



The Use of Digital Media for Social Mobilization in Marginalized Communities: The Case of a Mayan Socioenvironmental Movement in Guatemala

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Introduction

This article examines the use of information and communication technologies (ICTs) for political mobilization in marginalized populations of a developing country. Recent studies put forward the potential of ICTs in building networks and mobilizing power (Castells, 2007a; Juris, 2008; Sassen, 2004). However, there is scarce empirical research on how, why, and with what results this network communication power is possible in the context of traditionally excluded populations within social structures such as those in the Third World. Using multisited ethnographic research (Marcus, 1995), this investigation develops a case study examining how an environmental social movement led by Mayan rural communities uses ICTs to protest against the mining and extractive industries in the Western highlands of Guatemala.

In the last decade, the developing world saw a number of cases in which communities on the periphery organized social movements to challenge their governments about the environmental and human development costs of irresponsible exploitation of natural resources (e.g., Akpalu & Parks, 2007; Holden & Jacobson, 2007; Imbun, 2006; Root, Wiley, & Peek, 2002). Particularly in Latin America, indigenous populations have organized movements against mining and extractive industries (Perreault, 2012; Pieck, 2006; Ulloa, 2001; Van de Sandt, 2009; Whiteman & Mamen, 2002). In Guatemala, rural communities made up of different Mayan groups started a socioenvironmental movement in the early

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2000s. Taking advantage of new democratic spaces for participation after decades of civil war and dictatorships, the movement emerged in the western department of San Marcos in opposition to the opening of the Marlin Mine, the first open-pit mineral mine in the country, owned by Montana Exploradora, a local subsidiary of the transnational Goldcorp Inc. The movement expanded to other Mayan communities in the Western highlands, and in 2004 formed the Western Peoples Council, CPO (Consejo de Pueblos de Occidente). This indigenous coalition opposes mining projects specifically and industrial exploitation of natural resources in general.

The majority of the indigenous communities involved in this movement live in rural areas traditionally devoted to agriculture, and most of them struggle with poverty and marginalization conditions inherited from colonial times and reinforced by a prevailing socioeconomic system that favors inequality (United Nations Development Programme, 2009). The rural conditions also limit this population's access to communication infrastructure in general and Internet access in particular (International Telecommunication Union, 2012). In addition, these communities experienced a 36-year internal armed conflict that ended in 1996. The rise of a social movement with these antecedents is compelling. Past experience could have pushed these populations to put aside their demands and remain silent, but instead the movement against mining seems to be revitalizing the voices of these indigenous groups. Some of them say that they are tired of being excluded from the welfare of their own country, which they see as their own territory. It is this concept of "defense of their territory" that triggered the mobilization process that started eight years ago and keeps it growing.

The movement has gradually developed an integrated communication toolbox effectively combining ancestral communication practices (community assemblies, community consultations), some community and mass media (community radio, cable television, press conferences), and ICTs (mobile phones and personal computers) for key social mobilization activities, such as information sharing, civic journalism, and collective actions. There was scarce public debate on mining and natural resources management 10 years ago, but now the Mayan communities' position on the issue is central in public opinion and political debates in Guatemala. Moreover, the socioenvironmental movement in Guatemala has been able to build networks of support both within and outside its border. However, no research has been done yet to analyze the ICT usage behind these events. Furthermore, the socioeconomic circumstances of the communities leading this movement provide an opportunity for researchers to examine whether digital media can play a role in mobilization efforts led by segments of the population affected by marginalizing conditions. Thus, the anti-mining movement in Guatemala presents a compelling scenario for analyzing whether ICTs are used by deprived populations to mobilize power and under what conditions and with what outcomes.

Literature, Theory, and Research Questions

The present investigation seeks to examine the usage of digital media by marginalized populations to mobilize power in a developing world context. Scholars argue that resource differentials affect the types and effectiveness of communication developed by opposing social actors within a sociopolitical system. Usually, social movements are disadvantaged compared to the political or economic elites (Dozier & Lauzen, 2000; Karlberg, 1996). Empirical studies have found that environmental activist

groups habitually are at a disadvantage when confronting powerful adversaries, such as extractive transnational industries (Root et al., 2002). However, according to the resource mobilization model (McCarthy & Zald, 1977), building networks of support helps activists mobilize power and overcome resource deficits. Salmon, Fernandez, and Post (2011) provide empirical evidence supporting this contention, showing how endogenous (local initiatives) and exogenous (initiatives outside the movement) resources in addition to what are called "networked channels" (a combination of local and external resources) are used to mobilize assets and support. The authors provide examples of successful networked mobilizations such as the Arab Spring movement, and they advocate for more research on the strengths and limitations of using digital resources for diverse mobilization actions in different cultural contexts.

