superseded television as the most popular means for the airing of discontent, with microblogs leading the charge."101 Xinhua recognizes that these services differ from traditional media: "In comparison to microblogs, traditional media entities face technical and systematic restrictions in their efforts to observe and supervise the government."102 The power of these microblogs became evident with the horrifying high-speed rail crash in the summer of 2011, after which China's two major microblogs, Sina Weibo and Tencent, posted "an astounding 26 million messages on the tragedy, including some that have forced embarrassed officials to reverse themselves."103 The New York Times describes efforts to censor the microblogs:

The government censors assigned to monitor public opinion have let most, though hardly all of the weibo posts stream onto the Web unimpeded. But many experts say they are riding a tiger. For the very nature of weibo posts, which spread faster than censors can react, makes weibos beyond easy control. And their mushrooming popularity makes controlling them a delicate matter.¹⁰⁴

Most vividly, other authoritarian governments have also betrayed their fears of the Internet through their own actions. When Buddhist monks marched against the military dictatorship in Burma in 2007, activists broadcasted the government's savage response on You-

China's Microblogs Enhance Public's Supervision of Government, Xinhua Net (Aug. 14, 2011, 1:37 PM), http://news.xinhuanet.com/english2010/indepth/2011-08/14/c_13104 8218.htm.

¹⁰¹ Id.

¹⁰² Id.

¹⁰³ Michael Wines & Sharon LaFraniere, *In Baring Facts of Train Crash, Blogs Erode China Censorship*, N.Y. Times, July 29, 2011, at A1. For another Chinese case, see *supra* note 76 and accompanying text.

Wines & LaFraniere, supra note 103.

Tube.¹⁰⁵ The dictatorship responded by shutting off the Internet for the entire country.¹⁰⁶ The OpenNet Initiative reports that prior to the dictatorship's actions, only Nepal had resorted to such Internet blackouts.¹⁰⁷

Faced with violent unrest between the Uighur and Han ethnic groups in Xinjiang province in July 2009, China shut off the Internet in parts of the remote province, not restoring access until almost a year had passed. This left some seven million Xinjiang residents without Internet access. 109

As the crowds gathered in Tahrir Square in January 2011 after Zine El Abidine Ben Ali fled neighboring Tunisia ending a rule lasting two and a half decades, the government of President Hosni Mubarak famously shut down the Internet for the entire country. Having already blocked Twitter, Facebook and Google, on January 27, 2011, the government completely shut down Internet and cell phone access across the nation, with the assistance of international firms. 111

¹⁰⁵ See A.O. Scott, Bravery Fills Secret Burmese Dispatches, N.Y. Times, May 20, 2009, at C7 ("The viral videos of the Democratic Voice of Burma [a network of Burmese journalists] are like the hidden printing presses of earlier underground revolutionary movements, except that the portability of the cameras and the ease of Web and satellite-based distribution make them harder to suppress."); Stephanie Holmes, Burma's Cyber-Dissidents, BBC News (Sept. 26 2007, 7:38 AM), http://news.bbc.co.uk/2/hi/asia-pacific/7012984.stm.

¹⁰⁶ See Seth Mydans, Monks Are Silenced, and for Now, the Web Is, Too, N.Y. Times, Oct. 4, 2007, at A1; Stephanie Wang, Pulling the Plug: A Technical Review of the Internet Shutdown in Burma, OpenNet Initiative, 4–5, 9–10 (Oct. 21, 2007), http://opennet.net/sites/opennet.net/files/ONI_Bulletin_Burma_2007.pdf (describing the two-week Internet shutdown beginning on September 29, 2007).

¹⁰⁷ See Wang, supra note 106, at 11–12. On Nepalese censorship, see Amy Waldman, Nepal's King Cracks Down on Politics and News Media, N.Y. Times, Feb. 8, 2005, at A3.

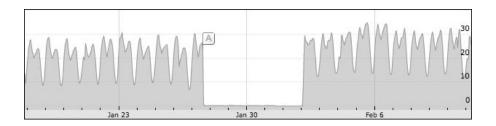
¹⁰⁸ See Ben Blanchard, China Tightens Web Screws After Xinjiang Riot, Reuters, July 6, 2009, available at http://www.reuters.com/article/2009/07/06/us-china-xinjiang-internet-idUSTRE5651K420090706; Edward Wong, After a 10-Month Ban, Western China Is Online, N.Y. Times, May 15, 2010, at A7.

