## FROM *NADA* TO *NAUTA*: INTERNET ACCESS AND CYBER-ACTIVISM IN A CHANGING CUBA

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Today, with the development of information technologies, [...] social networks, [...] computers and the Internet, to prohibit something is nearly an impossible chimera. It makes no sense. Today, news from all sources, good and bad, manipulated, true, and half-true, circulate on the web and reach people. The worst response then, what is it? Silence.

 Miguel Díaz-Canel, First Vice-President of Cuba, closing speech of the National Educators' Preparatory Seminar, May 6, 2013 (Burnett 2013)

Despite a state monopoly on the mass media and one of the Western Hemisphere's lowest Internet penetration rates (ONE 2012, 2013; Press 2011; Freedom House 2012), in recent years Cuba has seen the emergence of a variety of independent bloggers and Twitter users. Seeking to express themselves freely and overcome both political and material obstacles, they have gradually formed a number of blogger collectives, built bridges both within the island and abroad, and forged new public spaces—both cyberspaces and increasingly public spaces. In these emergent spaces, they have attempted to move beyond the stale monologues and dismissive labels of oficialista (Cuban government propagandist) and mercenario (U.S. government lackey) and begun to engage in real civic debate, dialogue, and even collaboration often reaching far beyond the insular territorial space of the island itself to do so (Henken 2011a, 2011b).

This ongoing effort, however, takes place in a context of an asphyxiating climate of political polarization and suspicion, where Cuba's incipient "inter-nauts" find themselves doubly blockaded. On the one hand is the "clumsy and anachronistic" U.S. embargo, to

cite none other than Cuba's best-known citizen journalist Yoani Sánchez, which acts as an obstacle to greater island access to new information and communication technologies (NICTs) (Sánchez 2009; Miroff 2012). On the other hand is the ongoing internal state embargo over the Internet. Despite reports in January 2013 that the ALBA-1 fiber-optic cable laid from Venezuela in 2011—and in the works since at least 2008—is finally operational, in Cuba "wired" does not necessarily mean "connected" since there are still infrastructural, economic, and political reasons for the island's notorious state of isolation from the World Wide Web (Miroff 2013). Indeed, while 118 newly equipped telepuntos (Internet access sites) opened across the island on June 4, 2013, the limited service is a state monopoly available only to those able to pay in hard currency (del Valle 2013; "Cuba amplía" 2013; Ravsberg 2013).

### CONFRONTING THE "DICTATORS DILEMMA"

In a report on the status of the Internet in Cuba published in January 2011, Larry Press described the current Cuban Internet as "slow, limited, and expensive" (Press 2011). He regretted that an island that had been a regional leader in information technology in the early 1990s had become among the least connected and most isolated in Latin America and the Caribbean. In Press' judgment, this drastic change was due to three main causes: the U.S. embargo, the chronic crisis in the Cuban economy, and the "dictator's dilemma"—the Cuban government's fear of freedom of information and expression. "The gov-

ernment was not willing to risk its political stability to achieve the benefits of the Internet," writes Press. Thus, these three factors "deformed the Cuban web, leaving the island behind almost all other countries of Latin America and the Caribbean" (Press 2011).

In the case of China, the notion of the "dictator's dilemma" has been framed with reference to the memorable phrase, "the CP [Communist Party] will never survive the PC [personal computer]." Such a quip recalls the famous "1984" Apple ad that aired during that year's Super Bowl featuring a lone female athlete hurling a sledgehammer against the giant digital face of Big Brother (or was it aimed at "Big Blue," IBM, Apple's arch competitor at that time in the PC market?). The ad's point was driven home by the catchy phrase that appeared on the screen at the end, "On January 24th, Apple Computer will introduce Macintosh. And you'll see why 1984 won't be like '1984." The anti-Orwellian message to the public the personal clear: joining computer revolution—preferably by purchasing a Mac would liberate you from both Big Brother and "Big Blue," not to mention the boob tube. This was long before the advent of mass use of the Internet and its own quite viral strain of "liberation technology" thinking (MacKinnon 2012).

