



# **RATIONING THE DIGITAL**

**The Policy and Politics of  
Internet Use in Cuba Today**



**INTERNET MONITOR**

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**COVER IMAGE**

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# Rationing the Digital: The Policy and Politics of Internet Use in Cuba Today

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INTERNET MONITOR

**CUBA** has one of the lowest Internet penetration rates in the Western hemisphere and is routinely ranked among countries with the highest restrictions on Internet use in the world. But within both categories, it is something of a rare bird.

While the precise number of Internet users in the country is difficult to calculate, it is clear that a lack of infrastructure, combined with economic and political hurdles, has left access to the global Internet out of reach for most Cubans. But this may soon change. This spring, the country's only telecommunications firm, the state-owned ETECSA, activated two undersea fiber optic cables that are set to drastically increase connection speeds in Cuba; the firm also opened over 100 cybercafes across the island.<sup>1</sup> Officials have since made public promises to increase access and lower currently exorbitant fees for Internet use. This could fundamentally change the island's information economy.

Although Cuba is routinely listed alongside China, Iran, and Saudi Arabia as one of the most Internet-restrictive countries in the world, there is no conclusive evidence that the Cuban government practices widespread filtering.<sup>2</sup> While a handful of websites related to dissident activity are blocked, Cubans who use the global Internet are able to browse the web and participate in digital communities without facing extensive content controls.<sup>3</sup> But most don't get this far. Although the country has an active national Intranet, access to the global Internet is available mainly to those in high-skilled professional sectors and academia.<sup>4</sup> The potential impact of digital media and the global Internet on Cuban society has been limited due to the lack of network access on the island. Yet this has not prevented the increasing circulation of digital media among the country's nascent but growing community of tech-savvy citizens.

## MEDIA IN REVOLUTION

In 1959, a group of guerilla insurgents led by Fidel Castro and Ernesto "Che" Guevara stormed the nation's presidential palace and ousted former president Fulgencio Batista from power. The guerillas formed a new government that sought to remake Cuban society using a unique blend of Marxist doctrine and nationalistic ideology. In the 1960s, all private enterprises were brought under state ownership; social service systems such as healthcare and education were aggressively developed and rebuilt to serve the country's entire population; and many independent organizations and informal groups were brought under the umbrella of state leadership. While the country's poor, who accounted for most of the population, generally applauded these reforms, many wealthier citizens left the island in an effort to protect their wealth.<sup>5</sup> Along with massive shifts in economic, social, and political life, media and information on the island underwent a drastic transformation. Nearly all print and broadcast media outlets that had existed prior to the revolution were closed in 1961.<sup>6</sup> In 1965, the state-run newspapers *Hoy* and *Revolución* merged to create *Granma*, which remains the most widely circulated newspaper on the island today.<sup>7</sup> State-run television and radio stations were also established, while independent stations were eliminated.

In addition to controls on media, the government also articulated a new position on intellectual expression. In a famous 1961 address to Cuba's Union of Writers and Artists (UNEAC), Fidel Castro proposed a new role for intellectuals, inscribing them in the revolution as fighters in the "ideological trenches" of the revolution, which is considered to be ongoing.<sup>8</sup> He proposed that critical thinking and expression should exist only "within" (or in service of) the revolution, making it clear that criticism considered damaging to the revolutionary project would not be tolerated. This policy has typically been



enforced informally by art venues, publishing houses, and other gatekeepers, but a handful of artists have faced trial and even jail time for their work.<sup>9</sup>

Although the Internet has brought about substantial change within informal information channels over the last six years, little has changed since the 1960s for most Cubans seeking easily accessible news. *Granma*, *Trabajadores*, and other major newspapers typically run from eight to twelve pages in length, offering coverage of public works and social service projects, political events, and international news from a markedly anti-US perspective. The reflections of Fidel Castro, and transcripts of speeches by Raúl Castro and other high-ranking officials, regularly occupy two or three pages of these newspapers.