¹⁰⁹ See Xinjiang Internet Restored After 10 Months, FAR WEST CHINA (May 14, 2010), http://www.farwestchina.com/2010/05/xinjiang-internet-restored-after-10-months.html.

¹¹⁰ See generally James Glanz & John Markoff, Egypt's Autocracy Found Internet's 'Off' Switch, N.Y. Times, Feb. 16, 2011, at A1 (detailing the Egyptian government's "ferocious counterattack" and characterizing the internet blackout as "a dark achievement that many had thought impossible in the age of global connectedness"); Christopher Rhoads & Geoffrey A. Fowler, Government Shuts Down Internet, Cellphone Services, Wall St. J., Jan. 29–30, 2011, at A11 (commenting that Egypt's synchronized shutdown of the Internet was remarkable considering the number of internet providers in Egypt); Matt Richtel, Egypt Halts Most Internet and Cell Service, and Scale of Shutdown Surprises Experts, N.Y. Times, Jan. 29, 2011, at A13 (noting that the Egyptian government asked all the mobile operators in Egypt to suspend service to selected areas and that the mobile operators were "obliged to comply" (quoting a statement of Vodafone, a cellular provider based in London)).

¹¹¹ See Egypt Internet Users Report Major Network Disruptions, Reuters Africa, Jan. 27, 2011, available at http://af.reuters.com/article/tunisiaNews/idAFLDE70Q2P220110127; Glanz & Markoff, supra note 110; Issandr El Amrani, Urgent: Egypt Has Shut Off the Internet, Arabist (Jan. 28, 2011, 12:05 AM), http://www.arabist.net/blog/2011/1/28/urgent-egypt-has-shut-off-the-internet.html.

Internet service was restored after one week.¹¹² Figure 1 shows traffic to Google services from Egypt during late January to early February 2011.



Seeking to control antigovernment protests, the Libyan government shut down many Internet websites for six hours on February 18, 2011, including very popular sites such as Al Jazeera¹¹⁴ and Facebook,¹¹⁵ during the protests calling for the removal of Libya's leader.¹¹⁶ The BBC reports that Colonel Muammar Gaddafi's government in Libya had begun taking a series of measures, including blocking internet sites and shutting off electricity to try to quell the rising unrest.¹¹⁷ On March 4, 2011, the Libyan government shut down the Internet, this time completely, in an attempt to stifle information flows about the insurrection.¹¹⁸ Figure 2 shows traffic to Google services from Libya since early 2011.

¹¹² Shereen El Gazzar, Government Restores Internet Service After a Weeklong Shutdown, WALL St. J., Feb. 3, 2011, at A10.

¹¹³ Transparency Report, GOOGLE, http://www.google.com/transparencyreport/traffic/(select "Egypt" and "All Products"; slide date on graph from January 18 to February 11) (last visited July 22, 2012) (fraction of worldwide traffic, normalized at 26.60).

¹¹⁴ Al Jazeera Says Signal Jammed, Libya Blocks Website, Reuters, Feb. 18, 2011, available at http://www.reuters.com/article/2011/02/19/us-jazeera-jamming-idUSTRE71I00M201102 19 (reporting that Al Jazeera's signal was jammed on several frequencies and its website blocked); Alexia Tsotsis, Libya Follows Egypt's Lead, Starts Shutting Off Internet Services, Tech-Crunch (Feb. 18, 2011), http://techcrunch.com/2011/02/18/reports-libya-follows-egypts-lead-starts-shutting-off-internet-services/.

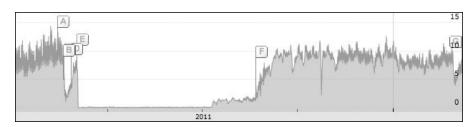
¹¹⁵ See Facebook Access Cut in Libya: Reports, Yahoo! News Sing. (Feb. 19, 2011), http://sg.news.yahoo.com/facebook-access-cut-libya-reports-20110218-134523-489.html.

¹¹⁶ Tsotsis, supra note 114.

¹¹⁷ Bridget Kendall, *Libya Media Crackdown Amid Anti-Government Protests*, BBC News (Feb. 18, 2011), http://www.bbc.co.uk/news/world-middle-east-12512202 (online broadcast).

¹¹⁸ Curt Hopkins, *Total Shutdown of Internet in Libya—Again*, ReadWriteWeb (Mar. 4, 2011), http://www.readwriteweb.com/archives/total_shutdown_of_internet_in_libya_-_again.php.

