Adapting, Adopting and Diffusing: Leveraging Web 2.0 Tools for Activism in Mexico

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Abstract

This qualitative study examines how four activist organizations in Mexico have employed digital communication technologies like Facebook and Twitter, exploring how digital tactics are diffused among these organizations, which dimensions of activism are supported by technologies, what obstacles they face in using technologies, and how they see adoption of these tactics as impacting activism. Interviews suggest that some organizations are acting as "hothouses," diffusing online tactics that are adapted and adopted according to an organization's needs and resources. However, this study also suggests the digital divide limits the use of, and creates resistance to, these tools. Thus, while digital tactics slowly are being diffused, they are not necessarily being institutionalized as part of a new repertoire of digital activist tactics.

Keywords: computer-mediated technologies, social media, social networks, activism, digital divide, mobile technologies, Mexico

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1. Adapting, Adopting and Diffusing: Leveraging Web 2.0 Tools for Activism in Mexico

Three years ago, the Miguel Agustín Pro Juárez Human Rights Center (Centro Prodh) had little real presence on the Internet. This Mexican non-governmental organization's website was rudimentary and old-fashioned. After viewing a video from the U.K.-based information-activism group Tactical Technology Collective (TTC) on incorporating digital communication tools into activism, however, Centro Prodh matured from Web 1.0 to 2.0, producing podcasts, posting updates on Facebook, and maintaining three Twitter feeds. Centro Prodh is one of several NGOs in Mexico that have turned to TTC's toolkits to employ e-activist techniques.

Since the Zapatistas in southern Mexico catapulted onto the international scene in the 1990s when they used the Internet as part of the world's "first informational guerrilla movement" (Castells, 2004, p. 75), scholars have been investigating how the Internet is both symbolically and instrumentally contributing to social movements and activism (Ayres, 1999; Diani, 2000). Internet "optimists" herald the arrival of digital technologies as an equalizing force for marginalized groups, affording them greater political access and creating alternative public spheres in which they can voice their opinions (Aouragh, 2008; Kellner, 2000). Such discourse, however, fails to recognize the economic, social, and educational capital necessary to take full advantage of new technological tools. As such, much research has analyzed the numerous barriers that exclude the bulk of the world's population from this digital public sphere (Bonfadelli, 2002; Fuchs, 2009). And while burgeoning, little research to date, however, has paid attention to how information communication technologies (ICTs) are being used in Latin America (Pick, et al., 2007) or how traditionally marginalized groups – in this case activists – are using new digital communication tools (Cartier et al., 2005).

As such, this case study examines the scope of how four different activist organizations in Mexico (Centro Prodh, REDDES, IEPAAC, and the Mexican National Human Rights Commission) have employed the digital tactics of the Tactical Technology Collective, and investigates how these organizations perceive the usefulness and potential of electronic communication tools for

various forms of activism. Based on the themes that emerged during in-depth interviews with NGO workers in Mexico and TTC personnel, as well as textual analyses of the NGOs' social media content and TTC's toolkit, this study explores how digital tools are being diffused among these four activist organizations, which dimensions of their activism are supported by 10 Tactics, what obstacles these groups face in using digital technologies, and how they see these tools as impacting the future of activism in Mexico. Rather than focusing on the outcome or the success rates of the adoption of digital tactics, this study interrogates the processes of adaption, adoption, and diffusion of, as well as resistance to, new Web 2.0 tactics. Such research contributes to our evolving understanding of how, in a region with limited Internet access, online tactics can be added to offline tactics, potentially accelerating activism in Mexico and restructuring activists' practices.

2. Background

Founded in 2003, the Tactical Technology Collective (TTC) is an international non-governmental organization (NGO) working with activist groups in developing countries to advance their use of new technologies, "empowering them to utilize information and communications as a critical asset in helping marginalized communities" effect social change (Tactical Technology Collective, n.d.).

In December 2009, TTC published 10 Tactics, an info-activism toolkit with flashcards and a 50-minute video (Information Activism, n.d.). The cards, written in English, provide 10 techniques for ways activist organizations can incorporate digital technologies into their work. The 10 Tactics (see Table 1) are: mobilize people, witness and record, visualize your message, amplify personal stories, just add humor, manage your contacts, how to use complex data, use collective intelligence, let people ask the questions, and investigate and expose. The video, with subtitles in more than 20 languages – including Spanish – highlights the personal stories of activists from 24 countries who have used these tips, and has been screened more than 200 times in 50 countries.

Table 1: 10 Tactics explained by the Tactical Technology Collective

Tactic	Good for	Featured tool
Mobilize peo-	uniting people around a cause, both	photo slideshow, such as via Flickr
ple	online and offline	
Witness and	giving people the ability to record	video sharing websites like The Hub or
record	and share humans rights abuses in	YouTube
	real time	
Visualize your	creative communication that cap-	dynamic tag clouds
message	tures people's attention, regardless	
	of their language or literacy levels	
Amplify per-	providing in-depth information that	create a website or blog as a mash-up
sonal stories	speaks directly to the people impact-	site bringing together stories from Face-
	ed	book, Flickr, YouTube and Google
		News
Just add	reaching out to different audiences	create your own ringtone with a mes-
humor	and encourage them to reach out to	sage using free software such as Au-
	others	dacity and then make it available via
		websites
Manage your	taking advantage of your networks	free software, such as the Organizers'
contacts		Database, that can track names, contact
		information, donations, and communica-
		tion with constituents
Use complex	presenting and sharing hard-to-	spreadsheets and animated graphs, such
data	access information	as from Google Motion Chart, to depict
		information and how it relates over time
Use collective	gathering information and respond-	live reporting via SMS text messaging
intelligence	ing to major events or disasters	
Let people ask	getting important, reliable infor-	create a free call-in center with interac-
the questions	mation when typical information	tive voice system using open source
	sources are misleading, incomplete,	software such as FreeSwitch
	or difficult to access	
Investigate	identifying, sharing, and acting on	email encryption
and expose	information that is ignored or kept	
	secret	

In Mexico, the Ibero-American Network for Sustainable Development (REDDES by its Spanish acronym) was the first NGO to begin using 10 Tactics. In the spring of 2010, REDDES organized seven screenings of the video throughout Mexico, and more than 350 people attended (Information Activism, n.d.). Established in 2007, REDDES is a small NGO, with about 22 employees, whose mission is to transfer technologies, knowledge and open-culture standards to

groups active in social and environmental issues (REDDES, n.d.). Besides holding 10 Tactics screenings, REDDES also conducts training seminars and forums.