In his book, *The Net Delusion: The Dark Side of Internet Freedom*, Evgeny Morozov (2011) rejects this kind of "cyber-utopianism" pointing out that China has successfully resolved the dictator's dilemma and gone on not only to survive but thrive in the Internet age. Celebrated *The New Yorker* journalist Malcolm Gladwell added his voice to this skeptical pushback with an article entitled, "Small Change: Why the

Revolution will not be Tweeted" (2010). In fact, according to Goldsmith and Wu, the PRC has created a Chinese version of the web "free enough to support and maintain the world's fastest growing economy, and yet closed enough to tamp down political threats to its monopoly on power" (Goldsmith and Wu 2006: 89). That, despite Bill Clinton's famous, but now clearly bombastic quip that China's crack down on the Internet was "like trying to nail Jell-O to the wall" (ibid., 90). Given the experience of China, Iran, and perhaps now Cuba with its newly launched *Nauta* public Internet access network, Press has more recently noted (2012) that his original dictator's dilemma formulation was both premature and a bit naïve.<sup>1</sup>

## CUBAN INTERNET CAFÉS, WITHOUT THE INTERNET OR THE CAFÉ

Using official data from each country, in 2011 the United Nations' information and communication technology (ICT) tracking agency, the International Telecommunications Union (ITU), ranked Cuba in the last place in Latin America and the Caribbean when measured by the number of broadband subscribers for every 100 inhabitants (Cuba had virtually none while the regional average is 7.2). Cuba is also in last place regionally when ranked by number of secure Internet servers for every million people (Cuba has just 0.1 when the regional average is 172.7). And comparing the rate of "Internet users" for every 100 people, Cuba leads only five other countries in the region (El Salvador, Guatemala, Haiti, Honduras, Nicaragua) with a rate of 23.2%, relative to a regional average of over 50% (ITU 2011, 2012a, 2012b; Press 2011; ONE 2012, 2013).

Table 1. Information and Communication Technology (ICT) in Cuba

Concept	2007	2008	2009	2010	2011	2012
Number of Computers (thousands)	509.0	630.0	700.0	724.0	783.0	834.0
Those connected to the web (thousands)	330.0	400.0	455.0	434.4	469.8	500.4

Source: ONE and Ministry of Information and Communications, Republic of Cuba, 2012, 2013.

<sup>1.</sup> On the "dictator's dilemma" and the efforts of authoritarian states to circumvent the "network neutrality" built into the very architecture of the Internet by constructing national or "halal" (healthful) *intra*-nets, see Boas (2000), Kalathil and Boas (2003), Goldsmith and Wu (2006), Wu (2010), MacKinnon (2012), Miroff (2012), Riesman (2012), and Díaz (2012). Of course, recent revelations about warrantless surveillance activities of the U.S. National Security Agency carried out in coordination with leading U.S. telecom companies remind us that authoritarian regimes are not alone in their efforts to remake the Internet in their own image (Rule 2013).

Table 1. Information and Communication Technology (ICT) in Cuba

Concept	2007	2008	2009	2010	2011	2012
Number of Internet Users (thousands)	1,310	1,450	1,600	1,790	2,610	2,871.0
Personal Computers / 1,000 inhabitants	45	56	62	64	70	74
Internet Users / 1,000 inhabitants	117	129	142	159	232	257
Domains Registered under ".cu"	1,431	2,168	2,331	2,225	2,285	2,345
Cellular Telephone Accounts (thousands)	198.3	330.0	621.2	1,003	1,315	1,681.6

Source: ONE and Ministry of Information and Communications, Republic of Cuba, 2012, 2013.

Furthermore, there is no universal definition of the term "Internet users." And being an Internet user in Cuba almost never means having high-speed access from home or from a smart phone, as is often the case elsewhere, but a tenuous, "slow, limited, and expensive" (Press 2011) connection from a state institution or through the black market. For example, a survey done by Cuba's National Statistical Office (ONE) in 2007 found that "only 5.2 percent of those questioned [...] had used a computer [typically without connection to the Internet] at home, while 88.8 percent did so in their workplace or school" (Acosta 2008). Moreover, Cuban blogger and researcher Elaine Díaz (2012) has argued that the island faces a double digital divide since its extremely low level of access is combined with frustratingly slow connection speeds of just 458 megabytes per second for downloads and 229 Mbps for uploads. (At least initially, these speeds do not seem to have significantly increased following the activation of the ALBA-1 fiber-optic cable or the opening of 118 public cybercafes on the island.)

