Aggregate, Amplify, Syndicate: Climate Change and Environmental Activism 2.0

by

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Abstract

This thesis explores Web 2.0 technologies in the context of climate change activism, investigating the extent to which new media platforms can be used to facilitate forms of subversion and resistance as well as trust, dialogue, and two-way flows of information (Grunig, 1989). Using the United Nations Framework Convention on Climate Change (UNFCCC) COP15 in Copenhagen, DK as a case study, the findings are based on a combination of interviews with activists, journalists and communications practitioners as well as a content analysis of the Twitter and Facebook profiles of several environmental non-governmental organizations (ENGOs). The findings suggest that while Web 2.0 technologies largely reproduce top-down modes of communication and are mainly used to disseminate information through link-sharing, they also help aggregate individuals and messages across networks, amplify the voices of activists and journalists in the blogosphere and help ENGOs syndicate their presence across a variety of Web 2.0 platforms.

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"Silent gratitude isn't much use to anyone." -- G.B. Stern

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Table of Contents

List of Tables

List of Appendices

Introduction

In March 2010, Greenpeace International launched a campaign protesting Nestlé's use of palm oil derived from Indonesian plantations, a site of major rainforest degradation. In their "Have a Break?" web video campaign, Greenpeace parodies a Kit Kat chocolate bar advertisement, depicting an office worker biting into a bloody orangutan's finger instead of a piece of chocolate to illustrate the consequences of ecological damage. The video, which received over one million views on YouTube and launched a firestorm of complaints from individuals on Nestlé's Facebook and Twitter profile pages, received even more attention when Nestlé attempted to ban it for copyright infringement. Less than one month after the inception of the campaign, Nestlé announced that it planned to stop the purchase of palm oil from Sinar Mas (one of the companies Greenpeace claimed was responsible), and made commitments toward more sustainable practices in the future.

Greenpeace International's skillful use of 'old' and 'new' media is one of the reasons why it is arguably one of the best-known environmental organizations today (Dale, 1996). Indeed, Anders Hansen (2009) notes that "a defining feature of many of the most well-known and most politically effective environmental pressure groups continues to be their view of the mass media as integral and essential to their campaigning strategy," suggesting that effective communications campaigns are just as important as lobbying and direct action campaigns. Greenpeace's successful campaign demonstrates the many ways in which Web 2.0 platforms (i.e user-generated web content premised on aggregation, amplification and syndication) have created public relations nightmares (and generated many new opportunities) for many notable figures and organizations, from

Sarah Palin (in her infamous Dateline NBC interview with Katie Couric) to the Domino's Pizza video depicting employees blowing their noses into pizza dough on the job.

Mediating climate change

Web campaigns by environmental NGOs (ENGOs) have become part of the mediascape of rising public concern over climate change. In 2007, Canadian newspapers devoted more attention to global warming than ever before (Weaver 2008: 31) and by 2008, the framing of climate change in the Canadian media had shifted from an issue of science to an issue of politics, policy and lifestyle (Gunster, 2009: 25). According to a January 2010 survey by the Canadian Defence and Foreign Affairs Institute, climate change was understood as the biggest threat for 49% of Canadians, ranked even higher than terrorism (4). In this sense, media becomes both a barometer of public opinion and a source of information. As Hansen (2009) notes:

> Much, maybe most, of what we learn and know about 'the environment', we know from the media, broadly defined. Indeed, this applies not only to our beliefs and knowledge about those aspects of the environment, which are regarded as problems or issues for public and political concern, but extends much deeper to the ways in which we – as individuals, cultures and societies – view, perceive and value nature and the natural environment (3).

At the same time, the public attention toward this issue is amplified by a growing body of literature from scientists and the United Nations Intergovernmental Panel on Climate Change (IPCC) which indicates that anthropogenic global warming is already occurring and responsible for rising sea levels and an accompanying increased frequency of extreme weather in the form of heat waves, droughts, floods and hurricanes. By 2100, the temperature of the Earth's near-surface air and oceans is expected to rise by nearly 5 degrees Celsius, leaving the planet unable to mitigate against the effects of carbon

emissions and resulting in global disasters that can end in food shortages, water depletion and human disease (Earth Charter International, 2008).

Environmental activism 2.0

While the views presented by the scientific community present a bleak outlook with respect to climate change, ENGOs are attempting to frame this prospective disaster as a call to action, launching a variety of web campaigns linked to public demonstrations. As an example, on 24 October 2009, the campaign organization 350.org coordinated more than 5,200 demonstrations in 181 countries and was widely praised for its creative use of Internet tools. Social media played a crucial role in harnessing the momentum of the movement by encouraging participants worldwide to submit photos from local demonstrations in order to aggregate a visual narrative of a global day of action. In the aftermath, over 19,000 photos were submitted to Flickr pools, turning the narrative of this event into a side story about the role of social media in e-campaigning. As one campaign organizer noted:

> 350.org recognizes that citizens around the world now have access to technology that allows for a revolution in grassroots organizing. When you can g-chat an organizer in Kenya, while Skype conferencing with allies in the Philippines, and SMS-blasting organizers across the United States, that opens up new possibilities...When we heard that there was going to be a 15,000 person march in Ethiopia on October 24 and no one to film the event, our Africa Media Coordinator based in New York City Skyped a friend in South Africa, who called a friend in Ethiopia, who biked to the event, took photos and video, then biked to the only high speed internet connection at the one 3-star hotel in Addis Ababa, bought a drink at the bar so she could use their internet, uploaded footage to our online media library, and we got it to major news networks 3 hours later[1].

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[1] Henn, J. (31/12/09). Social media, digital organizing and building a movement. *350.org* [blog post]. Retrieved 1 July 2010 from http://www.350.org/about/blogs/social-media-digital-organizing-and-building-movement.

When combined with interpersonal networks and a toolbox of communication technologies as outlined in the narrative above, Web 2.0 represents many possibilities for ENGOs, potentially existing as a deliberative public sphere, an opportunity for activism and the coordination of action, the direct lobbying of decision-makers, an avenue for advertising and fundraising, a space for marginalized voices and dialogue between organizations and stakeholders, an interconnected, instantaneous portal for information and news, and as a medium to bolster organizational accountability (Denning, 2001; Kenix, 2007).

Unlike prior media such as print news, radio and television which reach a particular audience, the Internet in the form of Web 2.0 is best understood as an aggregate of technologies related to video, sound and image, including blogs (e.g. Wordpress and Blogger), blog-based news portals (e.g. Reddit and Digg), wikis (e.g. Wikipedia), RSS (acronym for Really Simple Syndication), tagging and social bookmarking (e.g. Del.ici.ous), content-sharing platforms (e.g. Flickr, YouTube, Vimeo), mashups (digital content compiled from various sources), podcasts (audio programs recorded for use on computers or mobile devices), peer-to-peer (P2P) technologies (e.g. file-sharing, torrents and Skype), virtual communities (e.g. Second Life and World of Warcraft) and social-networking platforms (e.g. Twitter and Facebook). With a wide variety of platforms, what potential can new media hold for environmental activism and how can specific technologies be used by activists?

COP15: Dialogue and modernity 2.0

This thesis explores these questions in several ways. Taking a cue from the literature on public relations that situates dialogue (cf. Grunig, 1989; Pearson, 1989) as the most effective and ethical form of public communication for organizations, this study investigates whether or not new media technologies can become a pathway to effective two-way communication between ENGOs and their key stakeholders. Departing from a mass media broadcast model (e.g. television and radio) that understands communication in a top-down, sender-receiver format, the thesis asks: can Web 2.0 open up spaces for horizontal communication, and if so, in what ways?

This study also explores the sociological implications of climate change and new media technologies. As we enter a postindustrial era based on global interdependence and information as the central commodity, sociologists identify a transformation of social structures and identity processes that create more choices for how to live in the world and how to understand social issues (Giddens, 1991; Bennett, 1998; Beck, 2001). Postindustrialism is also accompanied by several *unintended consequences* (Beck, 2004) such as famine, natural disasters, pandemics, terrorism and climate change. Beck (1996) reminds us that these dangers set up a global interdependence, where the beginnings of a (potentially) global public sphere begin to take shape (2). The perceived globality of these dangers has also in turn triggered the development of co-operative transnational non-governmental organizations (NGO), such as Amnesty International, Doctors Without Borders and Oxfam. In turn, political boundaries are restructured, as the nation-state no longer adequately encompasses membership, participation and a shared sense of risk.

As global dangers expand their scope, reaching beyond geopolitical borders, international governing bodies such as the United Nations have become *cosmopolitical*

spaces for negotiation, deliberation and dialogue for countries aiming to control and manage risk through agreements, protocols and treaties. The United Nations Framework on Climate Change Convention (UNFCCC) is a particularly notable event regarding climate change as it has been the site of several important environmental policies and events, such as the 1997 Kyoto Accord (which aimed for an average 5.2% reduction in greenhouse gas emissions from 1990 levels), and more recently, the 15th annual Convention of Parties (COP15) in Copenhagen from 7-18 December, 2009. With the Kyoto protocol set to expire in 2012, COP15 would become an event where the developed Annex I countries (e.g. Australia, Canada, most of the European Union and the United States) would agree to deep binding cuts and find ways to help less developed parts of the world experience growth and prosper in an ecologically-sustainable way.

The momentum for COP15 was particularly strong in the activist community. From the 21 September 2009 Global Wakeup Call launched by Avaaz and TckTckTck, to 350.org's Day of Action on 24 October 2009, to Stop Climate Chaos Coalition's "The Wave" demonstration in London, UK on 5 December 2009, several ENGOs launched massive campaigns on social media platforms such as Twitter, Facebook and YouTube. With the summit approaching, thousands of ENGOs, bloggers, journalists and grassroots activists flew from around the world to meet in Copenhagen, attending plenary sessions, participating in public demonstrations and communicating the event to global news outlets and audiences. It is this event that becomes this study's primary site of investigation regarding how ENGOs use Web 2.0 tools to enhance their campaign work.

This thesis explores how ENGOs use new media technology in several ways. In Chapter I, I present some of the current literature about Web 2.0, non-profit

communication and social movements. Web 2.0 has been positioned as a watershed in communication (Carey, 1989), promoting new forms of citizen participation through micro media such as blogs, social-networking sites and mobile telephones. Next I discuss the web as a public relations tool through the notion of dialogue (see Gruing, 1989; Pearson, 1989) and suggest that there is a growing inconsistency between what is imagined to be possible through social media and how it is currently being implemented (Kent, Taylor & White, 2003; Eyrich, Padman & Sweetser, 2008; Bortree & Seltzer, 2009; Greenberg & MacAulay, 2009; Lariscy, Avery, Sweetser, & Howes, 2009; McAllister-Spooner, 2009). Finally the chapter concludes with an exploration of the literature on social movements and collective action that explores the conditions behind "mobilized citizenship" (Wellman *et al.*, 2003). Ultimately, I conclude that while the literature tends to highlight narratives about subversive and tactical uses of media, Web 2.0 technologies can sometimes fulfill more banal, though certainly not less important organizational objectives related to public relations, promotion and advocacy.

In Chapter II, I apply Anthony Giddens' (1991, 1994a, 1994b) and Ulrich Beck's (1994, 1996, 2001, 2004) concept of modernity to position Web 2.0 in a postindustrial society. Through this framework, modernity is described as the dynamism of space and time through the reconfiguration of the nation-state; the disembedding and re-embedding of abstract systems through expert systems and symbolic tokens; and the reflexivity of ENGOs as they attempt to negotiate competing knowledge within a dynamic media environment. Ultimately this chapter suggests that as part of a modern framework, Web 2.0 best illustrates the dynamic of disembedding/re-embedding as the cosmopolitical

character of the Internet helps to re-establish geopolitical borders and journalistic authority.