In addition to REDDES, Mexico's National Human Rights Commission also hosted a screening of the 10 Tactics video. More than 100 people attended a May 18, 2010, screening and conference (Information Activism, n.d.). The Mexican National Human Rights Commission (n.d.), with about 1,500 employees, is an autonomous federal institution dedicated to promoting and protecting human rights.

The Miguel Agustín Pro Juárez Human Rights Center (Centro Prodh) was founded in 1988 to defend the rights of Mexico's marginalized groups, including women, indigenous communities and migrants (Centro Prodh, n.d.). The Centro Prodh, with its staff of 15, worked with REDDES to host the first screening of the 10 Tactics video held in Mexico City.

Based in Merida, Yucatán, the Self-Managed Popular Research and Education organization (IEPAAC in Spanish) was founded in 1990 to defend children's rights (IEPAAC, n.d.). When a video screening REDDES had scheduled at the University of Yucatan was cancelled at the last minute, IEPAAC offered to host the viewing at its office. Since then, the organization has shown the video at least twice more.

3. Theoretical Framework

Keeping in mind the context of the digital divide in Mexico, where just 27 percent of the population has Internet access (Internet World Stats, 2010), this study draws on a multi-theoretical framework combining the repertoire of contention from social movement theories, and Markus' (1983) theory of resistance to information systems, to analyze how four activist NGOs in Mexico are developing and diffusing a "repertoire of electronic contention" (Costanza-Chock, 2003).

Using interviews with members of these Mexican activist organizations to investigate the dimensions of activism that benefit from digital technologies and to consider how the structure of the organization shapes which tools are employed and which are resisted, the aim is to understand how these organizations perceive the usefulness and potential of digital technologies for activ-

ism, especially in a stratified country like Mexico. This study questions whether, in digitally divided Mexico, the online repertoire can impact the offline repertoire, and restructure activists' practices. Any analysis of an online repertoire of contention must bear in mind questions related to who has access to these tools, who can know how or afford to use them, and who can actually benefit from them (Costanza-Chock, 2003). Thus, this study investigates whether 10 Tactics and other similar digital efforts are benefiting activists in Mexico, or whether info-activists like TTC should focus on offline, rather than online, strategies. Because e-activism still is in a nascent stage, such research is important for exploring what constantly changing new technologies mean for online and offline activism (Rolfe, 2005; Wojcieszak, 2009).

4. Repertoire of Contention and Diffusion

For any particular time and space, the same general and limited set of tactics is used for collective action (Tilly, 1978). Tilly (1978) referred to these activism tactics as the "repertoire of contention." Which tactics a movement uses depends on a group's resources, opportunities, and organizational structure, according to social movement scholarship's resource mobilization theory (McCarthy & Zald, 1977; McAdam & Rucht, 1993). These repertoires change slowly over time, and while groups may experiment with new tactics, most innovations are abandoned as quickly as they are adopted (Tilly, 1978). Tarrow (1993a, 1998) found tactics shifted as a movement matured, with new tactics introduced, modified and diffused throughout the course of a protest cycle.

Typically, new tactics are introduced to the repertoire of contention when new, small or marginalized groups lacking resources innovate new forms of action (Tarrow, 1998). Other groups then begin to experiment with these tactics, adapting them to fit the local context until, ultimately, the techniques that have been proven to be successful are adopted by the central, established groups. These tactics then are institutionalized, becoming part of the repertoire of contention (Koopmans, 1993; McAdam, 1982; Tarrow, 1998; Tilly, 2005). The introduction of new tactics sparks more activism, and revives the use of existing tactics (McAdam, 1983).

This process of diffusion is critical for activism, as it is the means by which new tactics are transferred among groups (McAdam et al., 2001). Diffusion depends on how appropriate or efficient a

group's current tactics are in comparison with any alternative tactics available (Tilly, 1978). Further, diffusion involves the local adaptation of any new tactics to make them more culturally relevant for a particular group's context (Tilly, 2005).

According to Rogers (1995), in diffusion of innovations, new practices at first are slow to be adopted because they are unfamiliar, but as early adopters spread the word about how to put the practices to use, adoption accelerates, until ultimately the practice becomes standard or drops off, depending on its value. For activists, technical skills, organizational routines, and available resources limit which new technologies they choose to adopt (Garrett & Edwards, 2007). For example, Stein (2009) argued that among U.S. social movement organizations, lack of resources and organizational structures contributed to movements' underutilization of the Internet.

5. Online Repertoire

The concept of a "repertoire of contention" provides a framework for examining the diffusion and adoption of digital tactics within Mexican activist NGOs. In this Digital Era, the concept can be expanded to a "repertoire of electronic contention," or the use of new technologies as tactics for activism (Costanza-Chock, 2003, p. 173). According to Rolfe (2005), the creation of a repertoire of electronic contention results from three processes: 1) established groups repurposing offline tactics for the digital realm, 2) "radical creativity" by small, technically savvy groups – "hothouses" – that are less ideologically-driven, and 3) the cyber-diffusion of these new tactics among organizations worldwide. Rolfe also proffered the possibility of a fourth process in the future, whereby the organizations themselves create and adapt new tactics by "innovating at the margins." What this development of an online repertoire of contention neglects, however, is what becomes of the offline repertoire.