In recent years there has been extraordinary growth in the use of cell phones in Cuba, which are used not only to make calls but increasingly to send and receive text/SMS messages that—when properly configured—can be transformed into Twitter messages (Sánchez 2012, 2013a). Although there were only 22,600 cell phones on the island in 2002, usage reached 330,000 in 2008 when the ban on purchasing them was lifted. Even so, this much higher number represented only 3% of the population, while the average regional coverage was 93.4%. Since 2008, however, the government began lowering prices (Miroff 2010) causing the number of users to almost double to 621,200 by 2009, surpassing a million in 2010, and reaching nearly 1.7 million in 2012 (Table 1). Still, this number remains just over 10% of the

population—the lowest cell phone penetration rate in the Western Hemisphere (Miroff 2012).

The most recent official Cuban statistics indicate that 25.7% of the island's population has access to the Internet (Table 1). However, this number does not refer to use of the World Wide Web, but only access to e-mail and the island's limited domestic Red Cuba or national "intra-net." This expanding intranet features its own politically correct versions of popular Internet sites like Wikipedia (EcuRed) and Facebook (Redsocial) (Press 2011), as well as a network of Joven Club computer centers, which according to National Public Radio's Havana-based correspondent Nick Miroff, "work like Internet cafés, [but] without the Internet or the café" (2012). In fact, it is estimated that just 5% of the population has access to the Internet proper, some at their workplaces and schools, others at hotels, and still others via the black market (Freedom House 2012). Although some professionals and government officials are provided legal household access, it remains impossible for the Cuban public to legally contract for a home-based connection (foreigners resident in Cuba do have this right). In spite of the recent legalization of the sale of mobile phones, it remains virtually impossible to access the web via a smart phone in Cuba as Wi-Fi "hotspots" are exceedingly rare and costly, mainly intended for foreign tourists.

High costs related to use of the Internet still prevent access by the general public. A desktop computer costs an average of \$722 (\$550 on the black market) and an hour of connection at one of the few international hotels costs between \$6 and \$12. By comparison, the average monthly income in Cuba is \$20. Finally, when a Cuban is at last able to reach the Internet, a slow connection and blocked sites make finding and downloading documents difficult, impeding full use of the web. Thus, Cuba remains one

of the world's most restricted environments for the Internet and other ICTs. Indeed, according to the 2012 "Freedom on the Net" report from Freedom House, Cuba ranks as the second most un-free country surveyed (46th out of the 47 countries included), ahead only of Iran. The report identifies three major obstacles to greater access: a rigid and ideological legal framework, prohibitive costs set in hard currency, and antiquated infrastructure (Table 2).

Table 2. Cuban Internet Access, 2011–2012

	2011	2012
Obstacles to Access (0–25)	24	24
Limits on Content (0-35)	30	29
Violation of User Rights (0-40)	33	33
Internet Freedom Score (0-100)*	87/Not Free	86/Not Free
Internet Penetration	1-3%	5%
Web 2.0 Applications Blocked	Yes	Yes
Notable Political Censorship	Yes	Yes
Bloggers/ICT Users Arrested	Yes	Yes

<sup>\*</sup>On the scale of Internet Freedom, 0 = most free and 100 = least free. **Source:** Freedom House, 2012.

To this must be added the obstacles put in place by the U.S. embargo. In 2009, President Barack Obama made a slight change to the embargo allowing U.S. telecom companies to negotiate with the Cuban government to set up fiber-optic cable and satellite links between the U.S. and Cuba. However, due to legal concerns and bureaucratic obstacles, the Obama change has not led to the establishment of any such connections (White House 2009; Piccone, Sabatini, and Saladrigas 2010; Freedom House 2012). Of course, it is possible that the Cuban government distrusts any such engagement with U.S. companies as a dangerous Trojan horse and prefers that the U.S. embargo serve as a convenient scapegoat for the lack access, while opting for greater—and more easily controlled—connectivity via its trusted ally Venezuela.

