

# CYBERDIALOGUE2012

## WHAT IS STEWARDSHIP IN CYBERSPACE?

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### CYBER DIALOGUE 2012 BRIEFS: LIMITS OF DISSENT IN CYBERSPACE

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Dissent in cyberspace has attracted much international attention over the past year, largely as a result of the role played by social media in the revolutions in the Arab world. The phenomenon is not new, however. Indeed, as early as 1987, a politically motivated ‘worm’ - Worms Against Nuclear Killers (WANK) - was released into NASA’s computer systems to prevent the launch of the *Galileo* space probe. *Galileo* had attracted protests from the anti-nuclear movement because its space-bound electrical systems were powered by the radioactive decay of 24 kilograms of plutonium, which in the event of a crash might have created an ecological disaster.<sup>1</sup> The identity of the ‘hactivist’ behind the worm was never discovered. While *Galileo* managed to finally take off for Jupiter, NASA spent almost half a million dollars to repair the damage. The ‘attack’ was significant for its time – hacktivism was just taking off.

First coined in 1998 by the underground group the Cult of the Dead Cow (cDc), the word hacktivism (hack + activism) indicated direct action in a digital environment as a means to affect political and/or social change. Groups like cDc promoted the development and use of technology to foster human rights and the open exchange of information.<sup>2</sup> The group later created *Hactivismo*, an operation “at the forefront of the struggle for human rights in and out of cyberspace,” and has developed tools enabling access to information otherwise restricted by governments.<sup>3</sup> Another group that emerged during the late nineties is the Critical Arts Ensemble. The CAE began to explore and provide more intellectual rigor to the intersections between art, critical theory, technology and political activism. Over the following decade, hacktivism

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1 Betz and Stephens (2011); Dreyfus and Assange, *Underground* (1989)

2 Delio (2004)

3 The same group drafted its own software license and became the only underground computer group to receive U.S. Department of Commerce approval to support strong encryption in software. Cult of the Dead Cow website

gradually grew to encapsulate “the development and use of technology by grass-roots movements to foster human rights and the open exchange of information,” or “the politically-motivated use of technical expertise,” with Article 19 of the UN Declaration on Human Rights and the other core human rights instruments often serving as the normative crutch for the legitimization of its activities.<sup>4</sup>

“Repertoires of action” that emerged included representation, information distribution, research, artistic production, fundraising, lobbying and tactical manoeuvres for the purpose of “conventional forms of contention” such as civil disobedience. Tactics included calls to action via email, Listservs, websites or chat sessions.<sup>5</sup> Meanwhile, tools such as email floods, form floods, fax bombs, viruses, worms, Trojan Horses, data theft or destruction, site alteration or redirection, distributed denial of service attacks (DDoS) and virtual sit-ins emerged as the tactics for a more hardcore and “disruptive” form of contention. On the other end of the scale, and particularly following the September 11 terrorist attacks in the United States, government and corporate literature has focused on forms of violent electronic contention that can cause human injury or death by gaining command and control of networked computer control systems such as electrical power grids, gas mains and air traffic control.<sup>6</sup>

In some cases, electronic forms of contention moved beyond the national and became transnational both in terms of form and objectives. For example, the Zapatista movement in Chiapas made very effective use of the Internet to draw attention to the autonomy and rights claims of indigenous populations. What started as a local rebellion gathered storm through the support of a global network of support. The movement managed to shift the focus of the media vis-à-vis the conflict and successfully link it to other local and international struggles. It has been dubbed a pre-emptive ‘info-strike’ “that succeeded for the most part in deterring violent state repression.”<sup>7</sup> This strategy allowed the Zapatistas to mobilize enough domestic and international support to

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4 Delio (2004)

5 Sasha Constanza-Chock (p.3)

6 Ibid

7 Sasha Constanza-Chock (2001), *Mapping the Repertoire of Electronic Contention*; Jeroen van Laer and Peter Van Aelst, Cyber-Protest and civil society: the Internet and action repertoires in social movements. *Handbook on Internet Crime*, Chapter 12.

raise the costs of violent action above levels acceptable to the Mexican government.<sup>8</sup> Similar strategy and tactics were used by the transnational networks that emerged around the Moruroa atom bomb testing debacle involving the French government and Greenpeace, and during the protests against the 1999 WTO ministerial meeting in Seattle.<sup>9</sup> By the end of the nineties, it was clear that the Internet and other forms of information technology had altered the dynamic of dissent by “electronically promoting the diffusion of protest ideas and tactics efficiently and quickly across the globe.”<sup>10</sup> The mere fact that ‘dissenters’ no longer had to be overly concerned with the age-old constraints of geographic space and time caught policy-makers off-guard. At the same time, some observers cautioned that the very nature of the Internet could also turn “unreliable and unverifiable information into a global electronic riot.”<sup>11</sup>