In Chapter III, I explore some of the methodological approaches used in this study, focusing on case study and accompanying issues related to reliability, validity and theory. This section explores some of the tensions and issues I experienced as a researcher in the field, including how to practice reflexivity when finding that one's observations do not "match" those of the literature as well as building a comprehensive content analysis coding scheme designed for a massive dataset and accounting for all of the multimediated capabilities of social-networking platforms. Ultimately this chapter explores whether or not two weeks in the field is a sufficient amount of time to produce valid findings and how being 'wrong' can become a useful way to generate theory.

In the final chapter, I present the findings from participant-observation, interviews and content analysis, discussing the results by addressing this study's major research questions about the possibility for dialogical communication and how Web 2.0 fits into sociological accounts of modernity. Ultimately I suggest that while Web 2.0 can be used to promote dialogue between ENGOs and their constituents, it is mainly used as a tool for information dissemination and the expression of symbolic gestures. Through 'relationship-building 2.0', I suggest that ENGOs do not *create* relationships but rather *aggregate* pre-existing communities of interest. Their emphasis on viral content means that they largely participate in top-down, one-way forms of exchange, relying on mainstream media and the blogosphere to redistribute news and information.

Also interesting are the symbolic aspects of Internet activism. While ENGOs occasionally used social-networking sites to mobilize and coordinate action on the

ground, these actions were primarily digital, helping to deepen pre-existing levels of audience engagement. Social-networking sites enabled the demonstration of solidarity and reciprocity among ENGOs and news outlets, as they can facilitate amplification, promotion and branding. This chapter ends by suggesting that Web 2.0 usage is uneven and largely dependent on the ENGOs needs. Furthermore, the inevitable "push to professionalism" (Dalton 1994) that follows an environmental movement with an extensive issue maturity and high degree of institutionalization results in mediated exchange that resembles more of a symbolic/organizational communication tool than a strategic/tactical means for direct action.

Chapter I: Spinning the Web of Environmental Activism 2.0: A Literature Review

Introduction

In order to understand the increasingly complex terrain of environmental activism enabled through new media technologies, it is useful to explore this idea from a variety of perspectives. Looking specifically at new media or Web 2.0 technologies, how can they be used to disrupt and shift traditional modes of communication? What is the role of blogs, social-networking sites and mobile devices in carving out alternative spaces for interaction, participation, production and consumption? From a public relations point of view, as organizations work toward optimizing their public image via social responsibility initiatives that emphasize openness, transparency, accountability and dialogue, for example, what are the ways in which social media becomes yet another tool for achieving these strategic outcomes? Finally, taking a cue from the social movements literature, how can collective action be understood through the lens of communication technologies and what are the ways in which they can both enable and constrain forms of direct action? This chapter concludes that while the literature often tells one story about digital technologies (i.e. they are tools of liberation, subversion and revolution), it often eludes the less ground-breaking narratives about technology as parts of organizational infrastructure designed to secure and maintain a movement.

New media

Central to the shift of traditional media forms has been the Internet and its accompanying Web 2.0 technologies. Generating its value and power from the active participation of users, the Web 2.0 version of the Internet is understood as new, social, interactive or participatory media (O'Reilly, 2005; Barnes, 2006) that differs from the

Web 1.0 model premised on read-only, text-based, static content such as Internet Relay Chat (IRC) and listservs.

According to O'Reilly (2005), Web 2.0 can be described as: decentralized; collaborative; dependent on user-generated content that promotes the "wisdom of crows"; founded upon "architectures of participation" that blur the once-firm distinction between producers and consumers; based on information as the central commodity; a format that signals the end of software release cycles, where every platform is a beta version work-in-progress; a series of loosely-connected platforms; an era where software exists above the level of a single device; and the promotion of a rich and interactive multi-mediated user experience. The appeal of Web 2.0 is its inherently personalized quality (Gallant *et al.*, 2007): users are connected at a load, pace, and time that suits their needs, with content derived from a personal network of information. Connected above the level of a single device, Web 2.0 promotes the individualization of media, as content is produced and consumed on personal computers and mobile devices such as laptops, mobile phones, voice recorders, video recorders and digital cameras.

Web 2.0 not only aggregates but also amalgamates. Jones, Millermaier, Goya–Martinez, & Schuler (2008) note that "users of social networking sites engage simultaneously in interpersonal and mass communication by writing for an audience that is partly known and partly invisible and/or imagined" (para. 4), effectively disrupting notions of a single audience and enabling many-to-many forms of communication. In theory, this makes it possible for every person connected to a network to broadcast as well as receive content such as text, images, audio, video, software, data, tags, or links to and from every other person within the network, establishing individuals as nodes or

points in a hub of information (Paul, 2007; Rheingold, 2008). Social networks, when paired with other information and communication networks, enable broader, faster, and lower-cost coordination of activities (Vegh, 2003: 74; Edwards & McCarthy, 2004; Benkler, 2006), that, in turn, enable more frequent and content-rich communicative situations.

"Networking" becomes an "activity through which individuals establish and develop social ties with other individuals," (Jones *et al.*, 2008: para. 4; see also DiPerna, 2007) promoting the rise of "networked publics" (boyd, 2006) as communities of users who share, create and consume content. Decentralized by nature, Web 2.0 extends and amplifies the possibilities for social relations not always possible within traditional communities based on face-to-face engagement and geographic proximity (Wellman, 2001). Because the unique power of new media is located specifically in its participatory potential, the number and types of people engaging with it, as well as the types of activities and skills that emerge, are particularly important for Communications scholarship (Rheingold, 2008). With the implementation of specific Web 2.0 technologies such as blogs, social-networking platforms and mobile devices, new spaces have opened up for discussion, deliberation and participation by users and citizens alike.

Blogs

Changes in media technologies have made blogs popular among individuals and organizations, enabling users to broadcast text, video, image and sound through self-publishing platforms such as Wordpress and Blogger. The rise of RSS technologies has supported the expansion of blogging, as authors and readers can receive regular updates and "follow" blogs, facilitating the maintenance of a regular readership. The erosion of

the mass audience as well as the proliferation of fragmented audiences that has resulted from the multiple channels opened through new media has promoted the popularity of blogs as a way to reach across different audiences. Organizations are increasingly shifting to websites based on a blog-like architecture, as they are easier to update than traditional websites and present more opportunities for layering content and engaging audiences.

Bennett (2003b) notes that the public spaces for engagement and conversation that have been carved in the architecture of the web are not removed from mass media, however. They also create pathways of information that flow from micro media such as blogs, E-mail and newsletters, to mass media such as television, radio and newspapers. Blogs and blog-based news sites such as *Huffington Post* function as a source of news and information for audiences by aggregating various types of content as well as influencing the mainstream news agenda as journalists increasingly look to blogs as "information subsidies" (Gandy, 1982) of pre-assembled multimedia content.

Blogs also disrupt traditional media because self-publishing exists outside the daily news cycle, meaning that news and information is based on immediate, asynchronous and ongoing contributions from users across the spectrum, from institutions to home offices and mobile work stations (Orihuela, 2004). Blogging also differs from traditional reporting in terms of its interactivity as a Web 2.0 platform. Through their ability to embed digital content such as video, blogs permit readers to engage with information in different ways than television or print news, although professional news sources are now also doing the same thing in an effort to retain their audiences. At the same time, the amateurization of blogs is accompanied with its own concerns related to information-overload, credibility and fact-checking (Carvin, 2009).

Social-networking sites: Facebook

Launched in 2004 by university student Mark Zuckerberg as a digital version of a school yearbook, Facebook provides users with a profile page and encourages them to invite their E-mail contacts to join. While contacting strangers is an acceptable online practice, the norm is to interact with individuals already known offline (Livingstone, 2008). Membership on Facebook is structured to fit the needs of users. While individuals can sign up to create personal profiles, they can also form membership-based "Groups", while organizations or public figures can construct "Fan Pages" to reach out to digital audiences. Through the "Wall", the central communication point of each page, Facebook allows users to post content to their own, or to another users' page for others to view. Content posted by users feeds into the "News Feed", a central feature that aggregates and displays updates of all the Facebook activity of each user's network. As a Web 2.0 technology, these applications are based on the user's Facebook contacts, activities and affiliations with Groups or Pages, meaning that each user experience is unique.

Facebook is defined by the digital practices and relationships formed online, such as "Friendship" (boyd, 2006), a process where individual users must "request" friendship in order to be able to access another user's profile. While some understand this as a demonstration of an interpersonal relationship offline, boyd (2006) suggests that "Friendship" can mean many more things online, including an expression of admiration, curiosity or solidarity, for example. Users have different motivations in these "Friendships" and participate in a diverse set of practices that include sending public and private messages, photo-tagging and sending invitations to join online groups or attend offline events.

The Facebook status update/wall post feature permits users to keep their "Friends" informed of daily changes to their site and are thus primarily text-based. Updates to one's status are not only demonstrated on a user's profile page but also filter into the "News Feed" for a wider audience to see. This is beneficial for "Fan Pages" because "Administrators" can send updates to fans without fear of spamming (sending excessive messages), and thus alienating or turning off users. Tagging, a practice derived from blogs and content-sharing sites such as Flickr and YouTube, is another popular Facebook activity for photo, video and text. Taking a cue from micro-blogging site Twitter, Facebook has also enabled tagging in posts, as Facebook users can now "@mention" other users in status updates. Commentary is also a popular activity, enabled not only for photos and videos, but also for meta-commentary as users can comment on exchanges, updates and even comments.

Social-networking sites: Twitter

Twitter is a social-networking and microblogging service that enables its users to send and read messages, known as "tweets". Among the questions scholars ask concern how, why and what users retweet (boyd, Gilder & Lotan, 2010). Created in 2006 by Jack Dorsey, Twitter is understood as the "SMS of the Internet" because tweets are text-based and are limited to 140 characters in order to be read on mobile phones. Typically, users' tweets are posted on their pages for all of their "Followers" to read. Like a Web 2.0 platform, access is not limited to a single device and is available through the Internet, on third-party desktop clients such as Tweetdeck and mobile phones. The 140 character limit has promoted the use of shortforms, ranging from the @ symbol to the "retweet" function known as RT. This character limit has also popularized the usage of URL shortening

platforms such as bit.Ly and content-hosting services such as photo-sharing sites in order to expand the amount of communication possible in a single message (Levy, 2009). Twitter's rise in popularity occurred during the 2007 South by Southwest (SXSW) festival, an event that blends technology, music and media (Carr, 2009). At the event, Twitter was used as a way for attendees to keep track of conference events and changes to the schedule, making it ideal for event-based planning and coordination. While some have accused Twitter of encouraging mindless blabber about what one ate for dinner, others suggest that this is typical for all forms of communication and that we should not disregard the significance of online exchange. Indeed, Java *et al.* (2007) identify "daily chatter" as part of a range of communicative activities on Twitter, including conversation, sharing information/URL's and reporting news.

The low emphasis on reciprocal relationships on Twitter is a structural feature that separates it from Facebook. Unlike Facebook, where users generally have to request and receive permission to view others' profiles, a publicly-accessible Twitter profile is the norm (boyd, Golder, Lotan, 2010). "Tweeters" or "tweeps" can choose to view another user's page or "follow" someone without being "followed". Reciprocity is also limited even if users acknowledge each other. For example, users who mention each other via the @username feature still do so from their own pages, condensing correspondence onto a single user's page. The density and types of content hosted by each platform also separates them. While Facebook permits the hosting of content-rich media via various applications, Twitter offers a significantly streamlined version, where users only have one profile photo and interact primarily through text. This makes in an ideal format for mobile devices, although Facebook does also offer a mobile option.

Three major practices have been associated with "tweeting" (boyd, Golder & Lotan, 2010). The first is the @username mention, the practice of addressing or trying to get the attention of a specific user. The @username identifies information sources, friends and information seekers as three possible types of users, reinforcing the personalized quality of Web 2.0 (Honeycutt & Herring, 2009; Huberman *et al.*, 2009). Furthermore, the @username suits a variety of purposes, such as addressivity, reference, emotion, E-mail, location and time (Honeycutt & Herring, 2009).