Rolfe's (2005) concept of "hothouses," or tech-savvy, innovative and often non-ideologically aligned organizations that diffuse new tactics to the activist community, can be applied to both TTC and REDDES. These hothouses, with their technical expertise, provide the fertile ground needed to cultivate innovations that activist groups can adapt and adopt, and perhaps eventually add to the repertoire of electronic contention.

6. Resistance to information systems

Beyond considering how activist tactics are diffused, it also is worth considering how resistance to implementation might prevent certain tactics from spreading. Based on Kling's (1980) identification of six perspectives for evaluating theories of resistance to technological change, Markus (1983) found three basic causes for resistance to implementing technology. While Markus specifically focused on organizations' implementation of computer-based information systems, her findings easily can be extended to NGOs' implementation of a repertoire of electronic contention. According to Markus, users resist information systems for internal reasons (i.e. lack of training, fear of technology, perceived lack of usefulness); because of the design of the system itself (i.e. complex, not user friendly); or because of interaction between the system and the people.

Within this third reason, interaction, Markus identified two variations: sociotechnical, which is related to resistance stemming from new roles and responsibilities at odds with existing ones; and political, which involves the interaction of the system with intra-organizational power structures. Two major implications of this interaction theory of resistance hold that no tactic works under all circumstances – thus the same technology in different settings can produce different results –, and "computer-based systems alone cannot accomplish the task of radical organizational change" (Markus, 1983, p. 441). Thus, Markus concluded, the interaction theory could be used to devise computer systems that did not generate resistance, and to create strategies to overcome resistance.

Since Markus (1993), other researchers have attempted to better explain resistance theories. For example, Joshi (1991), Marakas and Hornik (1996), and Martinko and colleagues (1996) looked at resistance based on the characteristics and behaviors of individual users. Lapointe and Rivard (2005) considered both the individual and collective, organizational level. Because this paper focuses on the organizational level – NGOs' adoption of digital tactics – Markus' approach was deemed most appropriate.

7. Literature Review

Digital activism

Research shows how activists have taken advantage of new technologies that easily break through the boundaries of money, time, space and distance, allowing the immediate and cheap dissemination of information to multiple people at once, regardless of where they live (Castells, 2001; Ribeiro, 1998). Around the world, activists during the past decade have taken up a host of digital tools – whether email, social media, blogs, podcasts or video-sharing platforms – to create campaigns, online petitions, and virtual sit-ins, and prompt myriad other online and offline actions (Castells, 2001; Kahn & Kellner, 2004).

While some scholars doubt that online interactions could be as effective as face-to-face relationships in creating the levels of trust necessary to participate in any kind of sustained collective action (Diani, 2000; Polat, 2005), a burgeoning amount of scholarship considers ways the Internet might be fundamentally changing – and not just facilitating – activism by expanding the "repertoire of contention" and perhaps even transforming the movements themselves (Cardoso & Pereira Neto, 2004; Harlow, 2012; Rolfe, 2005). Earl and colleagues (2010) created a four-category typology to illustrate the different types of online activism and their potential impacts, finding that online participation in activism and online organizing of collective action both potentially create lasting model changes, rather than simply scale changes, thus suggesting a need to perhaps rethink the applicability of existing social movement theories to online activism.

When it comes to online activism, most research has focused on how the Internet helps activists diffuse information, rather than tactics (Earl, 2010). Scholars often cite the Zapatistas and how they used the Internet to diffuse information, spreading the word quickly and cheaply to multiple people in multiple places at once (Wray, 1998; Martinez-Torres 2001). As Earl (2010 p. 212) noted, however, "none of this work argues that the fast and broad diffusion of information online alters other social movement processes." As such, diffusion of new online tactics could result in a "model-related change" in activism processes (Earl, 2010, p. 211).

Activism in Latin America

In Latin America, a surge in social movements during recent years, while not necessarily aimed at taking control of the state, has managed to topple governments and force policy changes (Stahler-Sholk et al., 2008). Since the Zapatistas in the 1990s used the Internet to help forestall an attack by the Mexican army, activists throughout Latin America have turned to digital technologies to mobilize movements, as evidenced by the struggles of indigenous organizations, women's rights groups, and the GLBT movements (Salazar, 2002; Torres Nabel, 2009). In fact, Gelsomino (2011) referred to the Zapatista's snowball effect on activism across the globe as various marginalized groups have followed the Zapatistas' model of using information communication technologies (ICTs) for grassroots activism. In her study of the Internet and organizations advocating for gender equality in Mexico, Argentina, and Brazil, Friedman (2005) found that while the Internet is not inherently democratizing, ICTs are enhancing gender advocacy and aiding marginalized groups, increasing their participation in civil society and putting pressure on political decision makers. Likewise, another study found that digital tools and cyberspace enable effective organizing and community building for lesbians in Latin America (Friedman, 2007).

Further casting doubt on the notion of "slacktivism" or "clicktivism," or the idea that online activism is somehow less useful or valid than offline activism (Morozov, 2009; Van de Donk et al., 2004), a comparative study of activists in Latin America and the United States showed survey respondents in Latin America were optimistic about the potential benefit of online tools for offline activism, as they believed online activism leads to offline activism, and that the two go hand in hand (Harlow & Harp, 2012). For example, studies have shown how Facebook was used to help organize massive anti-FARC rallies in Colombia (Neumayer & Raffl, 2008) and anti-president, pro-justice protests in Guatemala (Harlow, 2012). Similarly, Torres Nabel (2010) considered the political impact of various Twitter campaigns in Mexico.