In the early 2000s, academic institutions and non-governmental organizations began to take a deeper look at different Information and Communications Technologies (ICTs), moving beyond the study of the purely technological to deepen understanding of how technologies work beneath the surface, “exploring the limits and constraints they impose on human communications,” and the manner in which technical work-arounds to bad government policies were emerging.<sup>12</sup> Sociologists emphasized the need to deepen theoretical frameworks to better understand these forms of mobilization and their outcomes.<sup>13</sup> Funds gradually became available to enable the development and use of software and technology to defend human rights, strengthen and protect democratic processes (such as elections), and develop political agency. The more recent establishment by government and inter-governmental bodies of earmarked funds to defend human rights activists through the use of monitoring circumvention tools is aimed at further enabling political agency, particularly in autocratic regimes.<sup>14</sup>

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8 See among others Cleaver 1998; Shulz 1998; Ronfeldt and Arquilla 1998; Martinez-Torres 2001; Constanza-Chock 2001; Cere 2003; Olsen 2004.

9 Ibid

10 Jeffrey M. Ayres (1999), *From the Streets to the Internet: The Cyber Diffusion of Contention*. The Annals of the American Academy of Political and Social Science

11 Ibid

12 Delio (2004)

13 Suzanne Staggenborg has synthesized the work of several theorists to propose three broad categories of movement outcomes: political and policy outcome, mobilization outcomes and cultural outcomes. See Staggenborg 1995:341)

14 See US State Dept., EU Commission funding mechanisms

## THE REACH AND LIMITS OF DISSENT IN CYBERSPACE

The exponential growth in ICTs and the mushrooming of tools of dissent since the late nineties meant that the Internet and other ICTs became accessible to a much broader base of users, allowing dissent to be voiced overtly or covertly, by individuals, groups, movements or identities, in and beyond cyberspace, depending on the desired outcome. The growing accessibility of ICTs around the world and the emergence of social networking services such as Facebook, Twitter and low cost mobile messaging coincided with broader social developments: relentless urbanization, exposing people beyond the hyper-connected West to ICTs; an explosion in both youth populations and youth unemployment around the world, not least because of entrenched inequalities and the enduring financial crisis; a growing gulf between the interests of political and economic elites and the needs and interests of the broader citizenry; and consequently, a growing disenchantment with traditional politics and policy-makers across the globe.<sup>15</sup>

Wikileaks, Anonymous, the Occupy mobilizations, the Arab Spring, and the 2011 U.K. Riots are just a few of the more recent groups, movements, processes and incidents of dissent enabled by ICTs. They have produced far-reaching consequences at the global, regional and national levels. For example, Wikileaks has spurred the mobilization of hundreds of people who have provided the Wikileaks core group with technical support and site-mirroring services, facilitating the spread of content otherwise only accessible to governments or corporate giants. Thousands of others have looked on *bouche bée* at the audacity of the Wikileaks group, while others trawl through reams of confidential files, searching for new truths to enhance their personal or group narratives. According to Milan, the first major leak by the Wikileaks group in 2010 marked a turning point in cyber activism, giving visibility and renown to groups such as Anonymous, and encouraging people to ‘participate’ and note their dissent: the “sporadic, cell-based cyber-performances of the 1990s have become tactics practiced on a regular basis by decentralized networks of individuals seeking to intervene in real-world struggles.”<sup>16</sup> The new wave of cyber activism demonstrated that the low-cost deployment of resources can have an intense real time impact, leap-frogging

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15 Voter turn-out stats – International IDEA

16 Milan (2011)

many of the logistical and organizational obstacles that stymies real-world activism.<sup>17</sup>

The explosion of social media has also allowed dissidents or insurgents to adopt new strategies, some with interesting outcomes: for example, the 2001 impeachment of the Philippine president, South Korean protests over U.S. beef in 2008, and the 2009 defeat of the Communist government in Moldova.<sup>18</sup> Yet, 2011 marked a shift from social media enabling one-off-incidents to social media playing an organizing role in sustained political protest across the globe, not least in countries in North Africa and the Middle East, China, Russia, the U.K. and the U.S. In some of these contests, particularly Tunisia and Egypt, the results were groundbreaking. In others, such as the U.K., much else was broken. In yet others, mobilization provoked stronger state control of the Internet and mobile communications.<sup>19</sup> Unfortunately, misplaced analysis of these developments highlighted the contribution of social media, while relegating the underlying historical causes and [geo]political, economic and social factors of discontent to a secondary role, in turn weakening the basis of follow-on strategies. As noted by Malcolm Gladwell and Bill Wasik, while social media may unite people for protests and the achievement of short-term tactical gains, it does not necessarily unite them for the longer-term strategic objectives of structural societal change, often the object of dissent in the first place.<sup>20</sup>