Cubans can also get news from the radio or via national television news channels such as Cubavisión and TeleRebelde, but many say that state media doesn't provide adequate coverage of events on the island, particularly at the local level. Even established intellectual leaders have commented publicly on the mass media's "ineptitude in reflecting public grievances."<sup>10</sup> Most Cubans do not rely solely on state media for information. In Havana, home television screens buzz with Colombian *telenovelas* and CNN en Español, programs that are pirated via satellite from stations in Miami. Highly educated Cubans may read literary magazines, or *Temas*, the widely renowned intellectual journal on the island, but rarely *Granma*.

State-run periodicals and broadcast media are not explicitly censored per se, but journalists operate under certain expectations concerning ideological character and factual accuracy; for any person raised and educated in Cuba, these are second nature.<sup>11</sup> Article 53 of the 1976 constitution recognizes freedom of both expression and the press, but subordinates and limits those freedoms to the "ends of the

socialist society." In practice, this means that journalists are not explicitly limited in what they report on, so long as their coverage serves the "ends" or interests of the country's socialist system.

While politically "problematic" journalists are often simply not hired by press organizations, there have been instances where journalists have faced arrest and imprisonment because of their work. In the so-called "Black Spring" of 2003, the government systematically arrested, tried, and convicted 29 journalists of subversive coverage.<sup>12</sup>

The Internet has a limited and highly controlled role in Cuban society today. Given that most Cubans do not have access to the global Internet, its impact as a space for the exchange of news and information is difficult to measure, but presumably limited. The government has developed various state news and information websites, as well as a cadre of state bloggers who chiefly re-post content from state-run news sites. And a small but vociferous independent blogging community has developed on the island, where bloggers express a broad range of views on political and social issues in the country. State websites and blogs often spar with those bloggers who identify themselves as anti-government. This comes as no surprise: effectively, blogs have become the first medium since 1961 wherein Cubans can express themselves and document current events without confronting any state-imposed requirement for authorization or approval.

## A COMPLEX ECONOMY OF CONNECTIVITY

All Internet connections in Cuba today are provided by the government-owned ETECSA, the parent company of Cuba's telecommunications service providers. Most Internet users in Cuba connect through a dial-up connection. Though some use DSL,

wireless connections are very uncommon outside of high-end hotels.<sup>13</sup> Latency times for connecting to websites outside the country are generally very slow.<sup>14</sup>

Until early 2013, all Internet connections in the country were via satellite. Through a partnership with the Venezuelan government and the ALBA alliance,<sup>15</sup> the government has overseen the construction of an undersea fiber optic cable that reportedly will drastically improve connectivity for Cuban Internet users. Pending the development of adequate infrastructure on the island, officials say that the cable will increase connection speeds 3,000-fold.<sup>16</sup> Although the project has been underway since 2006, the cable was not put in place until 2011. It went unused until January 2013, when Renesys reported signs of new data routes into Cuba and slightly improved transmission speeds, indicating that the cable had been activated and that Telefónica Spain was sending Internet traffic to the island.<sup>17</sup> In May 2013, Renesys detected additional data routes between Cuba and Jamaica showing that ETECSA was receiving international Internet traffic through Cable & Wireless Jamaica.<sup>18</sup> Renesys researcher Doug Madory posited that the connection to Cable & Wireless Jamaica may be intended to serve as a back-up, should service through the main Cuba-Venezuela cable be shut off.<sup>19</sup> Shortly after this news surfaced, Cuban officials announced plans to increase the number of Internet cafes on the island.

Cubans who wish to have an Internet connection installed in their home or place of business must apply for a connection with the Ministry of Information Technology and Communications (MINTIC). Applications for Internet connections in private homes are rarely accepted; in 2011, the ITU reported that only 0.4 percent of Cuban households were connected to the global Internet.<sup>20</sup>

Businesses and individuals also must apply to MINTIC in order to establish WiFi networks. WiFi is extremely uncommon, both due to

bureaucratic hurdles and the limited use that citizens would derive from networks, given that most people do not own laptop computers or smart phones.

Cell phone penetration has increased rapidly since regulations on cell phone purchase and ownership were liberalized in 2008.<sup>21</sup> In 2011, eleven percent of Cubans owned cell phones.<sup>22</sup> Some mobile phones in Cuba are Internet capable, but given the lack of 3G and WiFi networks in the country (certain tourist areas are rumored to have 3G, but it has not been detected elsewhere), they are not especially useful. SMS messaging is very popular among Cubans and has provided an important fast communication mechanism for activists and citizen journalists.