FIGURE 2: TRAFFIC TO GOOGLE SERVICES FROM LIBYA, 2011–2012¹¹⁹



On the day that the rebels marched into Tripoli, August 21, 2011, Libya returned to the Internet: as the *Washington Post* reported, "[a]fter 171 days of virtual silence, Libya is back online." ¹²⁰

Hoping to avoid a similar fate and facing a mass protest in Hama, the Syrian government cut off the Internet across the country in August 2011.¹²¹ Activists still managed to smuggle video of the Syrian government's violent crackdown on protestors out of the country.¹²²

Pulling the kill switch on the Internet is, as the charts above suggest, a very visible signal to the world—and to the people of the deprived country. Pulling the plug suggests that the government lacks the popular support it claims, that it is hiding something from the people, and even that it is *afraid* of its own people. It shows that the government is desperate, willing to wound the economy and society in order to curtail what it perceives to be an existential threat. The Organization of Economic Cooperation and Development estimated that Egypt's five-day Internet and cell phone shutdown cost the economy some ninety million dollars.¹²³ Even shuttering a few sites, such as YouTube, is a very public act, drawing public attention to fact that

¹¹⁹ Transparency Report, GOOGLE, http://www.google.com/transparencyreport/traffic/(select "Libya" and "All Products"; slide date on graph from January 2011 to January 2012) (last visited July 22, 2012) (fraction of worldwide traffic, normalized at 9.78).

Hayley Tsukayama, Welcome Back to the Internet, Libya, Wash. Post, Aug. 22, 2011, http://www.washingtonpost.com/blogs/faster-forward/post/welcome-back-to-the-internet-libya/2011/08/22/gIQArYrJWJ_blog.html; see James Cowie, The Battle for Tripoli's Internet, Renesses Blog (Aug. 21, 2011, 7:15 AM), http://www.renesses.com/blog/2011/08/the-battle-for-tripolis-intern.shtml (noting that the Libyan Telecom and Technology webpage declared, "Congratulations, Libya, on emancipation from the rule of the tyrant").

^{121 34} Dead in Syria Protests, Internet Access Cut, CBC News (June 3, 2011, 1:00 PM) http://www.cbc.ca/news/world/story/2011/06/03/syria-deaths-friday.html ("The regime also cut internet service across most of the country, a potentially dire blow for a movement that motivates people with graphic YouTube videos of the crackdown and loosely organizes protests on Facebook pages."); see also Borzou Daragahi & Paul Richter, Syria Tanks Move Deep into Hama, L.A. Times, Aug. 4, 2011, at A6 (discussing how authorities cut Internet amongst other things to the "rebellious city of Hama").

^{122 34} Dead in Syria Protests, Internet Access Cut, supra note 121 ("Still many activists found alternate ways to log on and upload videos, such as satellite connections.").

The Economic Impact of Shutting Down Internet and Mobile Phone Services in Egypt, OECD, http://www.oecd.org/document/19/0,3746,en_2649_201185_47056659_1_1_1_1, 00.html (last updated Feb. 4, 2011).

information is being censored—and thereby publicizing that very information.¹²⁴ When Mubarak shuttered the Internet, Egyptians "who had been reluctant to step out into the streets now fe[lt] compelled to—there [was] no other way to communicate with each other."¹²⁵ Wael Ghonim observes that "[i]f you block people from accessing Facebook, it raises a flag that you're scared."¹²⁶

Trying to censor a bit of unwanted information will likely end up blocking a wider swath of information and thus ends up being a highly public act.¹²⁷ United States sanctions on Belarus, Iran, and Zimbabwe have censored, accidentally, human rights blogs emanating from those countries.¹²⁸ How liberal states like the United States approach the regulation of cyberspace remains a difficult issue, to which we turn next.