Retweeting, the "act of copying and rebroadcasting" (boyd, Golder & Lotan, 2010: para. 5), is the second type of activity. Primarily referencing content or rephrasing others' tweets, retweeting is a form of information dissemination or a means of participating in a diffuse conversation. While there is no set standard for retweeting, it often takes on forms such as "RT@user, "via@user", "RT(via@user) and "thx@user". Retweeting invites multiple communities to engage with a particular topic without having to directly address a specific user. Similar to the transmission of information through word of mouth, messages that are retweeted often spread and shift in the network, changing in both content and form. Retweeting is a unique and idiosyncratic practice, demonstrating the emphasis placed on certain parts of messages and the variety of meanings possible through this action (*ibid.*). Honeycutt and Herring (2009) identify at least 10 functions, including amplification or information distribution to a new audience, entertainment, commentary, indication of one's position as a listener, public agreement, validation of an opinion, friendship or support, supporting those less-recognized, self-gain/reciprocity and saving tweets for later reference. Amplification and reciprocity are

two popular functions of tweets, as amplification brings messages to new and multiple audiences, while reciprocity promotes conversation and rapport-building among users.

The hashtag (#) function is the third major practice. Like metatags, hashtags reference content by using labels to indicate topics. In Twitter, hashtags not only organize content but also serve as a barometer for the popularity of certain topics. Hashtags that appear frequently enough can "trend", meaning they will appear on the sidebar of Twitter's main interface for every user, gauging the tone of discussions at a particular time. Also showing up in Twitter searches, hashtags are becoming a significant feature of tweets, as they can be used to demonstrate solidarity, promote a specific issue or contribute to a massive conversation (boyd, Golder & Lotan, 2010).

Mobile telephony

Mobile telephony also forms part of the new media environment. As a result of mobile penetration outside of North America, much of the literature documents mobile phone usage in Asia, Africa and Europe (see Ling & Pedersen, 2005; Ito & Okabe, 2005; Castells, Fernandez-Ardevol, Qiu & Sey, 2007) while very little research explores mobile telephony from a North American viewpoint. For many, mobile telephony has shifted from being the technology of a privileged few to the mainstream for two reasons: first, the infrastructure for mobile phones has eclipsed landline and even Internet infrastructure in many countries, especially in the developing world; and second, standardization and mass production have reduced the cost of mobile devices, making them more affordable (Castells *et al.*, 2007).

The micro perspective examining actual devices is also important because the technological capabilities shape the form and content of what communication is possible.

Mobile devices vary considerably: Analog phones (1G) are considered first generation; the second generation (2G) refers to standard digital devices; and digital devices with high-speed broadband capacity such as the Apple iPhone or the Blackberry form the third generation (3G).

Typically, the understanding of mobile telephony examines changes in the context of labour as corporate culture demands that workers keep their mobiles turned on (Castells *et al.*, 2007); within the family in the context of changing relationships and authoritative roles (Ito & Okabe, 2005; Chen & Katz, 2009); as part of the domestication and personalization of media (Ito, 2004; Ling & Pedersen, 2005; Katz & Aakhus, 2002; Haddon, 2006), the transformation of sociability, particularly among adolescents (Ito & Okabe, 2006; Katz, 2006), and issues of personal safety, security and surveillance (Katz, 2007).

Mobile telephony has also been explored for its ability to help activists to micro coordinate action and mobilize constituencies (Rheingold, 2002; Kahn & Kellner, 2003). Micro-coordination is "the nuanced management of social interactions" (Ling, 2004: 70) through media that facilitates "recurrent scheduling on the move" (Nyiri, 2007: 101), changing the notion of what it means to be "on time" or even "late". This places the mobile telephone in an increasingly complex communications landscape involving public, personal and intimate use.

As a technosocial device that is "portable, personal and pedestrian" (Ito, 2004), the telephone is an understudied medium with respect to other media such as TV, radio and film (Katz & Aakhus, 2002) despite its ubiquity as a medium that cultivates interactive, personalized, one-to-one relationships (Peppers & Rogers, 1999).

Encouraging perpetual contact, mobile telephony enables what Licoppe (2004) calls a "connected" presence (see also Katz & Aakhus, 2002) across space and time. Mobile telephony also requires a level of engagement different than other forms of media, where audiences have to become more active in how they seek information (Esrock & Leichty, 1998: 310; Katz, 2007).

Short messaging signals (SMS), also known as text messaging, have become a critical aspect of mobile communication, adding significant value by expanding the amount of interaction possible in any given amount of airtime (Castells *et al.*, 2007: 24). While some carriers charge for texting across borders, this cost is significantly less than a long-distance phone call and has the added benefit of being able to reach an interlocutor at any time without having to be immediately acknowledged. The rise of voice-over Internet protocol (VOIP) technologies such as Skype has also promoted the expansion of communication on a global scale, as users can speak to each other free of charge through computers or through a standard low rate via mobile phone.

Mobile telephony has been understood as the "back door of personal communication" because it permits individuals to communicate discretely through text or voice virtually anywhere a phone signal exists (Kasesniemi & Rautiainen, 2002: 171). For Ito (2004), the asynchronous and text-based features of mobile telephony create conversation that exists parallel or peripheral to immediate situations, "rather than the more engrossing face-to-face modality of a telephone conversation". Ito and Okabe (2005) note that, "[u]nlike voice calls, which are generally point-to-point and engrossing, messaging can be a way of maintaining ongoing background awareness of others, and of keeping multiple channels of communication open" (264).

Public relations and the web

As ENGOs extend their presence online, they increasingly rely on sophisticated public relations principles to reach out and build relationships with their key stakeholders. Social media not only allows groups to reach out to and engage their publics in conversation, but also provides an avenue to strengthen media relations (Eyrich, Padman & Sweetser, 2008) which can affect public representation, popular opinion and the efficacy of public campaigns. Social media has also been examined for its capacity to help organizations build relations of trust with their publics (Kent *et al.*, 2003; Waters, 2007; Waters *et al.*, 2009) in addition to improving efforts related to public education, fundraising, volunteer recruitment, publicity, advocacy, service delivery, research and communications (Kenix, 2007). Waters (2007) encourages organizations to leverage the relationship-building features of new media, such as live chat, to facilitate trust-building as it promotes dialogue between organizations and publics.

Although non-profit organizations have typically been early adopters of technologies and the Internet has played an important role in grassroots mobilization and advocacy (Cukier & Middleton, 2003: 107), smaller organizations have faced capacity challenges in terms of finding staff and volunteers who have the skills to use the web effectively as a public and internal communication tool. With the relatively low cost of social media, however, how do digital communication networks change the political game in favour of resource-poor players who are experimenting with unconventional strategies? (Bennett, 2003a: 144; see also Graber, Bimber, Bennett, Davis & Norris, 2004). Social media may arguably help level the playing field in terms of expertise and

sophistication so that non-profits can focus on other activities such as lobbying, mobilization and trust-building with publics.

Building relationships of trust with publics is an important activity for many organizations. Pearson (1989), Grunig (1989) and Kent and Taylor (1998) have offered up the concept of "dialogue" as a model for ethical public relations by suggesting that organizations that open pathways to communication based on symmetrical, two-way flows of information can enhance their image as trustworthy and credible. Kent and Taylor (327) suggest that organizations should follow five guidelines when constructing a web presence (i.e. setting up a Facebook/Twitter account) in order to promote dialogue between themselves and their publics: providing useful information in a logical form, maintaining a user-friendly interface, finding a means to retain an audience, ensuring regular, return visits and promoting dialogic feedback loops, which allow publics to ask questions that organizations in turn respond to. The Internet could be used to optimize levels of public trust, as most individuals in industrial nations are already more likely to trust environmental organizations than government or corporations as a source of information (Rootes, 2004: 603; Anderson & Chiavari, 2009: 4812). With transparency becoming the new form of objectivity (Weinberger, 2009) and a crucial component of relationship-building, one way for organizations to build trust with their key stakeholders is by demonstrating accountability, disseminating messages to members and media stakeholders (Kent *et al.*, 2003) and by providing opportunities for engagement and action (Waters *et al.*, 2009). Carstens (2003) suggests that the online presence of an organization is crucial for building and nurturing trust because it strongly reflects an organization's self-identity, its perceived level of advocacy and its ability to produce new

knowledge. Still, for the most part, many organizations still use one-way communication on their websites and fail to take advantage of relationship-building features such as live chat or interactive media to promote two-way flows of information (Waters, 2007; Greenberg & MacAulay, 2009).

The literature then suggests an inconsistency between what scholars imagine to be possible through the Internet and what is actually taking place (Kent *et al.*, 2003; Eyrich, Padman & Sweetser, 2008; Bortree & Seltzer, 2009; Greenberg & MacAulay, 2009; Lariscy, Avery, Sweetser & Howes, 2009; McAllister-Spooner, 2009), where perceived rates are higher perhaps due to amount of attention Web 2.0 receives from mainstream media and the research community.

New media, collective action and social movements

The implementation of new media technologies adds another layer to a long history of social movements and collective action. Some suggest that we live in a "movement society" (Meyer & Tarrow, 1998) comprised of transnational civil society groups that are grassroots-oriented, not tied to classes or political parties and aimed at corporations, trade and development regimes instead of government (Beck, 1994; Bennett, 2003a). The literature on social movement organizations (SMOs) understands them as a series of contentious challenges to authorities (Tilly 1986: 392); as the symbolic construction and maintenance of a collective identity (Melucci 1989: 34); and, as the ensemble of interconnected SMOs striving for similar goals (Zald & McCarthy 1980: 3). SMOs are premised on the idea that collective action facilitates social change. Collective behaviour, then, refers to "extrainstitutional, group-problem solving behavior

that encompasses an array of collective actions, ranging from protest demonstrations, to behavior in disasters, to mass or diffuse phenomena, such as fads and crazes, to social movements and even revolution" (Snow & Oliver 1995: 571). Based upon collective identity, solidarity and commitment (Hunt & Benford, 2004), collective action and SMOs also require some degree of organization and temporal continuity (Snow, Soule & Kriesi, 2003).

Activist organizations are frequently divided into camps depending on their strategies. Vegh (2003: 72) classifies activism into three groups: awareness/advocacy, organization/mobilization and action/reaction. More often, however, activist organizations are understood as either direct action, grassroots groups that promote more participatory nonviolent forms of direct action and emphasize decentralization, transparency, openness and inclusion (Paehlke, 1998); or, more formalized groups focusing on policy and institutional tactics such as lawsuits, lobbying congress, testifying at congressional hearings, publishing books, circulating petitions and placing ads in newspapers (Carmin & Balser, 2002; Rheingold, 2002; Cammaerts, 2005). Activist communication is primarily concerned with two audiences. Its' internal communication has to do with how well it informs, coordinates and supports its members, while its external communication supports its public face by communicating with the media, industry and government. Direct action and lobbying are only a small part of activist practices. Activist networks are normally found working on public information campaigns, negotiating standards agreements, sharing information and finding ways to build communities around issues everywhere (Bennett, 2003b). Gamson (1975) notes that it is also important that social movements maintain lines of communication with

bystanders, adherents and opponents in order to attract new constituents and promote dialogue between groups. The Internet can be a good space for this. While Internet conversation can often polarize dialogue, there is no shortage of debates online that can cross a broad audience base.