Cuban officials attribute many limitations on Internet access to the US trade embargo on Cuba, which has made the costs of technical hardware and improving telecommunications infrastructure exorbitant for Cuba.<sup>23</sup> The Obama administration has eliminated some of these restrictions with the express intention of increasing telecommunications access for Cuban citizens, but current policy still leaves barriers substantial enough to discourage telecommunications companies from pursuing business opportunities on the island.<sup>24</sup>

## RATIONING INTERNET ACCESS

Cuban authorities have openly raised concern about the Internet and have declared that the government must protect Cubans from “damaging” and “imperialistic” content on the web, which is often called a “media weapon” of the United States.<sup>25</sup> Fidel Castro commented on the unique effects of decentralized communication online in a 2010 interview with the Mexico City-based daily newspaper *La Jornada*:

The Internet has put the possibility of communicating with the world into our hands. We had nothing like this

before. ... We are facing the most powerful weapon that's ever existed... The power of communication has been, and is, in the hands of the empire and of ambitious private sector groups that have used and abused it... [A]lthough they've tried to keep this power intact, they haven't been able to. They are losing it day by day... as many other [voices] emerge each moment.<sup>26</sup>

While Fidel's words might suggest some leniency toward independent voices on the web, he also portrays the Internet as a space for ideological conflict; this conceptualization has been central to state rhetoric concerning the Internet.<sup>27</sup>

Yet the government is also deeply committed to maintaining its renowned education and healthcare systems, and is reticent to fall behind regional standards because of technological barriers.<sup>28</sup> Thus, authorities have mitigated the political and economic challenges that the Internet presents by “rationing” Internet access and content. High-skilled professionals such as doctors, academics, and high-ranking government officials are given access to the global Internet at their places of work because it is deemed necessary to their professional development. Factory workers, plumbers, bus drivers—and the millions of other workers who do not belong to the category of elite professionals—are not so lucky.

While this privileged group of professionals may be able to get online, most are unlikely to tread too far outside of what they consider to be “safe for work”—regardless of whether or not they are being watched, such activity can feel like a substantial political risk. Indeed, several Cuban bloggers contend that in the professional world, Internet access is distributed not only in accordance with necessity, but also with political behavior. Employees who are known to be government

supporters are more likely to be trusted to use the Internet than those who are not outwardly supportive of the government.<sup>29</sup>

For Cubans who do not fall into this elite category, the government has developed a national network, or Intranet. Accessible in universities, youth recreation centers, and post offices,<sup>30</sup> the Intranet allows users to access the state email server and sites that are hosted in the .cu domain,<sup>31</sup> which is administered by the government. While it is not technically open, the Intranet hosts a wide variety of sites covering topics ranging from news to culture to tourism. EcuRed, Cuba's version of Wikipedia, boasts 103,000 articles on topics of all kinds.<sup>32</sup> Within the Intranet, the government allows citizens to participate in a uniquely Cuban online environment, and academic and medical researchers to build networks of scholarly exchange, without having to develop the infrastructure or face the political challenges that the global Internet would bring. All .cu domain sites are subject to review by the Department of Revolutionary Orientation, a measure that eliminates most politically objectionable or counterrevolutionary content from the Intranet.<sup>33</sup> There is some degree of ambiguity surrounding the Intranet—on the island, one notices that Cubans sometimes use the terms Internet and Intranet interchangeably.<sup>34</sup>

When describing the positive aspects of the Internet, officials do not acknowledge it as a space for individual exploration and social connection; the web is framed primarily as a valuable tool for professional and intellectual enrichment. In sum, those who are authorized to use the Internet are expected to do so in order to better do their jobs, or so that they may better serve the nation.