## *NAUTA*: EXPANDED INTERNET ACCESS AT HIGH, MONOPOLISTIC PRICES

Due to the U.S. embargo, since the mid-1990s when Cuba came on-line, its Internet connection was exclusively via satellite. However, after years of delays, a fiber-optic cable from Venezuela reached Cuba in February 2011, a development that was expected to increase the connection speed by a factor of 3,000.

However, more than two years passed before the cable became operational in early 2013. Ongoing financial and infrastructural obstacles, as well as a lack of political will, have so far prevented this major development from having an immediate effect on the extremely low level of public access to the web—effectively making the cable a "strong link in a weak chain" (Press 2012; Miroff 2013). Most recently, a May 28, 2013 article in the Cuban newspaper *Juventud Rebelde* (del Valle 2013) as well as new legislation published in the *Gaceta Oficial* (2013) announced that 118 *telepuntos*—each averaging three computers—would finally begin providing Internet service to the public across the island on June 4, 2013 (Hernández Busto 2013).

While a positive step toward greater access, the new service remains a monopoly of the Cuban state telecom company ETECSA and is available only to those able to pay in hard currency. Although the government has promised to continue to make needed investments in order to constantly expand and improve the service—including eventually setting up Wi-Fi hotspots and allowing Internet connection at private homes and via smart phones (Elizalde and Lagarde 2013)—current prices remain far out of reach for most Cubans. In fact, the \$5 (4.50 CUC) per hour of "full" access to international Internet at one of these cyber-cafes is equivalent to a full week's average Cuban salary (Díaz Moreno 2013). That is, a user who seeks to go online just one hour each day over the course of a month would have to shell out \$150, more than seven times Cuba's \$20 average monthly wage.

BBC Cuba correspondent Fernando Ravsberg recently noted that despite all the fanfare that accompanied the recent announcement, there will only be 334 of these public access computers in the country's 118 *telepuntos*. Doing the math, he calculates that this amounts to one cyber-cafe for every 65,000 people, allowing each user exactly one hour of access every five years, based on the assumption that 8 million of Cuba's 11 million inhabitants would be users. Even if we were to assume that just one-tenth of this number (800,000) sought access to the web via these

new cyber-cafes, each person would still have to wait six months to go online for an hour (Ravsberg 2013).

Despite the government's understandable emphasis on the fact that an expansion in service "cannot be free"-given the infrastructural investments needed to upgrade Cuba's antiquated telecom system—it simultaneously insists that "it will not be the market that regulates access to knowledge in our country" ("Cuba amplía" 2013; Díaz Moreno 2013). In the days following the announcement, a host of commentators on the island angrily pointed out this contradiction (Díaz Moreno 2013). For example, Havana blogger Walfrido López argued, "I'm sure that with average salaries of just 400 pesos per month few people will be able to connect, only making the already existing digital divide among Cubans-and between them and the rest of the world-wider and deeper" (López 2013). For his part, Camagüey-based blogger Alejandro Rodríguez argued that:

The Internet opening seems [...] a half-hearted measure, [...] the tiniest of the latest reforms, that only privileges the same wealthy ones as always, along with the *nouveau riche*. It is an opening that refuses to recognize everyone's right to similar opportunities, not just to education and health care, but also to access pluralistic knowledge, which means individual power, and culture (Rodríguez 2013).

While the government continues to justify limitations on private, house-hold Internet access with reference to upholding the principle of "social use" (prioritizing educational, research, and health uses, etc.)—as it did at a press conference announcing the new measure—most Cuban elementary and high schools remain unconnected to the web and the high prices for the expanded "public" access at these cyber-cafes are nothing if not based on market rates—and monopolistic ones at that ("Otro paso" 2013; Díaz Moreno 2013; Campos 2013).<sup>2</sup>

## NAUTA'S WALLED GARDEN: GREATER ACCESS IN EXCHANGE FOR EXPANDED CONTROL?

Furthermore, Internet access will be provided through a tightly controlled "walled garden" format via ETECSA's local server, Nauta, allowing the government the ability to engage in surveillance and filtering of all content. "It is unlikely," highlighted Walfrido López, "that those able to scale the first hurdle of the high prices realize that [...] they are paying to enter one of the most sophisticated, invisible, and exotic government schemes to control the Internet ever to exist—what I like to call the 'Cuban model' of the Internet" (López 2013). For example, while a visit to a cybercafé in the Vedado district of Havana by cyber-activists Yoani Sánchez and Reinaldo Escobar on June 4, 2013 confirmed that there was indeed high-speed access to many politically "incorrect" sites such as El País, El Nuevo Herald, and Sánchez's own blog, Generación Y, they also reported that "inter-nauts" are required to sign a contract that all but declares that they will be under surveillance (Sánchez 2013b).