Likewise, research in communication and information technologies in the Information Era has furthered access to and effective use of new digital media that play a crucial role in effectively networking for mobilization purposes (Castells, 2007a; Juris, 2008; Rolfe, 2005; Sassen, 2004). Castells (2007a) states that the convergence of globalization and new communication technologies allow social movements to build networks at multiscale levels, from local to global, which can result in new allocations of power. The new communication environment opens opportunities for autonomous processes of social mobilization that have the potential to bypass political or business control of communication, constituting a new form of insurgent politics.

The positive impact of using new technologies to build networks and circumvent traditional power structures can be affected by the social context in which the mobilization takes place. Socioeconomic, political, and cultural structures may limit or enhance the power potential of the networks. Environments with high socioeconomic disparities negatively affect access and usage of information technologies (Norris, 2001), therefore, lessening empowerment outcomes of the networks. The potential of digital media to empower peripheral populations also depends on whether or not they trigger certain communicative characteristics that enhance mobilization, such as civic engagement, cultural resonance, reinforcing patterns, and collective efficacy. For instance, Rojas and Puij-i-Abril (2009) and Rojas, Shah, and Friedland (2011) in Colombia showed that informational uses of ICTs (Internet and mobile phones) are significantly related to traditional and offline civic and political participatory behaviors. Likewise, experts on development communication in Latin America point out the relevance of genuine and authentic communication processes for sustainable social change (Gularte, Ozaeta, & Díaz, 2009; Gumucio-Dagron, 2003). Munyua'S (2000) analysis of the role of ICTs for rural development in developing countries also found that a mixed use of traditional and new media increases the potential for further social change.

However, networked communication and ICT usage do not necessarily lead to effective mobilization. Cartier, Castells, and Qiu (2005) studied the use of ICTs (mobile phones) in marginalized immigrant communities in China. They found that although mobile phones created networks that broaden economic opportunities for immigrants, these benefits did not lead to a gain in political power because the immigrants were seldom connected to the state's modernization policies that could promote articulation of shared experiences. Thus, there is no conclusive evidence that shows under which conditions the use of communication technologies enables empowerment of peripheral rural populations to mobilize power.

In order to fill this vacuum, the present study uses the case study of the Mayan socioenvironmental movement in Guatemala to answer the following research questions:

- RQ1. Does the socioenvironmental movement led by Mayan communities in Guatemala use ICTs for their mobilization purposes? If so, what types of ICTs do they use? How and why they use them?*
- RQ2. Do ICTs play a role in the networked communication of the movement? How? Why?*
- RQ3. What are the main strengths and limitations of ICT usage for mobilization in the Mayan socioenvironmental movement in Guatemala? Why?*

Study Design and Methods

Multisited ethnographic research (Marcus, 1995) was conducted using a combination of qualitative methodologies that are suitable for answering the research questions and are also appropriate to the social and cultural context. Since the objective of this study was to analyze networked communication processes and the role of ICTs within them, a multisited ethnographic approach was used to collect data on communication that occurred in different places and spaces (geographically during community assemblies, political meetings, etc., and electronically in social network interactions, chat rooms, etc.). Qualitative research was used to obtain a holistic and contextualized understanding of the subject (Lindlof & Taylor, 2002). The use of multiple sources of evidence was convenient for developing a case study such as this, because it allows for obtaining details from different research perspectives, thus enhancing the validity of the findings (Yin, 2003).

Fieldwork was conducted in Mayan communities in five departments located in the Western highlands of the country: Quetzaltenango, San Marcos, Totonicapán, Huehuetenango, and Quiché. These locations were selected because they represent the different Mayan groups leading the Consejo de Pueblos de Occidente (CPO, or Western Peoples Council) in their respective regions. Additional field research was conducted in Guatemala City, the capital, to observe collective actions targeting political decision makers and to conduct interviews with several government and corporate representatives.