The tourism industry has created another venue for Internet access on the island. Since 2001, hotel business centers have offered access to the global Internet, and since 2008, Cubans have been permitted to use these

services alongside tourists.<sup>35</sup> But at prices ranging from the equivalent of US\$7-12, hotel connections are prohibitively expensive for most Cubans, who earn the equivalent of US\$12-25 per month. This is the paradoxical tilt of Internet policy in Cuba, and one that directly contradicts the egalitarian imperative of the Cuban socialist project—if you can't scrape together the money, your opportunities to access the global Internet will be few and far between. But any person with a pocketful of cash can easily circumvent state restrictions by paying to use a hotel connection.

In June of 2013, ETECSA opened 118 Internet cafes around the country where Cuban nationals can get online at a lower (if still formidable) cost; domestic Intranet use is priced at the equivalent of US\$0.70 per hour, while connecting to the global Internet costs US\$5.00 per hour.<sup>36</sup> ETECSA officials have announced plans to increase the number of centers on the island and to reduce connection fees over time.<sup>37</sup>

Pinpointing Cuba's Internet penetration rate is difficult. Government statistics submitted to the International Telecommunication Union (ITU) reported Cuba's Internet penetration rate at 14 percent in 2010 and 23 percent in 2011.<sup>38</sup> The same report also stated that there were fewer than four fixed Internet connections per 10,000 inhabitants of the country.<sup>39</sup> As mentioned above, most Cubans who access the global Internet do so at work or school, on a shared computer. Many access the Internet on a relatively infrequent basis. Researchers also note that numbers submitted by the government could be adjusted to reflect the "informal" or unauthorized use of the Internet through black market channels, but it is difficult to estimate how many Cubans have access to such connections.

## DIGITAL EXPRESSION ON THE ISLAND

In spite of significant barriers to using the Internet, a small blogging community has

been growing in Cuba since 2006. Focusing on topics ranging from human rights to poetry to sexual politics, these bloggers have given people worldwide the opportunity to read about daily life in Cuba from independent sources. In a country where most writers, scholars, and novelists are supported and 'approved' by state-run institutions, this is a radical turn: civic discourse is no longer solely a product of state-supported journalists and intellectuals.

Measuring the degree to which these bloggers are reaching their own fellow citizens is difficult, given the low levels of Internet access on the island. Highly conscious of this problem, bloggers routinely send their posts to Cuban friends and family via email (the state email system is separate from the Internet and can be accessed wherever Intranet connections are found.) Some will load their writings, as well as news and other media from the web, to CDs or pen drives that they trade among friends. Those who don't blog, but have access to these networks of exchange, often pass new information along by word of mouth or, if they own cell phones, by sending it to their friends or posting it to Twitter via SMS. Blogger Orlando Luis Pardo Lazo describes these networks of secondary circulation as Cuba's Internet "offline".<sup>40</sup> Like other bloggers, Pardo Lazo believes that this relatively new, web-derived information-sharing economy is beginning to have some impact on how Cubans get their news—rather than relying on state media outlets and word-of-mouth, Cubans can now more easily learn of the latest social and political happenings from a range of sources, including independent and foreign ones.

Many of the island's bloggers have chronicled the development of Cuba's informal economy of technology, and they point out that these communities of information exchange correspond to underground networks of commercial activity. Since the mid-1990s, the



presence of hard currency in Cuba has led to a rapid expansion of the informal economy, and technological hardware and know-how have become coveted goods on the black market in recent years. Bloggers have reported that Cubans are increasingly able to access the Internet through unofficial channels. Cubans who work in hotels obtain Internet café access cards in bulk and sell them for reduced prices on the black market. Cubans with official authorization to use the Internet will allow their friends to log on using their passwords, or will sell their passwords for a small fee.<sup>41</sup> While these exchanges may sound too innocent to be called “black market” deals, any transaction that is not authorized by a state agency can be classified as unauthorized commercial activity, and thus constitute a criminal offense. But as long as technical commodities remain “hot” on the informal market, they will likely continue to proliferate among tech-savvy citizens.<sup>42</sup>