Still, despite new technologies expanding Latin American activists' repertoire of contention (Ribeiro, 1998), digital activism remains blunted by low Internet penetration rates (Salazar, 2002; Sandoval, 2009). In Mexico in particular, only 15 percent of households have a digital device and less than a third are equipped with a computer (Gomez et al., 2011).

The Digital Divide

While Groshek (2009) found that a greater diffusion of the Internet was a predictor for increased democracy, giving weight to optimistic scholars' belief that the Internet can provide a voice for the marginalized and give them greater political access (Kellner, 2000), some scholars argue that new technology deepens the digital divide (Bonfadelli, 2002; Kim, 2008). Beyond lack of access, scholars define the digital divide as an economic, political, and cultural divide that includes lack of know-how and lack of interest in new technologies (Castells, 2001; Fuchs, 2009; Goldstein, 2007; Ribeiro, 1998). Van Dijk (2005) suggested that motivations, in fact, are antecedents to access, as lack of interest, time, money, or self-confidence also influence whether someone will – or can – use ICTs. Hargittai (2008) and DiMaggio and colleagues (2004) considered various uses of ICTs also to be important dimensions of access, as using the Internet for recreational purposes, as opposed to building social capital, is another form of inequality. As Warschauer (2003) found, access alone to computers and the Internet in Egypt were not enough to improve educational opportunities.

In light of the fact that just a third of Latin America has access to the Internet (Internet World Stats, 2010), activism that utilizes digital tools is by its very nature elitist. Thus, underlying this study is the consideration of who has access to new digital tools, who has the resources to use them, and who could benefit from them (Costanza-Chock, 2003). Grounded in the literature of a repertoire of contention, diffusion of tactics, activism in Latin America, and adoption of and resistance to new technologies, this study furthers our understanding of how four activist NGOs in Mexico perceive the usefulness and potential of digital tools for activism by examining how 10 Tactics is being diffused in Mexico, which dimensions of activism these NGO workers believe are best supported by 10 Tactics, what obstacles they confront in employing digital tools, and how they believe technologies are impacting activism.

8. Methods

This study relied on semi-structured, in-depth interviews with workers at TTC and four NGO activist organizations in Mexico: REDDES; the National Human Rights Commission's migrant rights office; Centro Prodh; IEPAAC. Two of the four Mexican organizations work in the human rights sector, one advocates for children's rights, and the fourth is an info-activist group promoting technology use among activists. From September 2010-January 2011, interviews were conducted via Skype in Spanish or English. Multiple interviews were conducted with each group for a total of 10 interviews. While not representative of all Mexican activist NGOs, these organizations were chosen because they were the four in Mexico that had both used and disseminated the 10 Tactics toolkit.

Interviewees were asked to evaluate 10 Tactics, focusing on which tactics they had used and why, what had worked, and what they thought might work better.

The interviews were analyzed with an interpretative method using a discourse analysis approach (van Dijk, 1991; Fursich, 2008). Interviewees' responses were treated as discursive practices situated within a specific social, cultural and historical context (e.g. van Dijk, 1991), namely that of a digitally divided Mexico. According to Hall (1977), discourses are "sets of ready-made and preconstituted 'experiencings' displayed and arranged through language" that are used to provide meaning for reality (p. 322). Meaning can be constructed and deconstructed according to one's own interpretations (Hall, 2006). Specifically, the author identified preliminary themes and patterns that emerged during the interviews related to how these NGO workers experienced the usefulness of digital tools within their own particular realities. These patterns and themes then were further interpreted within a broader cultural context (Hall, 1975), that of activism in general. Themes that emerged during analysis included the diffusion of 10 Tactics, the usefulness of 10 Tactics, the digital divide, and the future of online activism in Mexico. The NGOs' social media sites also were qualitatively textually analyzed (Berger, 2000) through an interpretative lens looking for themes related to those that emerged during the interviews (Fursich, 2008).

Using both interviews and a textual analysis created a triangulated methodological approach that helps strengthen arguments (Potter, 1996; Flick, 2004). According to Lindlof and Taylor (2011),

triangulation involves comparing at least two forms of evidence – in this case interviews and textual analyses – in order to help "bolster confidence in the objective reality of a research finding" (p. 274).

Such qualitative methods of data collection and interpretation were deemed appropriate for this study as the idea was to provide a more nuanced understanding of a rapidly changing and growing field of study.

9. Analysis

Diffusion and "Hothouses"

When examining the Facebook pages of TTC (which has more than 1,300 fans) and REDDES (which has more than 1,400 fans), the interpretation of their roles as hothouses is solidified: both pages feature posts mainly related to diffusion of information related to capacitation of other activists and NGOs. Multiple posts on both groups' pages advertise workshops and seminars related to multimedia and other training for activists. For example, during the first week or so of December 2010, REDDES published four Facebook posts related to an upcoming workshop, conducted by a human rights organization, on using digital media for social action. The different posts were collectively "liked" by 22 other Facebook users, and generated a combined total of nine comments asking for more information or stating their desire to attend. Such interaction with other activists thus suggests REDDES, via its Facebook page, was fulfilling a diffusion and capacity-building role as a hothouse.

Analysis of the interviews showed that, via REDDES, TTC's 10 Tactics began circulating among activists primarily via screenings of the 10 Tactics video, a 50-minute film showcasing activists' successful use of digital tactics around the world. While the video, with subtitles in more than 20 languages, has spread quickly and gained popularity, its accompanying flashcards, because they are in English, have not. Also, despite general enthusiasm about the 10 Tactics video, interviewed activists still said there was room for improvement.