The data collection was conducted in three waves: the first wave from December 2010 to February 2011; the second wave from May 2011 to August 2011; and a third, longer wave, from November 2011 to September 2012. Although the antimining movement in Guatemala has not ended (it emerged in 2001 and is still an ongoing process), previous research (e.g., Tarrow, 1993) has shown that social movements are usually long processes that can be studied in stages or cycles that allow researchers to observe the character of the movement. Moreover, the present study can be used as point of reference for further longitudinal research on the evolution of the movement.

Methods

In-depth, nonstructured informant interviews were conducted following qualitative interviewing procedures prescribed by Lindlof and Taylor (2002). The interviews were nonstructured and used open-ended questions to give participants enough freedom to assemble their own rhetorical construction of their experience. The subjects participating in the interviews were identified in previous fieldwork and were selected through convenience sampling using a combination of typical and maximum variation strategies to obtain illustrative data of the diverse qualities of the phenomena and to observe potential differences related to factors such as social context, gender, and age. The sample of 24 subjects included:²

- (a) Top-level organizers of the movement, made up of representatives of the main Mayan groups in the Western Peoples Council
- (b) Participants in *consultas comunitarias* (community consultations, Mayan ancestral practice for collective decision-making) and other collective actions
- (c) Local and international activists supporting the movement
- (e) Government and corporate officials associated with mining and natural resources management issues

Direct observation was conducted during fieldwork that took place in 2010–2012, following procedures outlined by Schensul, Schensul, and LeCompte (1999). The aim was to collect data in the natural environment in which occurrences and events took place. The scenes, sites, and events observed were selected using typical and maximum-variation sampling strategies, prioritizing those with a higher potential for providing relevant information and considering the time and resources available for this investigation. Direct observation was conducted at the following places:

- (a) *Consultas comunitarias* and other collective actions
- (b) Various communication actions (community assemblies, press conferences, social network interactions, public demonstrations)
- (c) Meetings of community representatives with government officials and corporate executives.

Data Analysis

The data collected from qualitative research was analyzed using thematic analysis (King & Horrocks, 2010) to answer the study's corresponding research questions. The translation/interpretation, transcription, and analysis of the data were conducted by the authors, native Guatemalans with previous academic and professional experience in political and development communication in rural communities in the country.

² The 24 subjects accounted for 82 interviews because most of the subjects were interviewed two or three times at different stages of the field research (2010–2012) in order to cover different themes and moments of the movement.

Results and Discussion

The present investigation aimed to answer three main research questions designed to characterize (1) the usage of ICTs by the antimining movement led by Mayan communities in Western Guatemala, (2) the potential networking power of this usage, and (3) the main strengths and limitations for effective use of ICTs in the mobilization process so far.

A Self-Tailored Integrated Communication Toolbox

The gradual evolution of the Mayan socioenvironmental movement has allowed communities that are traditionally inexperienced in the use of media (especially ICTs) because of their marginalized situation to identify and progressively create an integrated communication toolbox appropriate for their cultural values and particular mobilization needs. The self-construction of communication toolkits provides greater sustainability in mobilization actions because communities perceive them as genuine and relevant, different from the temporary impact of imposed interventions. The following sections analyze some of the key features of this particular communication toolbox in order to identify factors that may help disadvantaged populations effectively achieve their mobilization goals.³

The old, the folk, the new. Results show that the Mayan socioenvironmental movement in Guatemala uses ICTs as part of an integrated communication toolbox built along with the evolution of the movement. Different strategies and collective actions have driven the movement to discover, implement, adapt, and mix diverse media. A communication coordinator emphasizes that Mayan communities have combined traditional communication tools with new ones, selecting those they find useful and in harmony with their culture:

At the beginning we were using only the traditional Community Assembly to gather with community members to share information and make collective decisions. This has been our tradition for centuries. It is what we have inherited from our grandpas and grandmas. Sometimes, we used art performances at the central park of the "pueblo." Where available, we used community radios. Now, we are discovering new ways of communicating with others. The youngest are good with the Internet and new things such as Facebook. But we use them only if they help our mission and if they do not go against our values and traditions. We like to talk and make decisions as a group, not individually. So, we use media that allow us to keep doing things in this way.