III ILLIBERAL PRECEDENTS IN LIBERAL STATES

Are the free states of the world providing the world's unfree states the roadmap for controlling the Internet? Both Morozov and Access Controlled suggest that Western states are at times quick to resort to measures that control cyberspace to accomplish what are often legitimate public policy goals. Ronald Deibert and Rafal Rohozinski argue that "many of the legal mechanisms that legitimate control over cyberspace, and its militarization, are led by the advanced democratic countries of Europe and North America."129 Deibert and Rohozinski call this the "security first" orientation toward Internet governance. 130 The fact that Access Controlled includes Western countries in its survey of efforts to control the Internet proves especially helpful here, revealing that extravagant and sometimes unduly invasive efforts to control the Internet occur even in the world's democratic states. This seems to me an important point that deserves greater attention from Western policymakers considering how to approach the Internet. I describe below a few of the array of practices that Western states have

¹²⁴ See Trebor Scholz, Infrastructure: Its Transformations and Effect on Digital Activism, in DIGITAL ACTIVISM DECODED: THE NEW MECHANICS OF CHANGE 17, 28 (Mary Joyce ed., 2010) (arguing that shutting down YouTube is a "highly visible act").

Wolman, supra note 91.

¹²⁶ Matthew Lee, *The People's Revolution*, 3 Think Q. 43, 44 (Sept. 28, 2011) (quoting Wael Ghonim)

¹²⁷ Ethan Zuckerman, *The Cute Cat Theory Talk at ETech*, My Heart's Accra (Mar. 8, 2008, 11:29 AM), http://www.ethanzuckerman.com/blog/2008/03/08/the-cute-cat-the-ory-talk-at-etech/ (opining that the Tunisian government's blocking of a popular website affects more people than just the politically motivated).

¹²⁸ Zuckerman, *supra* note 69, at 76 (explaining how U.S. Treasury Regulations had a negative effect on activist websites).

¹²⁹ Deibert & Rohozinski, *supra* note 14, at 1, 6.

¹³⁰ *Id.* at 11.

deployed in the last few years to combat perceived threats utilizing electronic communication technologies.

In the wake of the August 2011 London riots, Prime Minister David Cameron publicly floated the possibility of shutting off access to social media for those "plotting violence." The Prime Minister explained:

[W]hen people are using social media for violence we need to stop them.

So we are working with the Police, the intelligence services and industry to look at whether it would be right to stop people communicating via these websites and services when we know they are plotting violence, disorder and criminality.¹³²

Stopping rioters from communicating in furtherance of their violence seems sensible, but the difficulty comes in identifying who these rioters are. The question is whether the state will provide due process before denying individuals the right to electronic communication. The worrying possibility is that states will trump up claims of violent possibilities to suppress dissent.

Faced with planned protests over a police shooting the same month, the San Francisco transit authority seems to have gone even further. It shuttered cell phone service for *all* users in four of its stations for several hours on August 11, 2011.¹³³ This disabled not just normal phone calls but also all emergency calls from cell phones in these locations. Wags ridiculed the move "[p]ull[ing] a Mubarak." ¹³⁴

Internet Service Providers (ISPs) have often been asked to enforce government policies, often with very limited process. Two critics note that "Italy obliges [ISPs] to block access to certain sites without any court issuing such an order."¹³⁵ A 2002 Pennsylvania law required ISPs to block access to websites identified by the Pennsylvania Attorney General as hosting child pornography. While attempting to block access to some 400 websites, the implementation of that law in-

¹³¹ Statement from David Cameron, British Prime Minister, to the House of Commons, PM Statement on Disorder in England (Aug. 11, 2011), available at http://www.number10.gov.uk/news/pm-statement-on-disorder-in-england/.

¹³² Id.

¹³³ Richard Adhikari, FCC to Scrutinize BART's Cellphone Block, TechNewsWorld (Aug. 16, 2011, 12:20 PM), http://www.technewsworld.com/story/73088.html.

Eva Galperin, *BART Pulls a Mubarak in San Francisco*, Electronic Frontier Found. (Aug. 12, 2011), https://www.eff.org/deeplinks/2011/08/bart-pulls-mubarak-san-francisco.

¹³⁵ Fredrik Erixon & Hosuk Lee-Makiyama, *Digital Authoritarianism: Human Rights, Geo-politics and Commerce* 1, 8 (European Ctr. for Int'l Political Econ., Occasional Paper No. 5/2011, 2011), *available at* http://www.ecipe.org/media/publication_pdfs/digital-authoritarianism-human-rights-geopolitics-and-commerce.pdf.

¹³⁶ Internet Child Pornography Act, 18 PA. Cons. STAT. § 7330 (2002) (current version at 18 PA. Cons. STAT. §§ 7621–7630 (Supp. 2011); Nart Villeneuve, Barriers to Cooperation: An Analysis of the Origins of International Efforts to Protect Children Online, in Access Con-

advertently led to the blocking of 1.5 million other websites not associated with child pornography. A federal district court struck down the law because it "resulted in massive suppression of speech protected by the First Amendment."137

While both books raise the issue of heavy-handed tactics deployed by liberal states in respect of the Internet, there is much more to be said about this issue. I offer three additional observations on the matter.