A few years ago, Internet searches related to NGO capacity building led REDDES to the TTC website, where REDDES workers encountered various toolkits TTC had created, such as those

related to open source tools and making your own media. "It was amazing because there was nothing around like it at the time," said a REDDES interviewee. Realizing that both groups were working toward similar ends, REDDES contacted TTC and the conversation and sharing of information has been ongoing ever since. When TTC released 10 Tactics in 2009, REDDES immediately contacted TTC to get a copy of the toolkit. According to a REDDES worker:

It is a great tool to wake up ideas and online activism... It has been quite helpful just to show what can be done with the resources people have in front of them that they use pretty much every day.

In the spring of 2010, REDDES, which already regularly conducted digital workshops for activist organizations, began incorporating 10 Tactics and video screenings into its repertoire of training tactics. REDDES alone has shown the video more than 20 times in Mexico, and more than 1,000 people have watched it. Beyond serving as an "eye-opener" for activists, the video also has prompted groups to ask for technology training. As a result of them watching the 10 Tactics video, REDDES has trained more than 150 NGO personnel and activists in Mexico to use digital technologies in their work.

Just as REDDES wanted to spread the 10 Tactics in Mexico because workers were excited about seeing examples of the ways digital technologies had been successfully used for activism, the other interviewed NGO workers said that once they saw the video, they, too, began to consider real ways they could incorporate these new tactics into their work. "In the video, I liked that the 10 Tactics are made very clear," said an interviewee from the National Human Rights Commission. "It is something very practical... That helped us a lot, to see how the practices of these organizations have been applied." Likewise, a worker from Centro Prodh said the video "helps not only in giving you concrete ideas about problematic situations that we must face, but it also stirs the imagination."

Just six months after REDDES and Centro Prodh held a joint video screening, that human rights NGO has become "one of ICT's leaders in the human rights sector," said a REDDES worker. According to Centro Prodh, numerous people who saw the video asked for a copy, and several

"private screenings" also have occurred. Similarly, after receiving 10 Tactics training, Mexico's National Human Rights Commission offered a video screening in Tijuana for more than 100 people, and after hosting an initial screening with REDDES, IEPAAC has gone on to show the video at least two more times.

While the 10 Tactics video has spread from REDDES to the other interviewed NGOs, and from there to more groups, diffusion of the flashcards has stalled. As the Commission worker said:

The truth is that they are excellent, but as they are in English, here in Mexico, what we can distribute to the states is difficult. Honestly, the only thing that impeded us in the distribution was nothing more than the language. It did not seem relevant to hand out in the entire country.

All of the interviewees also lamented that the video was in English with Spanish subtitles that were hard to read, and that the video included no examples of the 10 Tactics being successfully deployed in Latin America. The video was "essential" and "impactful," said an IEPAAC interviewee, but it seemed to be designed "for the people who are European...Seeing the video where there is an experience that has occurred in Mexico, well, that has more impact...than to know what happened at Kuala Lumpur, right?"

Recognizing that the lack of Spanish cards or Latin American examples were acting as a barrier to wider distribution of 10 Tactics, REDDES worked to create Spanish translations, which were set to go into distribution at the beginning of 2011. Further, a new Spanish video was in the works, focusing on how activists in Latin America are employing digital technologies. As a REDDES worker said, "I think this is just the beginning."

Diffusion of these tactics is not just about TTC sharing information with REDDES and then REDDES sending that information on. Instead, an informal network is in place that is growing and strengthening. For example, REDDES just completed a toolkit in Spanish about how activist groups can edit videos for YouTube, and that kit was sent to TTC in the hopes "they can have an intern over there translate it into English," a REDDES worker said. Centro Prodh also is reaching

out to teach other groups how to use the 10 Tactics and other tools. The end goal is to create a network of information sharing and to widen the scope of tools available to activists, which, ultimately, helps in the struggle for human rights.

Implementing 10 Tactics

Part of the diffusion process is deciding which tools to adapt, adopt, and then pass along for others to use. As such, when analyzing which dimensions of activism these Mexican activist NGOs have found to be best supported by 10 Tactics, interviews showed that in general, groups adopted the tactics that required the least resources, such as creating a Facebook page (see Table 2).

Table 2: Mexican human rights NGOs' adoption and resistance of 10 Tactics

NGOs	Role	Tactics adopted	Tools adopted	Tools resisted
		first		
REDDES	To transfer technologies, knowledge and open- culture standards to groups active in social and envi- ronmental issues	* Mobilize people * Witness and record * Amplify personal stories * Investigate	* Facebook * Twitter * Videos * Blogs	* Mobile technologies * Open hardware * Open/free SMS software
Centro Prodh	To defend the rights of Mexico's marginalized groups, including women, indigenous communities and migrants	and expose * Mobilize people * Witness and record * Amplify personal stories	* Face-book * Twitter * Videos * Ustream Live * YouTube channel * Blogs	* Any digital tool not applicable to community being served * Open/free soft- ware
IEPAAC	To defend children's rights	* Mobilize people * Amplify personal stories	* Face- book * Twitter * Videos * YouTube channel	* Any digital tool not applicable to community being served * Open/free soft- ware

			* Podcast	
Mexican Na-	To promote and protect	* Mobilize	* Face-	* Any digital tool
tional Human	human rights	people	book	not applicable to
Rights Commis-		* Witness	* Twitter	community being
sion		and record	* Videos	* SMS technology
		* Amplify	*	* Open/free soft-
		personal	YouTube	ware
		stories	channel	

When it came to deciding which of the 10 Tactics to implement first, the three human rights NGOs chose Tactic 1, "Mobilize people." This tactic suggested groups create a profile or fan page on an online social network site, and the video showed how LGBT advocates in Lebanon and women's rights advocates in India used social media like Facebook, Flickr and Blogspot to spread their message and mobilize supporters.