The media used for mobilization can be characterized more as an expansion, rather than a replacement, of the media repertoire in the Mayan communities. Even in communities where the movement has more decisively incorporated ICTs (e.g., computer mediated communication [CMC] and social network sites [SNS]) in their strategies, other traditional media have not disappeared. Moreover,

³ A document is available online that outlines the different communication outlets and actions used by the Mayan movement, including their main functions, period of usage, and mobilization outcomes is available at <https://docs.google.com/file/d/0B6PUCd5CkWddR0FFcGp1Q254eIE/edit?pli=1>

sometimes the use of ICTs has triggered more effective use of other media, as described by a community leader in charge of the communication functions:

We learned how to send text messages and now we use them to announce community assemblies and art performances that we organize for the weekends. Also for the *consultas comunitarias*, we use cell phones to transmit live to the community radios about the voters' participation to the different voting centers. We stopped using printed invitations and started using text messages when we have an emergency or when we want to avoid been tracked by people who not only opposes the movement but also have tried to physically or psychologically harm our leaders.

Information Sharing, Community Journalism, and Collective Action Coordination

The Mayan movement in Guatemala used ICTs to support three mobilization actions: information sharing, community journalism, and collective action coordination. To complement traditional community assemblies, the Mayan communities started incorporating other communication tools to extend their collaborative work to groups and allies beyond their communities. They use e-mail and social networks to gather new information and then process and distribute it both in person with the community during the assemblies and through the same digital media. The Internet became even more important when the movement grew and it became necessary to share new information with other members in diverse locations not only within Guatemala but also in different places around the world. Communication organizers acknowledge that access to the Internet is limited in rural areas, but the Mayan collectivist culture helps them find a way to get organized and take advantage of their imited resources as much as possible.

Digital media have also contributed to the development of new practices in community journalism, both in a formal and informal manner. The movement has repeatedly condemned the lack of mass media coverage of the group's position on the mining issue. Therefore, during relevant events, such as *consultas comunitarias*, local leaders and community members use mobile phones to report information and transmit it through community radio stations or local newspapers. In addition, community members informally become reporters of the events, transmitting text messages and pictures to their social networks. Unlike the Internet, mobile phones are available throughout almost all the country, which facilitates their usage for mobilization even in rural areas. In addition, mobile phone technology is easier to use and allows more mobility than computers and the Internet.

Finally, digital media have provided significant support for organizing collective action. Mobile phones are used to coordinate group gatherings, press conferences, and demonstrations, and e-mail and social networks are used to publicize the results to the mass media and the public. A young member of the organization highlights the relevance of mobile phones for public demonstrations:

In some communities, we live very far away from each other, the only way to rapidly spread the word and coordinate when we will have a public event is through cell phone. Also, we try to update each other regarding relevant information but we do not like to do

it by mail because it is risky given the political persecution that we experience all the time.

The use of social networks, such as Facebook, occurred more recently as a way to reach a broader audience, especially in urban areas, and gain public support. "In the capital city and other urban areas, people think that mining exploitation is only our problem and not theirs. That is why we want to share our view with them to articulate more support," said a group organizer. In addition, Facebook and other websites helped the movement get more exposure with national and international audiences who otherwise would not know about this Mayan cause. In the words of a communication coordinator, "The Internet gives us the opportunity to struggle locally and resonate globally."

Networking Globally: A Pressure and Protection Strategy

Unlike when working together with members inside the community, Mayans do not naturally and spontaneously work with outsiders, especially those who come from other countries. Thus, Mayan populations have little trust in foreigners until their motivations and intentions for being in the community are made clear. However, this view has changed gradually, driven by the need for support partnerships.

As a strategy to counter power disparities with economic and political elites and to obtain protection from political persecution, the Mayan groups that began with communities leading a local struggle have increasingly become a movement with global resonance. They use cross-border networks to implement what Keck and Sikkink (1999) defined as the "boomerang pattern," because the movement seeks support from allies outside the country in order to gain more power and exert more political pressure inside. A member of a group that was one of the precursors of the Mayan movement in Guatemala noted that this strategy was not pre-planned, but arose spontaneously as a response to a latent threat:

At the beginning we were very closed when it came to accepting people from outside our community, especially from other countries, but then we realized that the government paid more attention to us when our case was covered by international news media or when we got support from allies in other countries.