Anonymous, a loose and leaderless coalition of operations also enhanced its profile on the world stage over the past two years. The group takes on different political and societal issues, with the more radical elements using tools such as DDoS attacks, Web defacements, malware and network breaches against targets. Many of the early-school hacktivists criticize these actions, not least because they limit rather than enable free speech and contradict core human rights principles. Some also engage in what are held to be senseless asocial and apolitical attacks (for example, against Sony), making it easier for governments, corporations and others who are the targets of their attacks to paint all hacktivists in a negative light. Such attacks are also said to undermine the narratives and goals of other groups operating under the Anonymous identity. This has led

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17 Ibid

18 Clay Shirky (2008), *Here Comes Everyone: The Power of Organizing without Organizations*.

19 Diamond (2011)

20 In part, Wasik (2011), Gladwell vs. Shirky: A Year Later, Scoring the Debate Over Social-Media Revolutions at <http://www.wired.com/threatlevel/2011/12/gladwell-vs-shirky/>

to splits within Anonymous, as well as animosity between ‘Anonymites’ and the broader hacking community, the latter characterized as ‘moralfags’ and the former dubbed as ‘hatefags,’ or middle-class hacker novices who lack objective and strategy. Notwithstanding, there is some consensus among hacktivists around the objective of some of the more powerful DDoS-like attacks, for example, if the attacks serve to prevent dissidents from being tortured and spill-over effects do not endanger the lives of others.

## RESPONDING TO DISSENT IN CYBERSPACE

As far back as 1996, groups such as the Electronic Frontier Foundation were calling for states, and by extension, state-based norm-making bodies, to stay out of cyberspace:<sup>21</sup>

“Governments of the Industrial World, you weary giants of flesh and steel, I come from Cyberspace, the new home of Mind. On behalf of the future, I ask you of the past to leave us alone. You are not welcome among us. You have no sovereignty where we gather (...) [and] we will spread ourselves across the Planet so that no one can arrest our thoughts.”<sup>22</sup>

Yet, from the perspective of governments, developments over the past ten years have elevated cyber dissent from a tactical to a strategic concern, and pushed both democratic and non-democratic governments across the globe to invest in counter-strategies and tools to mitigate their impact. Indeed, with the help of the private sector, governments are now mobilizing major resources to contain, criminalize and [h]act against citizen dissent. Censorship, monitoring and filtering techniques, surveillance and gate keeping are just some of the tools used.

On-line and off-line censorship is generally associated with autocratic countries - China’s Great Firewall is probably the most extensive, multi-layered and sophisticated system of Internet censorship.<sup>23</sup> The West has criticized Internet Service Providers (ISPs) for serving as censorship intermediaries for autocratic governments. Conversely, legislative proposals now floating in the liberal West would require ISPs to

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21 Article 19 of the Universal Declaration on Human Rights states that “Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers.”

22 John Perry Barlow (1996), *A Declaration of the Independence of Cyberspace*. Barlow is said to have articulated the first idea of hacktivism through the Declaration. Delio (2004)

23 Hintz and Milan (2012)

blacklist sites holding certain content, thus placing unwarranted responsibility on the shoulders of private actors and narrowing the interpretation of privacy rights.<sup>24</sup> Private companies are also engaging in gate-keeping functions such as blocking access to sites critical to dissidents.<sup>25</sup> Meanwhile, security institutions are taking on questionable *ex-ante* roles such as filtering web content and monitoring social media as a means to pre-empt and disrupt incidents. In addition, while no broad agreement has been reached on acceptable and non-acceptable behavior in cyberspace, governments seem intent on criminalizing much of what currently goes on and narrowing current legal interpretations of privacy.

These government efforts are only rarely accompanied by policies aimed at understanding, let alone addressing the underlying factors provoking dissent - whether in cyberspace or physical space - in the first place; the legitimacy of state institutions and political processes; government transparency and accountability; unemployment, income disparity, inequality and exclusion. Forms of dissent may be curbed, but the underlying causes of dissent remain and therefore new channels will be found to voice them.

How, then, should stewardship of cyberspace facilitate and address citizen dissent, activism and protest?

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24 Hintz and Milan (2012); Report of the Spec. Rapporteur on Freedom of Expression

25 Hintz and Milan (2012)

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