## **BLOGGERS: THE “MOST SERIOUS CHALLENGE” TO CUBA’S POLITICAL STABILITY?**

Certain bloggers and Twitter users focus primarily on reporting on dissident activism and human rights violations on the island—for the first time in history, readers around the world have been able to see photographs of abuses shortly after they’ve taken place. This type of activism has likely fueled government ire towards bloggers, whom officials have openly condemned in public address.<sup>43</sup> In diplomatic cables sent from the US Interests Section in Havana (an office that exists in lieu of an actual embassy), released by WikiLeaks in December 2010, US officials suggested that Cuban authorities have come to view the island’s bloggers as the “most serious challenge” to Cuba’s political stability.<sup>44</sup>

Cuban netizens have not been persecuted at the level that they have in countries like Iran or China, but they have faced increasing

pressure in recent years. The first well-documented arrests of Cubans who participate in online communities occurred in 2009, when well-known Havana-based bloggers Yoani Sánchez, Orlando Luis Pardo, and Claudia Cadelo were detained while en route to a performance by the controversial political arts group OMNI Zona Franca.<sup>45</sup> Since this time, Sánchez and Pardo have been arrested and detained several times. Bloggers and other netizens are typically arrested while traveling to a meeting or event of political significance. In October 2012, Sánchez and bloggers Agustín Díaz and Reinaldo Escobar (Sánchez’s husband) were arrested while they were on their way to the trial of Angel Carromero, a Spanish national accused by the Cuban government of vehicular manslaughter in the death of Oswaldo Payá, a long-standing advocate for human rights and democratic governance in Cuba.<sup>46</sup>

In November 2012, police arrested a large group of dissidents and independent bloggers who had gathered outside of a Havana police station to demand that authorities release certain activists and intellectuals who were being held in detention.<sup>47</sup> Antonio Rodiles, organizer of an informal intellectual forum called “Estado de SATS,” was among those arrested, and was held for three weeks before being released. Rodiles has been chided by authorities for his work on Estado de SATS, which he video records and posts on YouTube.<sup>48</sup> After his arrest, it was rumored that Rodiles would be charged with “contempt and dispersion of false news,” but he was released soon after this information began to circulate. It is unclear whether he will face charges in the future.<sup>49</sup>

Human rights advocacy and international peace-keeping organizations, not to mention foreign governments, are paying attention to the new lines of communication that have formed between Cuba and the rest of the world. They are increasingly using these tools to further awareness about violations of civil

and human rights in Cuba, and to hold the Cuban government accountable for its actions. In her writings, Sánchez has surmised that her international popularity has helped to protect her from further persecution by state authorities; if she were physically harmed or incarcerated for a long period of time, she suspects the diplomatic and economic costs for the Cuban government would be great.

In 2009, a US citizen named Alan Gross was arrested for bringing technological equipment into the country. Gross made five trips to Cuba on behalf of Development Alternatives International, a subcontractor of USAID, on which he was assigned to set up small WiFi networks in an effort to help Jewish communities in Cuba access the Internet. After being held without charges for ten months, Gross was tried and convicted of traveling to the country without proper permission (Gross entered Cuba on a tourist visa, rather than an aid worker's visa) and acts that violated the "integrity of the Cuban state."<sup>50</sup> He was sentenced to fifteen years in prison; although US State Department representatives have expressed confidence that the Gross sentence could be reduced through negotiations, thus far there has been no evidence that any progress has been made in this regard.<sup>51</sup>

Under Cuban law, it is illegal for Cuban citizens to accept financial, material, or any other type of assistance from US government agencies;<sup>52</sup> USAID has nevertheless maintained programming in the country that is typically conducted in a clandestine, non-transparent manner.<sup>53</sup>

In 2012, Cuban bloggers reported that certain universities had implemented a policy under which students who are found using Facebook or Twitter on university computers can have their Internet use privileges revoked for up to six months. Bloggers surmise that the policy deliberately targets US-based social networking sites, a "weapon" in what

government officials describe as an ongoing "cyberwar" between Cuba and the US.

Both the Gross case and the social network policy described above illustrate the degree to which Cuban government control over the Internet is particularly geared toward shielding the country from the cultural and economic influence of the United States.