First, the fact that individuals may use social networks to organize crimes should not be a get-out-of-jail-free card. After the London riots, an English court convicted two men of incitement to violence for posting calls following rioting elsewhere to a "Smash d[o]wn in Northwich Town."138 The call specified a particular time and place, and while the event did not in fact transpire, the court concluded that the pair were guilty of incitement nonetheless. 139

Second, to recognize that liberal states may have transgressed the limits of proper regulation is not to conflate zealous efforts to combat child pornography and other crimes with efforts to censor political opponents. There is no moral equivalence between the control of cyberspace by liberal states and that by totalitarian states. The purposes to which Internet controls are used are starkly different between liberal and illiberal states. Fighting terrorism, child pornography, and cyberwar clearly rank among the legitimate undertakings of a liberal (or illiberal) government. Yet, as the West seeks to accomplish objectives developed through democratic processes, it might keep in mind that others intent on preserving power at all costs can use its technologies and laws as precedents to accomplish those goals. As Fredrik Erixon and Hosuk Lee-Makiyama write: "A representative of the European Union voicing critique against China's online censorship, while supporting some forms of online censorship at home, will be considered as hypocritical by a Beijing that has mastered the skill of downplaying its own vices by comparing them with the vices of others."140

Third, we might ask: how should liberal states differentiate their Internet regulation from that of totalitarian states? Liberal states (like

TROLLED, supra note 13, at 55, 61-62 (describing the controversy subsequent to the passage of the law).

Ctr. for Democracy & Tech. v. Pappert, 337 F. Supp. 2d 606, 611 (E.D. Pa. 2004). England Riots: Two Jailed for Using Facebook to Incite Disorder, BBC News (Aug. 16, 2011, 2:57 PM), http://www.bbc.co.uk/news/uk-england-manchester-14551582 (alteration in original). Many criticized the four-year prison term as disproportionate to the crime. See Owen Bowcott et al., Facebook Cases Trigger Criticism of 'Disproportionate' Riot Sentences, Guardian (Aug. 17, 2011, 8:40 AM), http://www.guardian.co.uk/uk/2011/aug/17/face book-cases-criticism-riot-sentences.

England Riots: Two Jailed for Using Facebook to Incite Disorder, supra note 138.

Erixon & Lee-Makiyama, supra note 135, at 8.

all states, of course) should keep two constraints in mind: First, are the objectives of the Internet regulation consistent with international human rights norms?¹⁴¹ Second, does the regulation provide for due process? Careful and explicit attention to these two criteria might make it more difficult for a repressive state to invoke a liberal state's action as a precedent for abusive actions.

Conclusion

It seems hard to label a twenty-something with a Facebook page, a YouTube account, or a Weibo feed a hero. Ghonim himself rejected the "hero" label, suggesting that the label should be reserved for those wounded or killed in the revolutionary struggle. Yet, Internet activists too can face the same consequences—gulag or death—that history's heroes faced. Moreover, Internet activists have already proved crucial to the dissemination of information and the organization of mass revolt—elements critical to a revolution.

The Internet is a revolutionary tool; it is a tool of revolution. It is also an Orwellian tool, a tool for state omniscience. Whether it will ultimately prove to be the common person's tool for liberation or the iron fist of dictators remains an open question. I have argued that there is reason for optimism on this front, but that should not be mistaken for Panglossian indifference to the dangers of the new medium. Internet activism by itself is never enough, but neither were the heroic actions of Gandhi or Mandela alone.

The last chapter of Access Controlled discusses the development and promise of the Global Network Initiative, a private self-regulatory effort among companies such as Google, Yahoo!, and Microsoft to better understand and address human rights concerns as they operate around the world. Colin M. Maclay, *Protecting Privacy and Expression Online: Can the Global Network Initiative Embrace the Character of the Net?*, in Access Controlled, *supra* note 13, at 87, 88–89.

¹⁴² Egypt Activist Wael Ghonim Tells TV Station: 'I Am No Hero'—Video, GUARDIAN (Feb. 8, 2011), http://www.guardian.co.uk/world/video/2011/feb/08/egypt-activist-wael-ghonim-google-video (interview with Wael Ghonim).