Scholars also suggest that a variety of factors influence the "repertoires of contention" (Tilly, 1978), or the strategies of SMOs, as groups move from being short-term and locally-based toward establishing themselves as more formal, long-term organizations. Repertoires depend on the organization, consisting of institutional tactics such as lobbying, litigation and educational campaigns or expressive tactics such as protest, boycotts and street theatre (Carmin & Balser, 2002). Activists themselves draw further distinctions between repertoires promoting violent or non-violent means, and/or those who promote an institutional reliance on litigation versus more direct action strategies by grassroots organizations. More formalized groups tend to use less disruptive and contentious activities, instead looking to policy and lobbying approaches (Piven & Cloward, 1997; Staggenborg, 1988; Brulle, 2000; Dalton, 1994; Dreiling & Wolf, 2001). Resource mobilization theory (RMT) (Jenkins, 1983; Zald & McCarthy, 1987) considers how action occurs in a certain political structure, based on socially and culturally available resources that can enable and constrain strategies. According to RMT, increased access to moral, material, informational and human resources (Kriesi, 2004) makes collective action easier through coordination and strategic effort, also speeding up the rate of mobilization and response. Depending on who provides the resources, certain organizations may also be accountable to supporters who may channel and control the types of actions employed (McCarthy, Britt & Wolfson, 1991; Dreiling & Wolf, 2001).

Repertoires of action are also shaped ideologically (Carmin & Balser, 2002), based on an organization's interpretation of the political environment, the efficacy and acceptability of specific tactics, the significance of an issue and the perceived source of the problem. Each group typically relies on repertoires characterized by the dominant approach it takes when attempting to promote change (Rochon, 1988; Wilson, 1973). Tactics and repertoires of action are therefore fairly predictable, limited and bounded (Tilly, 1978; Tarrow, 1998) in addition to being historically specific and modular.

Access to the political arena also shapes action. Kahn and Kellner (2003) attribute the rise of Internet politics, for example, to the dissatisfaction with and lack of access to the conventional political process. When opportunity structures are open and accessible, SMOs typically rely on institutional avenues of influence, while scholars find that groups with the least political influence tend to use tactics that are more publicly oriented, symbolic and attention-grabbing (Eisinger, 1973; Tarrow, 1998). Furthermore, activists generally pick up and adapt traditional methods, often sharing tactics between other networks (Meyer & Whittier, 1994).

New media activism

Web 2.0 technologies form part of a long-standing tradition of media-based activism, as social movements have historically been concerned with access to, and use of, communications technologies (McCaughey & Ayers, 2003; Kahn & Kellner, 2004; Taylor & Van Dyke, 2004). For some, the "information society" (Castells, 2000) is more than just an extension of existing media and may trigger fundamental changes in social movement processes, shifting modes of organization, operation, mobilization, collective identity formation, the formation of solidarities, and the development of repertoires of

action (Kahn & Kellner, 2003). Some argue that digital communications have become a major part of changes within social movements, facilitating permanent campaigns; the growth of broad networks despite relatively weak social identity and ideology ties; the expansion of protests across borders; the transformation of individual member organizations and whole networks; and the capacity to communicate messages from desktops to television screens (Bennett, 2002; Taylor & Van Dyke, 2004: 271).

Castells *et al.* (2007) note that the Internet is crucial to those social movements concerned with cultural values, organizing in a non-hierarchical loose form and for those willing to retain their local roots and yet act on a global level (see also Meyrowitz, 2004). Emphasizing the locality of global communications tools, Internet-based politics could revive grassroots activism by facilitating the development of less rigid and informal groups, reducing the push toward professionalism and enabling smaller groups to voice their views more successfully and perhaps help trigger mobilization at more interpersonal levels (*ibid.*). Castells (2001) suggests that "the Internet has become a major organizing and mobilizing tool for environmentalists around the world, raising people's consciousness about alternative ways of living, and building the political force to make it happen" (280). Rheingold (2002) suggests that mobile communications technologies "enable people to act together in new ways and in situations where collective action was not possible before" (xi), helping actions become more expansive, flexible, and diffuse (Davis & Zald, 2005; Benkler, 2006; Shirky, 2008).

The literature about mediated collective action frequently explores how new media technologies have greatly enhanced both the speed and the reach of the social movements, facilitating a "mobilized citizenship" (Wellman *et al.*, 2003) in many

massive demonstrations, including the WTO "Battle of Seattle" anti-globalization protests in 1999 and the People Power II protest launched to overthrow corrupt government in the Philippines in 2001 (Rheingold, 2002; Davis & Zald, 2005). While both protests attracted mainly local and regional activists, they also used the power of online and mobile communication to coordinate and mobilize activists across international and global networks, making these specific technologies crucial parts of contemporary activist infrastructure (Levi & Olson, 2000). More recently, Twitter has been understood to play a major role as a tool of political subversion during the Iranian election where it was used as rallying tool and a form of communication with the outside world after the government blocked several other forms of media, including Facebook (Veiszadeh, 2009). Dissatisfied with mainstream news coverage of the election, many Iranians used Twitter and YouTube to broadcast alternative news and information, while outside Iran, Twitter users demonstrated solidarity by using the #IranElection hashtag and tinting their profile photos green. In fall 2009, the G8/G20 protests in Pittsburgh were also marked by their use of new media. Working out of a hotel room, activists used computers and a radio scanner to track police movements and distribute information to protesters via mobile phones and Twitter (Pilkington, 2009). In the aftermath, some organizers were arrested for illegally using social-networking sites to help protestors escape arrest.

While some activist campaigns receive positive media attention, disruptive public demonstrations tend to receive negative coverage (Bennett, 2003a) unless they are supported by strong public opinion. Protesters are typically framed as violent anarchists (*ibid.*), though representation varies depending on the amount of interaction between

activist organizations and media institutions. Groups who readily provide information to the media through blogs, press releases and representatives tend to have messages disseminated more regularly and accurately, while groups without a strong media presence risk misrepresentation.

For activists, the growing technical capacity for self-publishing through blogging has created unprecedented parallel records of events, while also permitting degrees of organization within chaotic real-time situations that can translate into offline action (Rheingold, 2002), including the release of an American journalism student from jail after tweeting "arrested" to his followers[2] (Simon, 2008). Blogging enables the proliferation of citizen journalism, where individuals have the ability to produce news independently, thanks to the lower cost and the ubiquity of media technologies such as streaming audio and video through digital cameras, handheld recorders and mobile phones.

Oppositional politics in the form of electronic civil disobedience have also become a major part of environmental activism, comprised mainly of culture jamming, alternative computing, mediated mobilization, and Indymedia (Lieuvrow, 2006) as a form of intervention and invention (Harold, 2004). Culture jamming, a term that originally rose from the anti-globalization movement (Cammaerts, 2005), has gained popularity within the environmental movement, as an increasing number of civil society actors are implementing these strategies as part of campaigns aimed at government and corporations. Traditionally, electronic civil disobedience and culture jams have included

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[2] On 10 April 2008, UC Berkeley student James Karl Buck and his translator, Mohammed Maree were arrested in Mahalla, Egypt while covering an anti-government protest. Buck sent out several updates regarding his status while university administrators worked on a legal team to free him.

disruptive activities such as phone and fax machine jams, newer media forms associated with Web 2.0 have enabled activists to practice increasingly advanced forms of techno-resistance, including "Google-Bombing" (Kahn & Kellner, 2004: 5) to modify search-engine results, hacktivism and parody by groups like the Yes Men[3].

In direct action situations, mobile communication can be used to help activists keep flexible tactics on the ground by keeping organizers informed of changes, such as the locations and actions of police (Davis & Zald, 2005: 345) and agents provocateurs (Marx, 1974). New media technologies can also enable journalists to broadcast breaking news through live streaming video, activists to send messages to each other and concerned citizens to record the actions of authorities in the event of excessive force.

Unintended effects

While Internet environmental politics bring many potential opportunities, it is equally important to explore their unintended consequences or effects (Beck, 1994). In a post 9/11 society that often equates direct action with terrorism (Soltis, 2009) – whether individuals organize a demonstration through Facebook, express an opinion on Twitter or start a massive text messaging campaign – as information becomes increasingly mediated, it becomes potentially available to authorities and corporations that can be used for monitoring, as a form of control and as potential evidence for prosecution. Public

[3] While it is questionable whether or not The Yes Men media hoaxes are a uniquely contemporary phenomenon, they have been involved in a variety of high-profile stunts such as impersonating a Dow Chemical spokesperson on the BBC in December 2004, distributing fake copies of the New York Times in November 2008, holding a fake U.S Chamber of Commerce press conference in October 2009 and launching a fake Environment Canada website announcing that Canada would cut its emissions by 40% during COP15.

protests and civil disobedience can be particularly vulnerable as mobile technologies can be used to immediately inform authorities of public activity and thwart demonstrations. For activists it is important to remember that all communication channels can be monitored, even word of mouth. Therefore, while reaching out to broader audiences is a benefit of new media, activists must also be aware of the potential for sensitive information to reach invisible, unwanted audiences[4].

Additionally, while "web communication may facilitate more balanced organization-public relationships and increase participation of citizens in community life" (Kent *et al.*, 2003: 63), 'environmental activism 2.0' can also highlight the "poverty of online engagements" (Pickerill, 2003: 82). The personalization of media can lead to a "cyberbalkanization of 'daily me' news feeds and fragmented communities" (Kahn & Kellner, 2003: 76), a polarization of opinion and the rise of echo chambers, engaging those already engaged offline and making it appear as if opinion is consensus (see also Van Alstyne & Brynjolfsson, 1996; Sunstein 2001).

'Armchair activism' or 'slacktivism' is another critique of online activism, as activities are limited to clicks on a keyboard by "check book/ credit card" supporters (Mitchell *et al.*, 1992: 16) or "conscience constituents" (Dowie, 1995: 42-9) whose actions are limited to financial donations, petition signings and joining an online communities to express 'support' (Rootes, 2004). While using financial platforms such as

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[4] Prior the G8/G20 summit in Toronto in the summer of 2010, the RCMP-led Integrated Security Unit (ISU) was actively monitoring social media feeds to uncover information about upcoming demonstrations to prepare security for the actual conference. During the summit, the ISU charged computer security expert Byron Sonne with the possession of an explosive device and mischief after monitoring his Twitter feeds, which included links to images of security fences and a G20 counter-surveillance "how to" guide he created and posted on a file-sharing website (Yang, 2010).

PayPal and applications such as Facebook's "Causes" can help organizations and individuals fundraise (Waters *et al.*, 2009), an overemphasis on fundraising has, for some, produced a loss of movement direction and the political demobilization of groups. Because donors and funding bodies can exert influence on a group's repertoires of action, the accompanying rise in "noncontroversial positions and non-confrontational practices" (Dowie, 1995: 49-53; Brulle, 2000: 261-3) may moderate the actions of more radical groups, causing tension from within and outside the movement and making groups accountable to shareholders instead of stakeholders.

Conclusion

While the literature on new media technologies conjures the image of mediated 'swarms' of protestors who are coordinated through web and mobile platforms, the literature on collective action tells another story about the effects of media tools for social movements. Although communications technologies continue to play a role, helping protestors mobilize against repressive governments in the Philippines, Iran and Moldova or linking those involved in the anti-globalization movement in Seattle (and later Quebec City, Gleneagles, Pittsburgh and Toronto), these media dramatizations may, in fact, overrepresent and overestimate the power of mediated protest. While the prospect of spontaneous, grassroots uprising by citizens may be an exciting opportunity for Communications scholars, it is important to note that new technologies can also operate in a more banal manner as organizational tools. As the environmental movement grows in size, complexity and issue maturity, the inevitable push to professionalism means that organizations can frequently substitute or replace organizational or instrumental goals for

the original goals of the social movement (Dalton, 1994). This means that, rather than use social media to achieve the kinds of aims celebrated in the literature, social media can also be used for tasks such as communicating with members of the movement, circulating news and information, cultivating an effective media presence and fundraising as a form of organizational maintenance. While taking such an approach to new media and activism presents less revolutionary possibilities, it nevertheless offers new questions and avenues of exploration.