Additional benefits from these new transnational networks are that new allies share their knowledge and resources and provide movement leaders with indirect protection from political persecution. A Maya-K'iche' leader in a remote rural community pointed out, "The mining issue is very complex for us, so it is very important for us to get information that helps us to strategize. [Also it is important to have] friends who can be our armor against repressive actions that the government has started in our communities."

Network Power

At the beginning we felt like we were by ourselves and sometimes that scared us. We preferred to hide because a lot of our brothers and sisters had disappeared and died just

for not conforming to what the government and the army said. But step by step we found out we were not alone. Other groups here and friends from other countries have helped us. Now it is not only like David and Goliath. We are several Davids together against a big but lonely Goliath.

This description comes from a young organizer of the Mayan movement in Quetzaltenango. He pointed out that one of the main communication goals is to maintain and increase the networks of supporters in the country and abroad. This is a strategy for counterbalancing resource and power differentials and also serves as an alternative channel for influencing political decision making. The movement's organizers found that using ICTs makes it easier to increase membership, connect with other activists locally and abroad, get attention from mass media, and get protection from political persecution.

Building networks is in accordance with the Mayan culture, which is grounded on collectivist values such as life-beings connection, unity, collaborative behavior, group consultation, and communal decision making. Thus, it was not difficult to incorporate network-building into their strategic mobilization toolbox. On the one hand, ICTs help strengthen the already united group and also facilitate gaining new members. But on the other hand, the use of ICTs is perceived by the movement as a tool that empowers them and strengthens their collective efficacy, which are key factors for networking power and social mobilization (Cartier et al., 2005; Castells, 2007b).

Despite the effectiveness of ICTs for the mobilization purposes of the Mayan antimining movement, logistic and sociologic limitations exist. The communication infrastructure in most rural areas in Guatemala is deficient, especially in terms of electricity and Internet access. That is why the mobile phone is more popular. In zones with limited access to electricity, people work together to find at least one "tienda del barrio" (small store) or community member where they can charge their phones for an affordable fee. Another limitation is the relatively high cost of the electronic devices and Internet services. A sociological barrier to the network power of ICTs is lack of trust found in some communities regarding CMC and SNS. This is understandable given the highly interpersonal patterns in the Mayan culture, the antecedents of repression and persecution experienced in these communities during the war years, and the more recent attempts of intimidation directed toward their leaders. However, successful outcomes using CMC and SNS in some groups have helped the most skeptical members start changing their attitudes. The narrow understanding of how ICTs work might affect what Castells (2011) defines as the programming and switching features of network power. Limited capability to organize and manage the tools for networking might negatively influence a more effective usage and the perception of their risk or reliability.

Scarce Resources Both Limit and Enhance Mobilization

The lack of resources, limited access to communication services, and low levels of education and technology skills both restrict and reinforce the antimining movement in Mayan communities in Guatemala. On the one hand, sparse resources for mobilization make it more difficult to achieve the mobilization goals of the various groups. For instance, one of the main boundaries highlighted by organizers is that most of the members lack time for the mobilization activities that they have to accomplish. A young woman who leads the movement in one of the most remote communities asserts,

My husband works in “el campo,” we both come from peasant families. I sell produce in the local market and take care of the children. Our work day starts at four in the morning and finishes at six in the afternoon. We spend almost two hours walking back home. We are very committed to the cause, but sometimes the body and mind are too tired. We are two of the very few who can read and write in our community, so we feel like we need to make an extra effort to help. In the group assembly, sometimes we all agree about what we need to do, but it is difficult do to it if we don't have either time or money to do it.

Restrictions on mobilizing resources places the Mayan movement at a disadvantage compared to its opponents, the transnational mining companies, who have vast resources, experience, and political power. The resource and power differentials are a crucial factor that can greatly and negatively impact the movement's effectiveness, especially in nascent, unequal, developing countries (Dozier & Lauzen, 2000; Karlberg, 1996). The will to mobilize may decline when these differentials result in too many failures and cause the membership to get discourages, thus decreasing the cost-reward relation for mobilization efforts and directly affecting their effectiveness (Olson, 1971).