Just three days after watching the video, IEPAAC had created a Facebook page, which an interviewee described as "the most successful of the tactics" as it has helped to raise unprecedented awareness and donations. For example, in June on the one-year anniversary of the ABC Day Care Center fire in Hermosillo, Sonora, Mexico, which killed more than 45 toddlers and infants, IEPAAC used its Facebook page to promote a memorial service and seek offerings for an altar as part of a peaceful demonstration showing indignation at the deaths caused by the day care owners' negligence.

The IEPAAC Facebook page, which has just slightly more than 400 fans, features mostly calls to action to mobilize people, or photos and reports of previous bouts of collective action, which also could serve to inspire potential activists to join the cause. For example, on Nov. 3, 2010, IEPAAC published 18 photos, which prompted eight likes and 12 comments, of volunteers putting together an altar in remembrance of the ABC victims. Other posts invited Facebook users to join IEPAAC in supporting various causes, such as Efecto Kuxtal, a pro-youth group, or to attend a December march demanding justice in the ABC case.

Similarly, for Centro Prodh workers, the video's examples of groups using Tactic 1 pushed them to delve into using social media. "Before seeing the 10 Tactics—the movie—we had not immersed ourselves into the theme of social networks and with that, we realized the importance of

doing it," an interviewee said said. Now, Centro Prodh even has three Twitter accounts, he said: one for the organization, one to provide information about human rights, and one to provide information for the media.

Two of the NGOs mentioned that since watching the video, they have used Tactic 2, "witness and record," to help ensure "that people have the power to capture rights abuses as they happen." A Centro Prodh worker said he had watched the example in the video of how bloggers in Burma used the Internet to expose human rights abuses, sidestepping the military junta's censorship of traditional news media, so when Centro Prodh had a case before the Inter American Court, where live video and audio transmissions were forbidden, he knew what to do. He said:

We announced on our communication networks that we were going to do a re-telling of the hearing through Twitter. We were tweeting all day. We put out about 90 or 100 tweets in which we described how the hearing was developing.

A reporter from the Mexican state of Guerrero, who could not attend the hearing, used Centro Prodh's tweets to write his story, the interviewee said, which demonstrated to the group that tweeting has a clear impact.

The @CentroProdh twitter account has more than 1,700 followers, and has published more than 1,600 tweets. The center continues to use Twitter to "witness and record," tweeting photos and videos of activist campaigns, regular updates on human rights-related judicial proceedings, and news and first-person accounts related to human rights violations.

Tactic 2 also got the Commission thinking about how it could get citizens to use their cell phones and digital cameras to document human rights abuses. "It helps us a lot when the victims can document what is happening at the moment that it is occurring," said a Commission worker. The commission now has the idea of training villagers from towns with high rates of migration to use their cell phones to take pictures or send texts when they encounter abuses or aggressions while migrating, she said. The problem, she said, is getting the resources.

Tactic 4, "amplify personal stories," also appealed to the NGO workers. For example, the Commission, which in January 2011 started its Facebook that now boasts more than 8,000 fans, has posted several womens' rights and immigrants' rights videos featuring personal accounts. IEPAAC also has posted videos on its site and YouTube channel, such as of youths who designed a disaster prevention program. Another video, that reached 1,000 hits in just two weeks, was produced by and about a group of youth from a community that has the second highest rate of migration in the Yucatan.

E-obstacles

When examining what obstacles these Mexican activist NGOs face in using digital technologies, interview responses indicated that, despite applauding the video and employing some of the tactics, in general the NGO workers said they had not been able to use most of the tactics because of lack of resources, lack of training, or lack of applicability to the people they work with. In other words, these workers were identifying both internal and interactional reasons for resisting adoption. For example, technological barriers, whether to equipment or know-how, kept them from utilizing the open software suggested in the toolbox. As one interviewee said, "There are some tools that we'd like to use but we don't have the general capacity to develop them or use them appropriately." Even at the technologically savvy REDDES, workers did not have the capacity – in terms of training and infrastructure – to adopt mobile technologies, or open/free hardware and software, despite the desire to do so.

Another obstacle that was mentioned only came up in reference to the large, federal National Human Rights Commission: organizational barriers – what Markus (1983) saw as an interaction between internal and external factors – were preventing implementation of the 10 Tactics. The Commission resisted creating Facebook and Twitter accounts (the commission did not start using these social media sites until early 2011, after interviews were conducted) because those higher up in the organization saw social media more as a fad for youths than as a tool for human rights work. According to a Commission worker:

We made many proposals on how to change our web page, get into Facebook, Twitter, and the rest. But at times the directors are from another generation and never used tech-

nology and don't see much use in it. So we see the need to continue training, not only to the workers but also to the directors.

Perhaps because of the Commission's structure, then, its Facebook page, in contrast to those of the other three NGOs, mainly features organizational press releases, more than calls to mobilize like the other groups.

The main hindrance that interviewed activist NGO workers noted, however, was not related to the organizations they worked for, but to the people they served. Considering the country's digital divide, many of the 10 Tactics just are not that useful for reaching out to their clients, they said, indicating both internal and interaction resistance. The Commission was starting to realize how digital tools can help with activism and documentation of human rights abuses, but although the organization is based in the capital city, and thus has access to technologies, outside of the larger cities, a worker said:

The people do not always have a cell phone, they don't always have access to the Internet, and they don't always know how to use certain technologies... They probably use a cell phone for nothing more than making a call, but they would never use it to take a picture, or they don't know how to use a computer well. So more than anything it is one, the lack of access to those technologies, and another to know how to use them for other ends such as documenting aggressions.

Beyond lack of access to equipment or understanding of how to use the equipment, some people just dedicate themselves to the production of "lettuce and peppers" and do not have the slightest desire to learn how to use new technologies, an IEPAAC worker said, adding:

Access to technology is very segmented. It is very clear who are the ones that can and want to access all these technologies. We say, 'okay, we can get into these technologies, they seem fabulous to us, they have the potential to be impressive, etc., etc.,' but we are surrounded by a community that is not only far away, but also has moments where they have no electricity.