Chapter II: Modernity 2.0-- A Theoretical Framework for Understanding COP15

Introduction

Social movements have always had a strong relationship with communications technologies. Making use of pamphlets and posters, television, radio and the Internet to create a managed media presence, many social movement organizations have become increasingly sophisticated in their approaches, incorporating streaming video, photo-sharing and live blogging.

In this section, I attempt to locate Web 2.0 technologies, COP15 and the contemporary environmental movement within the framework of what social theorists like Anthony Giddens (1991, 1994a, 1994b) and Ulrich Beck (1994, 1996, 2001, 2004) have variably called late, second, reflexive or radical modernity. Beck suggests that we are in a period of "reflexive modernization" that signals the self-destruction of the industrial society and the emergence of a new, postindustrial order (1994: 2) marked by the processes of globalization and the excavation of most traditional contexts of action, altering the balance between tradition and modernity (Giddens, 1994b: 95). It is only now that we are beginning to understand the effects of industrialization or, the consequences of modernity.

Globalization, modernity, postindustrialism

Scholars add that the three most significant non-economic outcomes of globalization and modernity are the freeing of identity from the conforming dictates of modern organizations; the refiguring of time, distance, and place; and the construction of ever more sophisticated and interlinked communication networks that both drive and harmonize the first two factors (Giddens, 1991; Beck, 1994; Bennett 2003b,). Giddens

(1991) suggests that the reconfiguration of time and space, plus the disembedding mechanisms, "radicalize and globalise pre-established institutional traits of modernity; and they act to transform the content and nature of day-to-day social life" (2), meaning that structural shifts associated with globalization open up new opportunities for being, acting and communicating in the world.

Economic globalization has typically been understood as a double-edged sword, exacerbating global inequities and environmental degradation while also allowing for new partnerships to emerge between nations (Giddens, 1991; Bennett, 1998; Beck, 2004; Davis & Zald, 2005). Giddens (*ibid.*) suggests that the industrial society represents tradition founded upon the notion of communities, nation-states, monopolized knowledge authorities and visible, tangible risks. In a postindustrial age, we encounter the rise of bureaucratic organizations, the replacement of the nation-state by the individual as the primary unit of society, the rise of the counter-opinion and the anti-expert and the realization that risks are increasingly intangible and borderless.

Giddens (1990) suggests that as part of a postindustrial order, we move from a system based upon the manufacture of material goods to one concerned with information. In a mediascape where information is a central commodity, the production and dissemination of knowledge become key activities through Web 2.0 technologies. The environmental movement also represents postindustrialism as it is centrally concerned with the economic and ecological consequences of 'progress', recognizing the importance of service and knowledge work, namely across science and technology areas, as solutions (Davis & Zald, 2005: 339). The move toward 'green' energy, through wind power and bio-fuel, offers an instructive example.

The concept of globalization is a necessary part of modernity's epistemological framework. Globalization is "the intensification of worldwide social relations [linking] distant localities in such a way that local happenings are shaped by events occurring many miles away and vice versa" (Giddens, 1991: 64). Beck (1994) differentiates between globalism in the neoliberal sense of market-led economies, and globalization as increased interdependence among national actors. Visual media in particular serves as an example of globalization as content-sharing platforms like Flickr and YouTube can transmit and broadcast images of catastrophic climate change and protestors to an increasingly connected audience. Unlike local or national news coverage, these platforms produce and distribute content in a decentralized and global manner.

Modernity 2.0

Dynamism of space/time

Giddens (1991) describes three central tendencies within modernity that will help structure our understanding of 'environmentalism 2.0': 1) the dynamism of time and space, 2) the disembedding of abstract systems of knowledge and expertise, and 3) reflexivity at both an institutional and personal level. In this section, I explore how Web 2.0 technologies amplify the effects of time-space expansion and how this complicates the notion of the nation-state and cosmopolitanism. As information and commodities become increasingly immaterial, some suggest that the necessary physicality of place becomes contested (Giddens, 1991: 16). Since the late 1990s, researchers have regarded physical proximity as having less prominence in defining relationships between people than the nature and strength of relationships (Preece & Maloney-Krichmar, 2005). This is of central importance to movements with a strong online presence as environmental

organizations increasingly use Facebook groups, Twitter pages and YouTube videos to reach out and build connections with their constituents around the world.

As physical proximity and co-presence become sufficient, but not necessary, conditions for relationships, weak-tie connections (Wellman, 2001), that is, loosely-affiliated relationships based on shared interests, become more prevalent. Mediated social networks can substitute for communities, with locally-based communities being one of many possible alternatives for the creation and maintenance of social networks, and the Internet providing another such alternative (Castells, 2001: 388). As such, they can link people with different social characteristics, thus expanding sociability beyond the culturally-defined borders of self-recognition and physicality (*ibid.*). Giddens (1994a) suggests that in modernity, globalization, reflexivity and detraditionalization help to create 'dialogic spaces' that must in some way be filled to invoke mechanisms of active trust between organizations, supporters and media (131). Organizations can then use weak-tie connections to their benefit by providing multiple opportunities for short, sustained and regular interaction between themselves and their audiences/members in these spaces, especially through Web 2.0. Twitter, for example, presents short opportunities for interaction in 140-character "tweets" that often reference external web content. The homepage for Twitter users often contain a "live feed" of all users "followed", providing updates on the online activities of members. In these spaces, users can communicate with each other, post content and add commentary, thus carving out opportunities for engagement and interaction online.

While modernity does not remove the importance of space, it loosens its attachment to place. Giddens (1991) adds that the dynamism of space and time provides

the very basis for their recombination in ways that coordinate social activities, connecting the "when" and the "where" without necessary reference to the particularities of place (17). Yet at the same time, Meyrowitz (2004) notes that with our bodies being bound by the laws of space and time, experience remains basically place-bound, even if communication devices expands its scope (85). Therefore, in the case of COP15, even the most sophisticated technological devices cannot replace the physical experiences of attending and participating, providing instead a second-hand account experienced on a first-hand basis. Communications devices might not be able to replace physical experience, but Web 2.0 technologies like streaming video and live chatting can enable "absent presence" (Katz & Aakhus, 2002) for those unable to attend the event, creating backchannels for participants and observers to witness, experience and comment on events in a personalized manner on multiple levels (Rosen, 2010).

While notions of place are increasingly contested in this phase of modernity, so are the geopolitical borders that govern it. The nation-state defines the first order of modernity, serving as the unit of inquiry and organizing force within society. If we are indeed experiencing reflexive modernity, the concepts of transnationalism and a cosmopolitical order (Beck, 2004) become particularly relevant to understanding these changes. Beck suggests that the distribution of risk across borders makes us more aware of our methodological nationalism (2006), the taken for granted aspect of the nation-state. Risk becomes a key issue in both modernity and the ecological movement, as unforeseen dangers accompany changes in society and technology.

As the effects of climate change impact both developed and developing nations, our global interdependence means that no single nation or person is unaffected[5]. No individual can "opt-out" of these changes (Giddens, 1991). Beck's project of a transnational cosmopolitanism, that is, the recognition of interdependence and shared risk across and among nations, strives to "disenchant" the uncontested notion of the nation-state, rendering it "deontologized, historicized and stripped of [its] inner necessity" (2004: 132). The globalization of climate change represents this shift, as the risks associated with environmental degradation are unconstrained by the geopolitical borders of the nation-state.

Not surprisingly, the global character of Web 2.0 technologies has been explored as a means to leave behind the representative order of the nation-state (McNair, 2006). The global production and transmission of news via blogs like *Huffington Post* and *Mother Jones* and social-networking sites like Facebook, Twitter, Digg and Reddit could represent one possibility for these transnational, decentralized flows of information. The online format of publications such as *The Guardian* and *The New York Times* means that 'old' media is often incorporated into these digital information hubs.

Beck (2004) sees this interdependence of social actors across national boundaries as an unintended and unforeseen side effect of modernity (132). The new risks and opportunities associated with modernity fit into the reconfiguration of space and time: "Spatially, we are confronted with risks that show no consideration for national or other

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[5] It ought to be noted that while climate change affects every individual in some form, these effects are especially pronounced in developing nations due to their warmer climates and proximity to the sea. In many of these nations, their economies rely on the natural environment (e.g. through agriculture and tourism) and they often lack the material resources to mitigate against the effects of drought and other natural disasters, meaning that climate change can exacerbate certain global inequities.

boundaries: climate change, atmospheric pollution and ozone holes concern everyone" (Beck, 2004: 138). Temporally, he adds, "the long latency period of various problems means that they elude the current routines for the handling of industrial dangers" (*ibid.*). The side effects, Beck argues, of "radical modernization reflected at the level of the global public create an awareness of new global dangers...Whereas the dangers in the first modernity were limited and easy to pinpoint, what we now see are unlimited risks and uncertainties that are much harder to identify" (146).

The environmental movement itself is focused on these unforeseen consequences of modern industrial development as well as how to adapt and mitigate against global dangers. In this sense, the UN COP illustrates the shift toward cosmopolitanism (Beck, 2004), the acknowledgement of global interdependence and a shared sense of risk. Cosmopolitanism becomes a "multidimensional process, involving the formation of multiple loyalties, the spread of various transnational lifestyles, the rise of non-state political actors, and the development of protest movements against (neo-liberal) globalism and for a different (cosmopolitan) globalization involving the worldwide recognition of human rights, workers' rights, global protection of the environment, an end to poverty, and so on" (*ibid.*: 136). With the implementation of COP15, for example, the UN becomes a non-state actor as do the industry and civil society NGOs at multiple levels. Loyalties are not only formed at the national and cultural level (as in African delegations and the Indigenous People's Network), but also at the institutional level, with groups like Greenpeace, Avaaz and tcktcktck as members of the Climate Action Network, an international network of ENGOs.

Most importantly, the rhetoric of the anti-globalization movement, or alter-globalization movement, becomes a part of the dominant environmental discourse at COP15, as activists and NGOs push for an agreement to also include foreign aid to undeveloped and developing nations, an emphasis on the rights of a women and respecting the land rights of Indigenous peoples. As the environmental movement draws in actors and organizations across borders, the concerns of those nations are interwoven into a larger global narrative about the visible and invisible effects of climate change that can then be amplified and distributed by Web 2.0 technologies.

While modernity challenges the notion of the nation-state, its reflexivity means that the nation-state never completely disappears. Beck (2004) suggests that "socially, the ascription of dangers and therefore liability to particular sources becomes more and more of a problem. It is hard to establish who (sic), in a legal sense, has 'caused' environmental pollution, since they arise out of interaction among so many different actors. The dangers of civilization therefore present themselves as largely deterritorialized-- hence as difficult to attribute and almost impossible to control at the level of national states" (146). In the context of COP15, this is not exactly the case. Although Beck suggests that we have transitioned to a risk politics that is "post-international and no longer centred upon national states" (2004: 146), the discourse of responsibility and blame within the environmental movement effectively preserves the hegemony of the nation-state as both a concept and key political actor. The environmental movement, which uses terms like climate debtor/climate refugee and Global North/Global South, reinforces the nation-state as a container (Beck, 2004: 179).

This is understood as a dynamic force within reflexive modernity, as the nation-state becomes both disembedded and re-embedded in a new context.

While the environmental movement and global communications technologies help reconfigure the relationship between space and place, so do new media technologies expand and redistribute time across networks. Typically, Web 2.0 technologies are understood as forwarding both synchronous and asynchronous modes of communication (Jones *et al.*, 2008). Citizen-based journalism, enabled through cell phones, SMARTphones and laptops, play an important role in this regard. In theory, anyone with a mobile device can instantly capture and transmit images, reinforcing the journalistic news values of timeliness, or immediacy, and proximity (Mencher, 1991) while by-passing traditional gate-keeping and filtering of news and information. While forms of citizen journalism expand time by reporting in both synchronous (e.g. livestreaming) and asynchronous forms (e.g. blogging), enabling the past, present and future to interact with each other (Castells, 2001: 406), it is interesting to note that they are still bound by the laws of space and place, effectively reinserting physicality into digital communication. With an on-the-ground aesthetic, citizen journalism often presents the first images of uncensored news that can shape public opinion and representation. The rhythms of conventional news reporting, once compartmentalized into daily publications or evening news formats, have been challenged through live reporting and continuous updates enabled by platforms like Twitter.