However, the same factors that limit mobilization in these marginalized communities also make it possible to strengthen the movement because members have developed stronger unity and deeper trust to overcome the scarcity of resources. For instance, the movement has organized *consultas comunitarias* (community consultations), a strategic collective action in which members of a given community vote for or against mining in their territory. The first *consultas comunitarias* were planned in the most organized communities, usually those with more resources available. However, it is more difficult to implement this strategy in the more rural, isolated communities. To overcome the multiple limitations, communities with previous experience and more resources have offered their assistance to others, reinforcing social capital outcomes. This results not only in an improved learning process, but also in stronger solidarity, improvement in collective efficacy, and enhanced interpersonal trust among members, all of which are key components for social capital (Rojas et al., 2011), empowerment of marginalized communities (Cartier et al., 2005), and mobilization effectiveness (Castells, 2007b). In the long run, the more personal, shared, and meaningful use of media by indigenous communities—compared to the massive, well-funded, commercial-oriented usage by the mining corporations—might benefit mobilization by creating more relevant communication with more sustainable social changes.

Conclusions

This study examined the role of ICTs in socioenvironmental mobilization in rural Mayan communities in the Western highlands of Guatemala. Overcoming disadvantaging conditions such as power and resource differentials, knowledge gaps, and political persecution, the Mayan movement opposing mining and natural resource exploitation has found a way to effectively incorporate ICTs in an integrated communication toolbox they have self-tailored to mobilize power. In the aim of building their voices, these communities have learned not only how to construct the messages that express their

demands but also how to use different channels to further spread their views and get broader support in order to influence decision-making in the country. The movement started out using community and mass media, such as community assemblies and community radio, and then began incorporating ICTs in successive stages, mainly for information sharing, civic journalism, and collective actions. There are several lessons that can be learned from the analysis of the use of digital media in the Mayan movement in Guatemala.

First, organizers of the movement recognize the value of ICTs to improve membership, increase collective efficacy, and strengthen networks of support. This recognition of the relevance of digital communication enhances the meaningfulness and ownership of its usage. This is a key feature that has been highlighted by scholars of networked mobilization (e.g., Castells, 2007a; Juris, 2008) and communication for social change (Gularte et al., 2009; Gumucio-Dagron, 2003), who emphasize that access to technology or a new communication medium represents a real opportunity for development and power mobilization only if these platforms become genuinely relevant to people and empower them to achieve their goals.

Second, this study found that networked communication has dual effects when applied to mobilization: strong and highly effective in the mobilization inside the movement, but weak and curbed in its effects on policies and political decision-making processes outside the movement. Networked communication proved highly effective inside the movement enhancing group cohesion, collective efficacy, and social capital. Nonetheless, structural exclusion, ineffective political dialogue, and blatant persecution against indigenous leaders hinders the movement's potential to effectively influence elites' decision-making, resulting in increasing conflict and violence. Despite these limitations, the movement has reached some intermediate goals, such as influence on the media agenda, changes in corporate policies, and some public policy modifications.

Finally, this study suggests that research on the effects of networked communication for mobilization needs to address not only its impact on public policies and elites' decisions but also—and more importantly—its impact on civic participation and sociopolitical organization norms. In general, networked communication—spontaneously developed, resonating with cultural values, and promoting inclusive forms of governance—may help to defeat marginalization in a definitive and sustained manner.

Results from this study showed, in general, the potential of networked communication to empower marginalized populations. However, further research needs to be conducted examining specific types of communication actions and outlets (e.g., community assemblies, mobile phones, social network sites) to test their particular association with specific mobilization effects. In particular, more studies should aim to identify communication features that improve the empowering potential of mobile phones, which would prove crucial for mobilization in disadvantaged populations.

Several of the findings in this study can likely be applied to cases in other countries under similar conditions (i.e., emergent democracies, developing countries, multicultural societies). However, it is important to conduct additional case studies with other marginalized populations and different sociopolitical contexts to allow for validation, comparison, and extension of the findings of this study.

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