This user contract states that the government reserves the right to block those who engage in activities that "undermine public safety or the country's integrity, economy, independence and sovereignty." Moreover, while assuring users that their "privacy will be guaranteed," it also warns them that ETECSA will "immediately suspend the service if it detects that, during the navigation session, the user has violated any of the ethical norms of behavior which the Cuban State has established" (Sánchez 2013b; "Cuba amplía" 2013). In fact, during her opening-day visit to a cyber-cafe Sánchez sent out a Twitter photo of a pop-up notice on her computer screen that read, "When you send information via the Internet it is possible for other people to see what you are sending. Would you like to continue?" (Sánchez 2013b). Finally, Cuba's most popular Craig's List-type site, Revolico.com, as well as most sites with erotic or sexu-

<sup>2.</sup> Of course, not all of Cuba's bloggers agreed with these assessments. "Using the Internet may still be a luxury for most," admitted Osmany Sánchez, one of the administrators of the *La Joven Cuba* blog, "but e-mail services are more affordable and will help bring Cuban families closer together" (O. Sánchez 2013; Aquique 2013).

al content, continue to be blocked, even though use of the *telepuntos* is restricted to those 18 or older. To paraphrase Ravsberg, the message seems to be that this opening will allow Cuba's deep-pocketed *Nauta* users to pay their money and take their chances, but that they should remember: no politics, no sex, no business, and no minors (Ravsberg 2013).

### THE PROMISE AND PERIL OF SOCIAL MEDIA IN CUBA

Despite the recent inauguration of the *Nauta* program, the above data on Internet penetration and access indicates that Cuba continues to live in a world of web 1.0, without the common use of social networks, mobile technology, and cloud computing. However, this does not mean that the most popular social media applications like Facebook, Twitter, Wordpress, and Blogger are completely unavailable in Cuba. It is only that their use is still in its infancy and only an elite (the most privileged and/or adept) has been able to enter the "brave new world" of web 2.0. Still, social media's disruptive potential arises in Cuba from the same "leveling" process that it exhibits in other contexts. It blurs the traditional distinction between the public and the private, the real and the virtual, the professional and the amateur, formal one-to-many broadcasting and informal one-to-one communication, as well as collapsing the local, national, and international spheres (Calvo Peña 2010). It can also undermine the authority and hegemony of dominant telecom institutions (i.e., the "master switch" wielded by the "mainstream media," which is the party-controlled state media in the case of Cuba) by placing inexpensive broadcast technology in the hands of "the people formerly known as the audience" (Wu 2010). Furthermore, it allows for greater independent and horizontal ("peer-to-peer") communication, sharing of information, convening of publics, crowdsourcing, "peer production," and creative non-proprietary collaboration through harnessing of collective surplus time and energy (Henken and Bien 2012), all abilities with a disruptive potential to undermine the power of authoritarian regimes and traditional media elites (Mandiberg 2012).

Of course, many of these technologies can also be used by authoritarian regimes and traditional elites to