Disembedding/re-embedding

The dynamism of time and space flows into the second force of modernity, the disembedding (and subsequent re-embedding) of abstract systems (Giddens, 1991).

Disembedding processes are a "lifting out" of social relations from local contexts of interaction and restructuring [them] across indefinite spans of time-space" (21). They depend on two conditions: the evacuation of the traditional or customary content of local contexts of action, and the reorganizing of social relations across broad time-space bands (1994b: 85). Abstract systems are defined as both expert systems of knowledge and symbolic tokens, such as money. In modernity, these are removed from local contexts and replaced with trust as the key relationship. Giddens (1991) suggests that money brackets time and space, since it allows transactions between a multiplicity of individuals who never physically meet one another. Online, different forms of transactions take place: Users support each other by sharing links, uploading content and visiting blogs. User-generated content becomes a form of currency and individuals support each other anonymously. From an organizational perspective, trust becomes crucial as it can optimize activities such as fundraising and member recruitment and retention. This also becomes an asset. Studies demonstrate that individuals place more trust in NGOs than in government, industry or international sources (Rootes, 1994; Anderson & Chiavari, 2009). Because online communication exists in a digitized space, immaterial tokens also take on value: Retweeting something on Twitter, for example, demonstrates solidarity with a particular organization and acts as a form of reciprocity, helping organizations promote and distribute their messages across wider, more distributed audiences.

Expert systems in the form of leadership and authoritative knowledge are the second component of disembedding practices within reflexive modernity. The charismatic leadership (cf. Weber, 1947) of an individual leading a social movement has been replaced with the Executive Director or the CEO of social movement organizations

whose mandate is to not only lead his or her organization, but also to help manage its public presence. In a Web 2.0 environment, this means that these leaders serve as a public face for the organization by blogging and circulating content across social-networking platforms. This can help facilitate trust in the abstract capacities of leaders, as live webcasts enable viewers to submit questions via instant messenger and provide opportunities for interaction. Through interactive video and voice technologies, communication can shift from a vertical, top-down model to a more horizontal and dialogic form.

Disembedding/re-embedding in the form of expert systems of knowledge are also crucial for understanding COP15 and the climate change movement. Giddens (1994b) notes that technology plays a leading role here, in terms of both material technology and expertise (60). Scientific knowledge about climate change, such as the recommendation for a reduction in carbon emissions to 350 parts per million to ensure that the Earth's internal temperature rises no more than 2 degrees Celsius is part of a deskilling/re-skilling process, where lay people re-appropriate expert knowledge that is always subject to revision and reinterpretation (Giddens, 1991: 22). Reskilling "is always partial and liable to be affected by the 'revisable' nature of expert knowledge and by internal disseminations between experts…Lay attitudes toward science, technology and other esoteric forms of expertise, in the age of high modernity, tend to express the same mixed attitudes of reverence and reserve, approval and disquiet, enthusiasm and antipathy" (Giddens, 1991: 7). Where the earlier environmental movement emphasized the dangers of CFC's and holes in the ozone layer, this has now been changed in light of carbon

emissions and natural disasters. In modernity, the dangers are not only uncertain but constantly up for revision, renegotiation and reinterpretation.

Disembedding encourages us to separate the expert from the official (Giddens, 1994b). While officials are technically experts, expertise is more pervasive as it claims specific skills or types of knowledge that the layperson does not possess. Under the framework of the UN COP, we see how this operates, as officials and delegates representing nations and climate change are different from scientific and industry experts, who generate the information for officials to consider. UK Minister Lord Christopher Monckton is an example of an official separate from the expert, as could be George Monbiot, author, activist and columnist for *The Guardian*. While neither has received formal training in environmental or climate science, both perform an expert role as they re-appropriate knowledge from competing scientific communities. While Monckton speaks the language of climate change 'denial' or 'scepticism' about the role of anthropogenic climate change, Monbiot aligns himself with another scientific community based on consensus and near certainty about anthropogenic climate change, pushing for immediate action.

In modernity, Giddens (1994b) suggests that expertise is tied not to an absolute truth but to a belief in the tentativeness of knowledge that depends on a methodical scepticism (84). In the climate change movement, however, this scepticism is rarely understood as productive. Those who question the science are seen as 'deniers' or are accused of launching these arguments to win favour with corporate interests. The movement becomes split into "discourse coalitions" (Beck, 1996: 10) of activists and

'deniers' that stretch across boundaries to form counter-narratives and competing systems of knowledge.

The disembedding of abstract systems also explains how the nation-state is deconstructed and reconfigured through Web 2.0 technologies. Global communication technologies have enabled consumers of a particular media form to develop an idea of belonging to a particular audience instead of a particular territory (Trenz, 2009: 7). Users become members of Facebook and Twitter communities that do not necessarily set them in one specific geographic location.

On the other hand, the parameters of the nation-state continue to structure what is possible in a globally-connected network. Many nationally-based websites, such as the official COP15 website (http://www.en.COP15.dk) for example, are marked by nationally-based suffixes. Wi-Fi penetration rates are also governed by national regulatory bodies, meaning that the ubiquitous Internet connectivity available in many major cities in North America is not always as available in the EU, for example. Furthermore, the physical universe re-embeds the nation-state, as even 'global' news media platforms hire nationally-based journalists or bloggers. Trenz (2009) suggests that blogging is "firmly entrenched within national or local public spheres" and is very inaccessible for those outside the nation-state, using publications such as *Huffington Post* as an example (14). Indeed, *Huffington Post* is a major source of news and information on Web 2.0 platforms like Facebook and Twitter, as are North-American based magazines-turned-blogs like *Mother Jones* and *Grist*. Trenz suggests that the debates in these spaces are narrow and self-referential, and are constructed for particular segments of American users who understand the codes and share these specific concerns. This is

not cosmopolitan news for a cosmopolitan audience. Rather than support dialogue across nation-states, nationally-based yet globally accessible news portals simply establish conversations among nationals about national issues, networking with national journalists through national media outlets.

Furthermore, the hegemony of news discourse is not broken through a new mediascape where Internet news becomes mainly a "waste product" of mainstream print and television media (Trenz, 2009: 12). These changes have arguably constrained political communication in terms of declining informative quality and debate. In this respect, Web 2.0 technologies become an extension of, rather than an alternative to, print news and television. This has empirical validity as well: Koopmans and Zimmerman (2007) analyzed how search engines link to news and discovered that for the average user, the main platforms of political news continued to be platforms of their preferred television channel or newspaper. Furthermore, the growing role of governments and institutions in online information provision suggests that the voices of civil society actors might become even less visible online than before.

Disembedding also reconfigures traditional forms of symbolic tokens and expertise. In the context of the UN COP15, we see how online practices related to the recirculation of web content take on a symbolic gesture of reciprocity, while the expert systems of scientific knowledge are deconstructed and reconfigured. More importantly, this process allows us to see how the nation-state, once the foundation of society, is curiously removed and yet re-inserted into supposedly global platforms. It is this form of reflexivity that structures the third aspect of modernity, and reconfigures politics and political participation in light of modernity and new communications technologies.

Reflexivity

Reflexivity is the third aspect of modernity, on both an institutional and intimate level. Giddens (38) notes that the "reflexivity of modern social life consists in the fact that social practices are constantly examined and reformed in the light of incoming information about those very practices". On a more micro level, this means that modernity alters the nature of day-to-day social life and affects the most personal aspects of our experiences, enabling a sort of "lifestyle politics" that becomes a politics of identity as well as a choice in reflexive modernity. Ultimately the end of tradition frees individuals to explore issues beyond borders (Giddens, 1994b: 91).

Modernity's reflexivity refers to the tendency for chronic revision in the light of new information or knowledge. In a world of abstract systems and lifestyle choices, active engagement with knowledge becomes key (Giddens, 1994b: 91). Institutional reflexivity becomes the regularized use of knowledge about circumstances of social life as a constitutive element in its organization and transformation (Giddens, 1994b: 20). In other words, new and current information shape the direction of environmental organizations and movements and not the other way around. Modernity's reflexivity undermines the certainty of knowledge, even in the foundational areas of science. Giddens (1994b) notes that science depends not on proofs but doubt. No matter how established, knowledge is open to revision in the light of new ideas or findings (21), meaning that authority and expertise are in constant flux and subject to renewal and reinterpretation.

In the contemporary environmental movement, the reflexivity of knowledge can actually threaten the public legitimacy and credibility of organizations founded upon the

notion of a scientific consensus about climate change. The trust placed in expert systems like the scientific process and institutions like the International Panel on Climate Change (IPCC) can be compromised under reflexive modernization. Just prior to COP15, the climate change movement faced a major challenge as leaked E-mails from climate change scientists at the University of East Anglia suggested that some graphs and data may have been deliberately altered to make a stronger case for anthropogenic climate change. Referred to as "Climategate" by the press, this 'scandal' demonstates the reflexive and shifting nature of science. Some of these symbolic tokens and major findings, such as Dr. Michael Mann's infamous "hockey stick" graph, suddenly become suspect. Knowledge becomes constantly contested, disrupted and questioned.

Both the figure of the climate change skeptic/denier as well as the Climategate scandal illustrate the prominent role of the counter-opinion. Beck (1996) proposes three types of counter-opinions within the environmental movement: one, that the knowledge is far from certain about climate hazards, so a 'skeptic/denier' stance; two, that so-called developing countries have taken on a neo-imperalist discourse in assigning responsibility toward industrialized nations and naming the winners and losers (e.g. 'climate debtors' vs. 'climate refugees'); and three, that the globalization of the environmental movement has set up information monopolies of knowledge, like the IPCC, with its own inherent politics and policies (6). Indeed, the position of IPCC Chairman Rajendra Pachauri has recently been called into question over a potential conflict of interest between his role as chair and his role as advisor to various energy and environmental companies. These counter-opinions are useful as they indicate that climate change is neither a natural nor a neutral phenomenon. Again, this is a consequence of modernity. Giddens (1994a)

suggests that the once-protected sphere that made disinterested scientific activity possible has been compromised as reflexivity develops and manufactured risk appears (215). Modernity itself becomes a scientific experiment that demonstrates the human fallibility behind so-called 'objective' science.

Giddens (1994a) also explains that living in a world of multiple authorities presents new challenges for expert knowledge and trust. Because there are no super-experts to turn to, risk assessment has to be factored into the risk of which experts are consulted or whose authority is to be taken as binding. The conventional tool of political decision-making, (i.e. the expert opinion), has failed (Beck, 1994) as it is no longer seen as adequate on its own. Scientists like NASA's James Hansen, a leading climate change researcher, are included in the decision-making process as consultants but not key negotiators. The debates about global warming and climate change illustrate that scepticism and doubt can create cynicism and disenchantment with all forms of expertise (Beck, 1994: 87), further compromising the persuasive success of the movement.

The interplay between opinion and counter-opinion has not resolved but only hardened the fronts within the movement (Beck, 1994: 29). In order for consensus to be achieved, Beck advocates for the demonopolization of expertise, universal jurisdiction over ecological matters and transparency in decision-making, existing as part of a public dialogue between all actors (*ibid.*). In the context of the UN COP, however, the refusal of some hard line advocates to debate skeptics, secret negotiations between nations, lock-outs of delegations and the reluctance of political leaders to sign agreements can be detrimental, as citizens can feel alienated from the decision-making process and become less likely to participate.