As such, the organization has to weigh the costs and benefits of investing the time, money and effort into creating a YouTube video for that community. In that case, perhaps a play would be a better tool than technology, he said, adding that technology is just one communication strategy that should be combined with others in order to create any kind of real impact. "I do not believe that the simple fact of having a page on Facebook or a channel on YouTube will be what accomplishes the impact," he said.

A Revolutionary vs. Logistical Tool

In looking at how these activist NGO workers perceive the future role of digital technologies in activism in Mexico, analysis showed that in general, the interviewees viewed new technologies as a way to enhance, not replace, existing tactics. For the most part they were adopting new tactics to supplement existing procedures, but were resistance to the idea that ICTs were creating a new type of activism altogether. They were divided, however, on what adoption of these new tactics means for the future of activism. While they agreed that the repertoire of contention is changing slowly, they disagreed on whether activism itself was being transformed as a result.

As a REDDES worker said, activists in Mexico currently are in a "needs phase," assessing which new tools are producing successful outcomes in various contexts. "Many NGOS are in a trial and error phase, seeing what works or what doesn't work, in using different tools and different strategies," he said. He warned, though, that the inequalities in access mean technology is changing activism slowly:

You can't expect that people without access to technology are using digital technology to have an impact, to reinforce their activism, so the activism in that sense becomes the traditional ways they have been acting. But as technology spreads out and is being used by more people, especially new generations, the ones who get involved with it are becoming a bit more active.

A Commission interviewee also said she believes barriers and resistance to using new technologies gradually are being lowered. As access to technologies increases, she said, activism will continue to evolve. But for technology, and activism, to reach its fullest capacity, power struc-

tures, issues of poverty and lack of information and access to technology must all first be addressed, she said.

In contrast, IEPAAC and Centro Prodh interviewees said technologies are complementing, more than changing, activism. "I believe that in no moment...all the conversation that can be had will become exclusively virtual," an IEPAAC interviewee said. Technologies create new possibilities, he said, but they are not "redesigning" activism. Similarly, a Centro Prodh worker said technologies are aiding activists' work by facilitating communication and distribution of information, but he said he does not believe there is some fundamental change occurring in the definition of activism. More than anything, he said, 10 Tactics has been most useful for generating ideas to "take advantage of the resources that we have."

10. Discussion

When analyzing the interviews with the NGOs, it was evident that in Mexico, the diffusion of 10 Tactics and an electronic repertoire of contention has followed processes similar to those that social movement researchers have found previously in regards to offline tactics (Koopmans, 1993; McAdam, 1983; Tarrow, 1998; Tilly, 2005). Whether by creating 10 Tactics or by developing a toolkit in Spanish for editing YouTube videos, both TTC and REDDES were functioning as "hothouses," innovating and diffusing new tactics. As REDDES conducted screenings of the 10 Tactics video – again, fulfilling the role of a hothouse – other NGOs began to adapt and adopt those tactics they found locally relevant, and then spread those tactics by hosting their own 10 Tactics video screenings.

Although Rolfe (2005) does not specifically address unequal access like that which contextualizes this study, hothouses, as they transfer technology, potentially could help activists overcome some issues – including internal factors of resistance – related to the digital divide. In Mexico or other stratified countries, hothouses have the potential for making technologies more accessible; allowing activist groups to learn about and use new digital tools that otherwise might be beyond their reach or ken. It also is worth noting the way the tactics spread to various groups within diverse movements, extending the reach of the tools so that the tactics could be used regardless of the cause the group was supporting.

Also, again following the trajectory for diffusion and adoption of new tactics that previous research has found, the smaller NGOs, like Centro Prodh and IEPAAC, are the ones who were more likely to experiment with innovations. The more established and bureaucratic National Human Rights Commission, in contrast, has been slower to try out new tactics, resistant because of organizational barriers, or what Markus (1983) referred to as the sociotechnical interaction between personal resistance to technology with resistance to the technological system itself. Once central NGOs like the Commission begin to adopt new technologies, however, it is more likely these tactics will become "institutionalized" as part of the electronic repertoire. As such, better understanding why the Commission is resistant to using these tools could help the group lower its barriers and begin using the tools, serving as an example for other NGOs in Mexico.

When it comes to spreading new tools like the 10 Tactics, interviewees agreed the information needs to be culturally relevant. In this case, the 10 Tactics cards need to be in Spanish to have any sort of useful potential. In addition, the video must show examples of activists in Latin America successfully employing the tactics, otherwise the NGOs might dismiss the tactics as not being applicable in their local setting. Again, this echoes previous research showing that culturally relevant tactics resonate more and thus are more likely to be adopted (McAdam & Rucht, 1993), again suggesting that regardless of whether the tactic is an online or offline one, the diffusion process is the same.

The 10 Tactics that the NGOs adopted first, such as campaigning via Facebook, were the tactics that required the least amount of technology access and know-how, both of which served as major causes of resistance to adoption of new tactics. Even REDDES, the hothouse, was hampered by its lack of on-staff experts. Which tactics the NGOs used speaks to the cultural context of Mexico, a country with high rates of poverty, low levels of education, and little Internet access. Each interviewee mentioned the digital divide as being an obstacle for fully implementing the 10 Tactics. They all saw this divide as having three components: first, government regulations and/or telecommunications companies limiting access; second, lack of in-house technology resources; and third and most important, lack of access to or interest in technologies among the populations the NGOs serve. These NGO workers understood that in Mexico, the digital divide

is so much more than access, underscoring the internal reasons for resistance that interviewee after interviewee mentioned. This limitation, then, meant these NGO workers saw a diminished value for online tactics – only combined with offline tactics could these NGO workers foresee online tactics as making any kind of lasting impact in a digitally divided region.