## SURVEILLANCE FROM THE BOTTOM UP

Surveillance in Cuba takes place through a multi-tiered system that begins at the "grassroots" level: in every town and on nearly every city block, there is one person who serves as the community's designated leader of the local Committee for the Defense of the Revolution (CDR).<sup>54</sup> Committees for the Defense of the Revolution are meant to function as a source of political inspiration and solidarity for their communities, while also serving as the "eyes" of the state at the local level. The leader of each local CDR is charged with keeping a log of unusual, potentially counterrevolutionary activity in the area and reporting these activities to a state police officer who collects logs on a regular basis. In recent years, CDRs have since become a site for trading political favors; committee leaders report on their neighbors not necessarily as a way to support the government, but rather in an effort to encourage officers to turn a blind eye to their own unauthorized activities.<sup>55</sup>

Broadly speaking, there is an expectation of surveillance within Cuban society. Political doctrine is taught from nursery school onward, reinforced by CDR leaders, and repeatedly articulated in the speeches of high-ranking government officials.<sup>56</sup> Expectations and norms for what is and is not acceptable are well-understood by most people and enforced by authority figures (ranging from police officers to employers to university personnel) when necessary.

Those who have attempted to study electronic surveillance in Cuba have made little progress. Various individuals have reported on a unique, Cuban-made software program known as Avila Link, which prevents users from running certain kinds of software, and may possess monitoring capabilities.<sup>57</sup> It is rumored that public computers use keyloggers that record users' passwords for online accounts. For over a decade, researchers at the Universidad de las Ciencias Informáticas (UCI) have studied the potential benefits and ills of Cuba becoming a networked society.<sup>58</sup> Students at the UCI police the Internet in "Cybernetic Response Brigades," student task forces that comb the web for Cuba-based sites containing counterrevolutionary sentiment.<sup>59</sup>

Cubans have reported that the island's relatively new cybercafés require customers to show their national ID cards when signing up for time on a computer. The Miami Herald reported that customers also must sign an agreement stating that they will not engage in any activity online "that could be considered ... as damaging or harmful to the public security."<sup>60</sup>

Although some Cuban Internet users surely do worry about electronic surveillance, it is important to recognize that the general expectation of physical surveillance often trumps this concern. In fact, many bloggers on the island have elected to be very open about their real identities. Sánchez and Cadelo have high-quality scans of their national ID cards (carnet) posted on their homepages.<sup>61</sup> Many say that this is the "safest" way to blog on the island. If it is true that state security is the most efficiently-run government institution in Cuba, it seems unlikely that any blogger in Cuba could remain unknown to state security for very long. Furthermore, by blogging anonymously, a writer suggests that he or she is saying something that the state may find objectionable; this would likely only increase state suspicion about that particular

writer. Sánchez, who is regularly followed by state police officers in plainclothes, has even documented her followers' activities.

The previously mentioned trend of bloggers being arrested while physically en route to an event or meeting of political significance presents an important clue to this end, as it suggests that the government is primarily concerned with actions on the ground, not actions online. Given the low levels of Internet access among most of the population, it is not surprising that the government continues to rely on physical surveillance and real-space punishment of those who engage in criticism.

## LOOKING TOWARD A MORE CONNECTED FUTURE

At present, while recent developments give many Cubans hope for a more connected future, Internet access remains scant, prohibitively expensive, and beyond the reach of most of the population. It is likely that the underground economy of technology and information will continue to grow alongside the state's multi-tiered system of Internet use. Cubans in the upper echelon of skilled professionals will retain the privilege of regular Internet use. Some of the population will continue to use state-provided resources. And most Cubans will remain disconnected from the online world. The group to watch will be the island's tech-savvy minority. While the flow of technological commodities and know-how through underground channels may seem irreversible, it could one day trigger tighter government controls on technology; increased access to the Internet could yield an increase in digital surveillance. But as long as bloggers and other Internet users continue to participate in Cuba's "offline Internet," the global Internet will have an increasing impact on the spread of knowledge and information in Cuban society.

## ADDITIONAL RECOMMENDED READING

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<sup>1</sup> Doug Madory, "Cuba-Jamaica Link Activated," *Reunesys*, May 20, 2013, <http://www.reunesys.com/2013/05/cuba-jamaica-link-activated/>. See also "Cuban Centers to Offer a Costly Glimpse of the Web," *New York Times*, May 28, 2013, [http://www.nytimes.com/2013/05/29/world/americas/cuban-centers-to-offer-a-costly-glimpse-of-the-web.html?hpw&\\_r=0](http://www.nytimes.com/2013/05/29/world/americas/cuban-centers-to-offer-a-costly-glimpse-of-the-web.html?hpw&_r=0).