From a micro perspective, the reflexivity of modernity also affects personal identities and civic participation. Individualization plays an important role. Beck (2001) distinguishes between the late-modern condition of individualization, and the older ideological concept of individualism. Individualization reflects the breakdown of one set of social structures and its replacement by more direct experiences with society. This restructuring of the individual experience can make the state less protective or useful, while it frees individuals to explore cosmopolitan, transnational political arrangements that may better address their concerns (9).

Without the nation-state as a self-evident point of departure, a new way of conducting life is produced as the individual manages his or her own biography, identity, social networks, commitments and convictions. Online, individuals practice this identity management as they construct user profiles, build networks of contacts, join communities and contribute content.

Giddens (1991) suggests that personal identities become reflective (and reflexive) through these elaborately managed lifestyles. From a sociological standpoint, as identity bonds loosen from traditional groups, individuals have less reason to create and maintain conventional affiliations related to traditional areas such as employment, gender or race. Giddens (*ibid.*) argues that personal identity narratives replace collective social scripts as the basis for social order, effectively personalizing politics. With the politicization of an issue like climate change, for example, Giddens notes that "the more tradition loses its hold, and the more daily life is reconstituted in terms of the dialectical interplay of the local and the global, the more individuals are forced to negotiate lifestyle choices among a diversity of options" (1991: 5). This also helps to explain the fragile nature of issue

commitment within the environmental movement, where participation in movements can spark and fizzle depending on changing issues. When individuals can connect with others around the world that share similar interests regarding climate change, it presents more options for mobilizing and establishing new communities.

Reflexivity as lifepolitics in a subpolitical order

"Reflexively organized life-planning," Giddens (*ibid.*) suggests, "which normally presumes consideration of risks as filtered through contact with expert knowledge, becomes a central feature of the structuring of self-identity" (5). Through Web 2.0 platforms like streaming video and blogs, individuals have more opportunities to engage with both expert and lay forms of knowledge that help them position themselves vis-à-vis the hegemony of expertise and decide the level of danger and immediacy of climate change. Bennett (2003a) notes that narratives become interpersonal linkages as online network organization replaces hierarchical institutions as primary forms of membership and social recognition (146). This affiliation is different than the earlier tendency to form relationships through identification with leaders, ideologies and formal memberships (Bennett, 2003a). Rather than simply 'belong' to a group through structures that include paying dues, attending meetings and voting, networks and social-networking sites allow for looser forms of membership. Users can demonstrate solidarity with a particular issue by posting content, changing profile photos and re-circulating news and information, thus expanding the reach of organizations. Individuals who join Greenpeace, for example, can both promote and help recruit others by retweeting this announcement with a link for

more information. Using the @username function, for example, users can promote and demonstrate solidarity with a specific organization.

As such, individuals become more likely to form political ties through affinity networks based on repertoires of these narratives in these "imagined communities" (Anderson, 1991). A Twitter page or Facebook group can provide a preview of an organization's identity. Pages that are updated frequently and answer the questions of users demonstrate higher levels of interactivity than static pages that simply exist as a "status symbol" (White & Raman, 1999).

Giddens (1991) suggests that these changes are part of a lifestyle politics where ideology, party loyalties and elections are replaced with issue networks offering personalized solutions for problems (see Bennett, 1998). In the environmental movement, for example, while political leaders are lobbied and organizations work with industry to promote sustainable solutions, a strong thread of lifestyle activism is present. Campaigns like WWF's Earth Hour encourage individuals to avoid using electricity for an hour to raise awareness about household energy consumption. In many cities, municipalities draft legislation to curb the sale of plastic water bottles and shopping bags with the idea that all lifestyle choices count. Individuals are then encouraged to drive less and support more sustainable forms of food production, popularized by more locally-based, vegetarian diets and the promotion of Fair Trade certified products.

Giddens (*ibid.*) also attributes these changes to economic globalization, suggesting that post-industrialization has facilitated the rise of a "new" middle-class with sufficient resources to pursue and promote personal issues. Less concerned with economic redistribution and policy changes, this middle class politicizes issues related to

quality of life, personal growth, autonomy, identity and self-affirmation (Taylor & Van Dyke, 2004: 273). The push toward hybrid cars and purchasing carbon offsets for air travel is an example of this, as individuals politicize their consumption habits and are willing to spend additional income to do so.

These "new politics" also favour arrangements drawn across ideological borders. Of the environmental movement, Beck notes "the compulsion to engage in the ecological salvation and renewal of the world has by now become universal. It unites the conservatives with the socialists and the chemical industry with its Green arch-critics" (1994: 19). Bennett (2003b) notes that ideological motivation may still drive participants in their own spheres of action, but their coordinated activities need not be based on shared ideological understandings, or even common goals. Rhe changes advocated by groups from the Climate Action Network tend to align with more liberal-democratic ideas of sustainability through partnerships with government and market, while groups like Climate Justice action tend to follow an anarchist or anti-capitalist ideology. These differences often take a back door to more pressing issues, potentially reproducing ideological rifts and exacerbating identity politics.

Similarly, Beck (1994) uses the term "subpolitics" to situate new social movements within a political framework existing outside the state, composed of grassroots, citizen-initiative groups that are extra-parliamentary, not tied to classes or parties and organizationally and programmatically diffuse (18). Subpolitics refers to "the rise of a transnational activism that is aimed beyond states and directly at corporations, trade and development regimes" (Bennett, 2003a: 146). Multinational corporations such as BP, Shell, Monsanto and Coca-Cola become just as powerful as state officials in that

their practices have a major influence on both the economy and climate change. In the context of the UN COP, outcomes are influenced at multiple levels.

Subpolitical arrangements are also linked to the rise of transnationalism. Beck (2004) notes that, "trans-international politics, then, implies a level of organized, more or less informal politics within, outside, between and below the levels of individual states. It is a politics that reflects all other phenomena: global economic power relations, crises and strategies; situations and reactions of individual countries and groups of countries; interventions by a global public; terrorist dangers and so on" (147). In a period where space is no longer firmly tethered to geography, subpolitics reinforce the cosmopolitization of issues and strategies within the climate change movement, as risks, dangers and commitments are mediated and made visible to various audiences online. As part of the recognition of living in a cosmopolitical order, communications technologies can also leverage the power of globally-connected networks in order to facilitate self-organizing and public debate at more local levels while also allowing for trans-border social movements to emerge.

While the global character of Web 2.0 technologies enables communication across and through borders, it also presents opportunities for organizing and mobilizing across geographic borders. Subpolitics become part of what Tarrow (2002) calls a "scale shift", where individuals begin to identify with activities occurring in transnational localities and see the sites of their political actions as ranging from local to global without necessarily passing through national institutions on the way. In this scale shift, subpolitics and new media technologies can enable brokerage (the construction of social links among disconnected sites of protest), diffusion across the network, and a shared site of

identification (McAdam, Tarrow & Tilly, 2001: 331-339). In subpoliticization, Beck (1994) suggests that there are growing opportunities to have a voice and a share in the arrangement of society for groups once uninvolved in the process, like citizens, social movements and expert groups (23).

The space for subpolitics to flourish has been pronounced mostly in the third sector or civil society, the sphere between the state and the market for citizens. Represented by international NGOs like Greenpeace, Friends of the Earth and Oxfam, these organizations have leveraged tremendous amounts of power vis-à-vis the state, corporations and supranational organizations by emphasizing more direct forms of politics (Beck, 1996) that attempt to manage power outside the parameters of the traditional nation-state and emphasize the self-organization of individuals. Civil society becomes an important and highly visible part of the process while using Web 2.0 technologies to create a strong and interactive web presence forms a major part of disseminating campaign information, recruitment and mobilization.

If identities have become more fluid and individuals have more opportunities to explore different ideologies and groups under reflexive modernity, what does this mean for traditional, party-based politics? What political potential is found in social-networking groups, a retweet, or a group of user-submitted photos documenting the same event? Just as the flexibility of decentralized, spatially dispersed, social networks creates demand for collaborative communication and information sharing, the rapid development of computer-communications networks nourishes societal transitions from group-based societies to network-based societies that can affect how we organize and understand ourselves as political subjects (Castells, 1997, 2000; Wellman, 2001). Aggregating

images, sounds and videos of a movement plays an important role for mobilizing actors and maintaining momentum. At a time of uncertainty, risk and doubt, these technologies fulfill an internal function of helping members and supporters build a collective sense of identity and shared goals that can be compromised by the diversity of actors that comprise new social movements.

Web-based activism also encourages scholars to become more reflexive about the political process and activism. Kahn and Kellner (2003) note that Internet politics needs to be re-theorized from a critical and constructionist perspective. The emergence of movements related to anti-globalization, anti-war and the environment have expanded the reach of local communities and groups past borders, encouraging us to understand Internet-based movements as both global and local in scope (76). Kahn and Kellner suggest that the decentralized, collaborative and participatory features of new media can facilitate oppositional cultural and political movements by connecting dispersed, like-minded individuals and providing possibilities for the sort of progressive socio-political changes and struggles conceived of as an important dimension of contemporary cultural politics (77). In other words, while individuals interested in climate change can engage locally with members of geographically-proximal communities, these organizations function as nodes within the network, using hubs like new media platforms to connect anonymous and autonomous individuals across the world. Information becomes personalized and compartmentalized, allowing users to understand issues both globally and personally.

Conclusion

For some, this "new" politics represents a "disillusionment with traditional politics and a preference to develop alternative forms of participation and direct democracy", where online activism promotes the changing of voluntary behaviours through both a top-down and bottom-up approach (McKie & Toledano, 2008). From a standpoint of civic engagement, the individualization and compartmentalization of democratic participation into voting and paying taxes has been understood as problematic for mass political engagement by reducing the process into a seemingly isolated and fragmented set of actions that appear to exert little effect (Cammaerts, 2007). In modernity, a time of destabilization, alternative communicative spaces like Web 2.0 platforms can potentially draw power away from traditional media, increase the number and types of political voices, offer new modes of engagement and provide a new definition of politics (Dahlgren, 2005). Dahlgren also suggests that these affinities, perhaps enacted through the demonstrations of solidarity online, can foster cooperationoperation between groups, forming a broader counter-political culture and promoting new ways of being citizens and doing politics, communicating through and across media platforms.

While not trying to suggest that new media technologies inherently change the game for social movement organizations, we can see how the structural spaces carved out in reflexive modernity create opportunities for the emergence of alternative political actors and new political configurations. Through Giddens' and Beck's characterization of modernity as the dynamism of time and space, the disembedding of abstract systems and reflexivity, we see how new social movements have the potential to exist. Using new media technologies like YouTube, Facebook and Twitter, organizations can bridge spatial

constraints, allowing for the construction of mass constituents creating, sharing and distributing content. While global communications technologies and the global character of climate change suggest a possible move to a more cosmopolitical order, the reflexivity of modernity re-inserts nationalism into environmental discourse and into Internet content, reinforcing the borders of the nation-state. In modernity, the disembedding of abstract systems enables us to participate in activism in a variety of different ways, using symbolic tokens to demonstrate solidarity and promote reciprocity among organizations through social-networking platforms. Expert systems become dislodged, as the uncertainty of science presents offers up questions and challenges. Finally, reflexivity in modernity opens up new potentials for configurations of both identity and politics. Individual participation becomes more diverse and a rise of movements outside conventional politics suggests that multiple relationships can occur among citizens, the state and civil society, mediated through new communications technologies.

Chapter III: Chatting, Coding and Counting: The Curious Case of COP15 2.0

Introduction

This study employed a case study approach, combining participant-observation and semi-structured interviews of activists, bloggers and journalists at COP15 as well as content analysis of the Twitter and Facebook pages of 11 ENGOs. To investigate how ENGOs were using social media in the context of their COP15 campaigning, a qualitative approach through interviews and participant-observation was used. As a graduate student new to fieldwork, I became a more reflexive researcher through this study when I found that my observations and findings diverged from the patterns outlined in the literature consulted prior to research.