expand their media hegemony even more. For example, in his recent book, The Myth of Digital Democracy (2009), Matthew Hindman shows—at least in the case of political websites in the U.S.—a pronounced winner-take-all pattern whereby only a handful of well-known and well-linked sites receive the lion's share of web traffic. He also makes a key distinction between the ability to speak—which he agrees the Internet has "democratized" in powerful ways—and being heard. As for the contention that the blogging phenomenon "amplifies the voice of ordinary citizens," Hindman argues that there is a big difference between who posts and who gets read. In fact, he shows that despite the proliferation of political blogs in the U.S. since 2003, a small number of highly educated white male professional media elites have come to dominate the U.S. political blogosphere not exactly "ordinary citizens" or "former members of the audience." Finally, while many have celebrated blogs as a step toward greater democratization of the mainstream media, Hindman reminds us of the potential downside to the pluralism and amateurization of the media that blogs facilitate (think ciberchancleteo). While some observers are heartened that "blogging is making political discourse less exclusive, giving ordinary citizens and expanded voice," others decry this development as "too democratic: it empowers the unqualified and insipid, tramples on norms of accuracy and objectivity, and replaces trained professionals with partisan hacks" (Hindman 2009:113, emphasis in the original). Further research in Cuba is needed to see if these patterns are replicated there as well.

# CONCLUSION: AN EMERGENT TRANSNATIONAL CUBAN CONTENTIOUS SPACE?

The emergent character of social media in Cuba, combined perhaps with at least an initial hubris and ignorance on the part of the government, has allowed its denizens to begin to share spontaneous critical commentary in what is still an unchartered, ambiguous space (via e-mails, blog posts, Twitter messages, or Facebook and even Youtube videos), granting them a modicum of safety relative to traditional "public," "alternative," or "dissident" street protests.

In other words, while "the street" may still belong to Fidel ("*la calle es de Fidel*" being a typical slogan aimed at claiming all public spaces as "revolutionary"), it is much less clear who Cuban cyberspace belongs to, if anyone (Henken 2008, 2010). Moreover, Cuba's cyber-activists have not been content to remain "in the cloud," forever isolated from one another. Instead, they have sought to turn their visibility—long understood as a dangerous liability—into an asset (Geoffray 2013: 14–16), harnessing their transnational digital presence (as "the whole world watches") to serve as a protective shield when they dare to occupy the public sphere.

Given the "worldwide" nature of the web, standard understandings of civil society (Habermas 1989; Dilla and Oxhorn 2002; Fernández 2008; Grant 2009) need to be updated when applied to the inherently de-territorialized space of the Internet-what Geoffray calls an "emerging transnational Cuban contentious space" (2013: 20-29). In fact, while nearly all of Cuba's cyber-activists are indeed territorially based, they simultaneously inhabit a complex transnational space, often relying on hosting, servers, administrators, web-masters, translators, and even some financing from outside of Cuba, not to mention drawing the bulk of their readers, commentators, and critics from abroad as well. Furthermore, the horizontal, many-to-many architecture of social media is inherently at odds with the top-down architectural logic of traditional, vertical, one-to-many broadcast media that both capitalist and state socialist telecom monopolies have long relied on. Indeed, Hoffmann applies Marshall McLuhan's now famous dictum "the medium is the message" to Cuba's diverse group of cyber-activists when he notes:

Although the political content and ultimate aims may vary widely, all those who use e-mail or blogs to voice their personal views are, by the very fact of using these media, advocating a right to participate in the public sphere individually and beyond the state monopoly on mass media, and without their writings having to pass editors-in-chief or program directors. Using citizen media is a civic action in itself, an "insurgent citizenship" claiming its communication rights (Hoffmann 2011).

While early Internet debates, such as the January 2007 e-mail war,3 were largely restricted to cyberspace—making them all-but-invisible to the Cuban public given the extremely low rate of Internet access on the island—2012 and 2013 have seen increasingly bold and confident attempts on the part of some of Cuba's cyber-activists to claim a public space for their debates. "These virtual and real activities," writes Geoffray perceptively, "have played a crucial role for the convergence of micro-arenas that used to be segmented from one another" (2013: 28). The convergence of these "allies of convenience," however, does not necessarily make them political allies. In fact, their lack of any political alliance makes these contentious interactions all the more important in establishing "a more plural and connected pubic arena" where "protagonists [can] recognize one another as legitimate opponents" (ibid.).

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<sup>3.</sup> The "e-mail war" was a spontaneous *polémica intelectual* (intellectual polemic) that erupted among a wide array of Cuban artists and writers both on and off the island in January and February 2007 in response to the recognition on national television of a number of censors notorious for their repressive policies against Cuban intellectuals in the 1970s (Heras and Navarro 2007).

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