The stated obstacles to adapting various tactics – whether lack of access and resources (both on the part of the NGOs themselves and the populations they serve), lack of interest in the communities served, or even the organizational barriers mentioned by the Commission – all fit well into Markus' (1983) model of resistance to adoption of technologies. While the "hothouses" like TTC and REDDES could help the NGOs overcome some of the internal causes of resistance, such as lack of skills, it is noteworthy that in some rural and/or indigenous regions of Mexico – especially where computer access is next to non-existent –, the communities the NGOs serve just do not see ICTs as beneficial or useful for their lives, especially in comparison with illiteracy rates or needs for basic services like potable water. Such a resistance, which can be seen as interaction between technology and the NGOs' structure, is not easily overcome. Moreover, in such cases, diffusion of tactics alone is not enough to create a new repertoire of contention. Rather, basic resistances first must be overcome in order for new digital tactics to become institutionalized in a "repertoire of electronic contention."

Further, the interviewees said that when deciding which new tactics to incorporate, they had to balance time and effort with potential impact. Thus, no particular digital tool was useful under all circumstances. Interviewees also noted that sometimes offline tools worked better than online tools, reaching a wider audience and causing more of an impact. As such, in Mexico at least, these interviews suggest that perhaps it is too soon to speak of an institutionalized repertoire of electronic contention. In general, the interviewees viewed new technologies as one more logistical tool for the opening of information and ideas, and not as the central core of activism.

11. Conclusion

While technology may support dimensions of activism such as communicating with the media or other NGOs, or even create new forms of activism as some research has shown (Earl et al., 2010), this case study of 10 Tactics in Mexico showed that digital tools are not necessarily useful

for reaching out to migrants, indigenous communities, or other vulnerable – and resistant – segments of the population. Because of the limited reach of ICTs and the resistance in a digitally divided community, these NGO workers were divided on the potential for technologies to fundamentally transform activism. Quite expectedly, REDDES, the "hothouse," was much more optimistic about the ability of digital tools to change the future of activism. The federal National Human Rights Commission also saw potential for technologies to change activism – and this despite the fact that the organization has been the slowest of those interviewed to adopt new tactics. This positive attitude toward the transformative potential of digital tools could stem from the Commission's large size and thus more substantial resources than the smaller NGOs studied here, as digital obstacles do not seem as high when resources are available to provide training and infrastructure. Still, the Commission was quick to point out that any revolutionary potential was dependent on first improving access to new technologies throughout Mexico. Meanwhile, workers from the smaller NGOs were less positive, seeing the Internet as merely a complementary, rather than revolutionary, tool. This perhaps could be attributed to having fewer resources and thus seeing more barriers to the implementation of such tactics. Further, these NGOs were based in the communities in which they work, unlike the national-level view of the Commission, allowing them to witness daily the various causes of resistance to technology, which also could have contributed to their more negative views.

These results lend further support to Stein's (2009) contention that effective use of the Internet is dependent on an organization's various goals and objectives. The findings also bolster Rolfe's (2005) processes for development of a repertoire of electronic contention, illustrating how tactics get diffused, adapted and adopted, depending on a group's needs and available resources. This study showed that a new digital repertoire of contention is adapted, adopted, and diffused in much the same way as traditional, offline activist tactics. Such information is useful for better understanding the role of "hothouses" (Rolfe, 2005) like TTC and REDDES. Further, the causes for resistance to adoption of new tactics that NGO workers cited also indicate that diffusion must be coupled with overcoming resistance in order to institutionalize Web 2.0 tactics into the Mexican activist's repertoire.

Thus, this study suggests that until Internet access – in terms of physical equipment as well as use, know-how and resistance – is improved, the use of new technologies for activism in Mexico will remain in an experimental mode, wherein different groups continually try out new tactics to determine whether they are a good fit. This means innovations have the potential to be abandoned before ever becoming institutionalized as part of the repertoire of electronic contention. In these cases, then, it seems unlikely that the digital repertoire of contention will replace, or even take precedent over, offline traditional tactics. This research also suggests that perhaps the best use of digital technologies for these NGOs in Mexico currently is as a springboard for generating ideas – i.e. hothouses that innovate at the margins (Rolfe, 2005) –about how to better use their existing resources and improve their offline capabilities.

However, because the Internet has proven to be a successful instrument in some cases, such as with Centro Prodh's use of Twitter and IEPAAC's use of Facebook, digital tools should not be summarily dismissed because of barriers related to the digital divide. Instead, further research should consider how the tools these NGOs have adopted are shaping outcomes. Additionally, perhaps organizations like TTC and REDDES can serve as technology translators, bridging the digital divide and making digital tools available to and relevant for activists who otherwise might be left behind by or resistant to technological advances. Of course, the danger is that much can be lost in translation, highlighting the need for the communities activists serve to have their own entrée into the digital public sphere.

While this study is limited because it relies on just four examples and thus is not generalizable, it nevertheless is important, within the context of Mexico's digital divide, for offering clues as to the obstacles preventing these activist NGOs from fully using new digital tactics to promote social change. Further case study research could look at activist NGOs in other countries to compare whether they are adapting and adopting 10 Tactics in similar ways as these groups in Mexico. Future studies also should explore how activists throughout Mexico and Latin America are employing digital tactics beyond those suggested by 10 Tactics.

While the Internet may not be causing a social revolution in Mexico, this study shows that, at the very least, it is contributing to the evolution of communications and tactics, which has the poten-

tial to change activism and, ultimately, impact democracy. As such, this research posits that, as the digital divide closes and resistance to adoption lessens, the potential exists for electronic tools to eventually become an essential part of the Mexican activist's repertoire of contention, with online and offline tactics working together to incite social change.

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