<sup>2</sup> Despite several attempts, researchers at the OpenNet Initiative ([opennet.net](http://opennet.net)) have been unable to run successful filtering tests in Cuba. Security concerns prevent further testing.

<sup>3</sup> Yoani Sánchez, author of the blog *Generación Y*, reported that her blog was blocked in Cuba from March of 2008 until February of 2010. Blogger Orlando Luis Pardo also reports that his blog, *Boring Home Utopics*, is blocked in Cuba. Numerous reports indicate that *MartíNoticias*, the website of Radio Martí, the US government-funded radio station directed at Cubans, is also blocked on the island.

<sup>4</sup> While it has less in common with countries that aggressively filter online content, Cuba shares some characteristics with North Korea—though its policies in certain areas are far less stringent. In North Korea, access to the global Internet is limited to a few connections via China for select government elites, and a national Intranet serves as citizens' only known way to experience the online world. For more information on Internet in North Korea, see: "North Korea," OpenNet Initiative, May 10, 2007, <https://opennet.net/research/profiles/north-korea>.



<sup>5</sup> Marifeli Pérez-Stable, *The Cuban Revolution: Origins, Course, and Legacy* (New York: Oxford University Press, 1993).

<sup>6</sup> Luis Martínez-Fernández et al. eds., *Encyclopedia of Cuba: People, History, Culture*, Vol. 1 (Westport, Connecticut: Greenwood Press, 2003), 272.

<sup>7</sup> “Cuba,” Press Reference, <http://www.pressreference.com/Cofa/Cuba.html>.

<sup>8</sup> Fidel Castro “Words to the Intellectuals,” UNEAC 1961, <http://lanic.utexas.edu/project/castro/db/1961/19610630.html>.

<sup>9</sup> Jean Franco, *The Decline and Fall of the Lettered City* (Cambridge, MA: Harvard University Press, 2002).

<sup>10</sup> Rafael Hernández, “On Cuban Democracy: Cuba and the Democratic Culture,” in Phillip Brenner et al. eds., *A Contemporary Cuba Reader: Reinventing the Revolution* (Lanham: Rowman and Littlefield, 2008), 77.

<sup>11</sup> The DOR is directed by the Secretary of Ideology, and operates as part of the political bureau of the central committee of the PCC. Cristina Venegas, *Digital Dilemmas: the state, the individual, and technology in Cuba* (New Brunswick: Rutgers University Press, 2010), 81.

<sup>12</sup> Carlos Lauria, Monica Campbell, and María Salazar, “Cuba’s Long Black Spring,” Committee to Protect Journalists, March 18, 2008, <https://cpj.org/reports/2008/03/cuba-press-crackdown.php>.

<sup>13</sup> “TIC en Cifras Cuba 2011,” Oficina Nacional de Estadísticas, June 2012, <http://www.one.cu/publicaciones/06turismo ycomercio/TIC%20en%20Cifras%20Cuba%202011/TIC%20en%20Cifras%20Cuba%202011.pdf>. See also Larry Press “Updated Cuban ICT Statistics,” *The Internet in Cuba*, July 2012, <http://laredcubana.blogspot.com/2012/07/updated-cuban-ict-statistics.html>.

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<sup>32</sup> EcuRed, [http://www.ecured.cu/index.php/EcuRed:Enciclopedia\\_cubana](http://www.ecured.cu/index.php/EcuRed:Enciclopedia_cubana).

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<sup>41</sup> Yoani Sánchez, “Red ciudadana,” *Generación Y*, July 1, 2008, <http://www.desdecuba.com/generaciony/?p=333>. See also: Claudia Cadelo, “Mis demonios a veces están cansados,” *Octavo Cerco*, July 7, 2009, <http://octavocerco.blogspot.com/2009/07/mis-demonios-veces-estan-cansados.html>.

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