This chapter outlines some of the strengths and limitations of the case study approach, particularly concerning issues related to reliability, validity and theory. It also outlines some of the issues related to applying analysis tools designed for static texts to the Web. With dynamic URLs, multimedia links and a massive dataset that was manually coded, this analysis of social-networking platforms requires new forms of rigour and creativity.

Case study

A case study is an in-depth study of the particular, where the researcher seeks to increase his or her understanding of the phenomena studied (Johansson, 2002: 2). Flying to Copenhagen, DK to observe COP15 (7-18 December 2009) I was accredited as an observer[6] who attended demonstrations, visited both the official UNFCCC forum as well as Klimaforum '09 (the social forum) and spent time interviewing various activists,

[6] 3 levels of accreditation at COP15: NGO observer, press/media and party nominee.

content managers, bloggers and journalists onsite.

Case study has been variously defined as a method, methodology or research design (for more discussion, see VanWynsberghe & Khan, 2007). As a technique, case study takes on an ethnographic dimension that can provide empirically-grounded knowledge through the lived experiences of participants (Gillespie, 1995: 54). Ultimately, this case study of Web 2.0 in action examines the "social interaction, context of communication, and technical features" that accompany the study of new media both at a physical and digital level (Gallant *et al.*, 2007). While social interaction and context are conceptually more important than the technology itself (Jones, Ravid & Rafaeli, 2004), examining these specific technologies can help us understand how they can constrain or enable organizational goals in certain contexts (Jones & Rafaeli, 2000).

Participant-observation

Endres *et al.* (2008) note that studying a movement event as it is happening has significant benefits for research. My experience of being a participant-observer at COP15 with access to site-specific texts and artifacts (e.g. pamphlets, posters, personal photos) not otherwise available online provided me with a more comprehensive understanding of the event with relation to the larger environmental movement. 'Being there' also helped me better understand the importance of interpersonal, face-to-face communication in demonstrations, something I would not have noticed had I only monitored the events online. Indeed, Endres *et al.* also note that a co-presence and shared experience with protestors provide a more nuanced understanding of the "communicative dynamics" of the events (240), a particularly important aspect for Communications scholars. For example, during the 10 December 2009 Climate Justice Action protest, I observed how

crucial traditional maps and word of mouth (and, to my surprise, not SMS) were for coordinating protestors, causing me to reconsider my assumptions about the 'power' of new media in organizing protest. Furthermore, as protestors gathered together outside the Bella Centre on 16 December 2009, I saw how important SMS was as an internal organizational tool. Because so many NGOs were locked out of the official deliberations toward the end of COP15, mobile phones became a way to maintain contact between those still remaining on the inside and those locked out. Being 'on the scene' also enabled me to see which aspects of activism gain media coverage and which do not, providing me with an interesting comparative framework to read news coverage about COP15.

Fieldworking sites

1) The Bella Centre, site of the official UNFCCC COP15 negotiations

The first few days in the field did not yield significant findings as waiting in long lineups to receive accreditation for the Bella Centre made the transition from outsider to insider a tedious task. Although the Bella Centre was an exciting site with representatives from various ENGOs, government delegates and media personnel, it was initially difficult to use this place as a spot for recruitment or interviews, as many of the social media organizers and bloggers were actually inside the access-restricted media centre.

Access became further restricted as the conference progressed. By 14 December 2009, event organizers revoked the accreditation of many NGO observers, as the Bella Centre was over-capacity. As more and more observers lost their accreditation, it became less important as a researcher to spend time attempting to recruit participants who were likely locked out.

2) DGI-Byen, site of Klimaforum '09

Klimaforum '09, the People's Summit, took place at DGI-Byen, a conference centre close to downtown Copenhagen. Available to members of the general public, it was much easier to gain access to participants, especially those representing ENGO at the grassroots level. Independent journalists and several popular movement speakers such as Naomi Klein, Nnimmo Bassey, George Monbiot and Bill McKibben were featured alongside activist workshops, small press conferences and meetings to draft up a people's declaration. Klimaforum was also an important space on 12 December 2009, as the first major demonstration, The Flood, began there, with thousands marching through Copenhagen over the entire day and ending up at the Bella Centre by early evening.

3) Grassroots activist meeting and organizing spaces around Copenhagen

While the Bella Centre acted as the institutional/policy space and Klimaforum functioned as a social/educational space, activist housing and meeting spaces also played an important role, especially as a site of participant-observation. Assembling in places such as the "Candy Factory" (an abandoned warehouse in Ragnhildgade where activists lived and held meetings) and Støberiet (an anarchist coffee shop/meeting place in Nørrebro), more radical groups such as Climate Justice Action used these sites as a home base, also using public spaces such as town centres (e.g. Nytorv) and metro stations (i.e. Tarnby) to begin demonstrations. Had there been more time to build rapport and gain access to what was a difficult-to-reach population[7], I might have been more successful in recruiting participants from these groups, as a lack of opportunity structures and access to

[7] After a few attempts to recruit participants from more radical organizations, I was informed that some members were unwilling to be interviewed due to past negative experiences with the research community and to avoid sharing sensitive information.

the 'legitimate' political sphere in Copenhagen[8] might have provided examples of more unconventional uses of social media platforms[9].

4) TckTckTck-sponsored blogger hub, the Fresh Air Centre

Although the Fresh Air Blogger Centre was not originally planned to be a site of inquiry[10], this space was a crucial space for networking, recruitment, rapport-building, interviews and participant-observation. For bloggers, journalists and content managers, this space represented a site of both work and play, as individuals spent time either uploading and creating web content or socializing after hours. Managed by TckTckTck, there were originally two Fresh Air Centres: one in the Bella Centre and one at local Danish café, The Huset. While the Bella Centre had an extensive communications infrastructure consisting of WiFi, Skype-enabled desktops and laptops, the Fresh Air Centre downtown provided its own infrastructure consisting of a few desktop computers and WiFi to meet the needs of the hundreds of media personnel who worked out of this space on a daily basis[11]. I was fortunate enough to establish contacts early on with those at TckTckTck, who helped me to access this space. Ostranger (1993) describes this as an "initial 'getting in' and establishing the kinds of relationships essential to getting useful information" (16), which was easy to accomplish in such a dynamic social space.

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[8] At COP15, the clash between radical protestors and Danish police was largely reflective of the antagonistic relationship between police and Danish youth. Along with the hundreds of protestors arrested, Climate Justice Action spokesperson Tadzio Müller was arrested during the December 16th Reclaim Power! demonstration for allegedly invoking violence against police and inciting unrest in the city.

[9] As my content analysis of more radical, grassroots-oriented groups such as Camp for Climate Action and Climate Justice Action demonstrates, social media was largely used in the same manner as more "mainstream" ENGOs.

[10] This is likely because TckTckTck organized these spaces a weeks prior to COP15.

[11] This infrastructure was crucial, as Klimaforum '09 had a low level of functioning WiFi and free public WiFi infrastructure was scarce in Copenhagen.

5) Public demonstrations in Copenhagen[12]

The demonstrations that took place in front of government buildings, metro stops and the gates outside the Bella Centre were another important research site. Walking through thousands of protestors, it was important to observe how ENGOs were organizing on site. While initially I expected spontaneously-occurring protests, my observations instead indicated the organized nature of demonstrations in countries that require permits, careful traffic coordination and cooperation between police and organizers.

While some of the larger ENGOs came to COP15 equipped with camera crews and advanced recording devices, the smaller protests and actions were captured largely by personal equipment such as camcorders and voice recorders, with footage later compiled into online content. For example, at Climate Justice Action's "Don't Buy the Lie" demonstration, coordination was mainly achieved through face-to-face, word of mouth communication as select individuals 'led' packs of protestors and distributed maps.

The Interviews

Participants

Throughout the conference and in the subsequent months following COP15, a total of 17 participants (4 women, 13 men) between the ages of 25-45 were interviewed.

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[12] These observations are based on demonstrations I attended in Copenhagen, such as the Indigenous People's Caucus' tar sands protest outside of the U.S Embassy in Copenhagen on 10 December 2009, the "Don't Buy the Lie" anti-corporate demonstration on 11 December, "The Flood" demonstration on 12 December, the "Hit the Production" harbour demonstration on 13 December and the Reclaim Power! demonstration on 16 December.

Of the participants, 10 were from North America (3 Canadians, 7 Americans), 2 from the United Kingdom (England) and 5 from the European Union (1 from Switzerland, 3 from Denmark and 1 from Holland). My interview questions concerned: 1) the social media practices of ENGOs and the role they play in a broader communication strategy, 2) the limits and possibilities accompanying this use of social media and 3) the relationship between activism and technology.

Recruitment

I attempted to recruit participants prior to COP15, however many requested to communicate onsite rather than before the event[13]. Snowball sampling was the most important recruiting strategy for this study, as many onsite noticed my presence and became curious about my research. I was also very fortunate, as many participants not only donated their time to share their experiences but also helped me establish contact with other potential participants either within or outside of their organization. As Ostranger (1993) notes, taking advantage of these chance meetings or of one's own social contacts may be as important as careful planning (25). Nights sitting at the blogger hub casually conversing with individuals generated multiple opportunities that I might not have had otherwise. This highlights the importance of gaining access and building rapport, as a less open situation may have made the recruitment process more difficult.

One limitation of this recruitment strategy concerns the diversity of my sample. Not every ENGO had access to both the Bella Centre and the Fresh Air Blogger Centre[14],

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[13] This was most likely because many ENGOs did not organize their COP15 campaigns until weeks beforehand and so did not yet have the personnel to discuss their strategies.
[14] While access to the Fresh Air Centre was not nearly as restricted as at COP15, access was still mainly restricted to bloggers and communications personnel.

meaning that most of those I observed onsite were from more resource-rich and media-savvy organizations.

I originally entered the field anticipating that I would meet specific individuals in charge of social media for their ENGO. While this occasionally occurred, it became clear that running social media was a collaborative duty often assigned to multiple individuals and depended on the organizational structure. Furthermore, social media duties were often part of a host of other tasks that included content management and blogging, meaning that my participants came from a variety of media backgrounds and represented various organizations. It was important to include the voices of those organizations involved indirectly, as I quickly learned that many of the activists who attended COP15 had other organizational and media affiliations outside of their ENGOs.

Asking questions

Most interviews lasted approximately 45 minutes. Often, there was insufficient time to meet for a full interview in Copenhagen so follow-up interviews were conducted over telephone or Skype[15]. While it was beneficial in some cases to interview participants onsite while information was current and fresh, it was also useful to allow them some time to reflect on their experiences and provide more information later on.

While a set of 16 interview questions was prepared, it was important that participants were able to tell their own stories about their organizations' use of social media, as it became clear that there was tremendous divergence between how I conceptualized the ways ENGOs use social media and how they were actually being

[15] 10 interviews were conducted face-to-face in Copenhagen, while 7 occurred over telephone/Skype over a 2-month period following COP15.

enacted. Initially, this was discouraging as I felt that I had gotten something 'wrong' in my approach. As I progressed through the interviews trying to stitch narratives about how social media enables relationship-building or stories of protest coordination through mobile devices, I failed to see the other important, if banal, organizational activities at work.

This tendency to discount alternative findings is part of the anxiety that follows a graduate student as he or she enters the field and is uncertain about how to negotiate findings that do not neatly align with existing research. VanWynsberghe & Khan (2007) note that because the case study "involves a careful delineation of the phenomenon for which evidence is being collected. It is plausible that the case study researcher is biased toward the falsification rather than the confirmation of his or her preconceived notions about the case" (2). Worried that I had been 'wrong', I wondered if I had missed a major part of research or if I was asking bad questions.

Ostranger (1993) notes that while "doing background work and knowing at least some of the pressing issues before going into the field is important" (25), yet one also needs to be open to taking in new and, sometimes, contradictory information in the process. My dependence on the literature caused me to steer some of my participants into answering questions that seemed irrelevant. Elizabeth St. Pierre (1999) reminds us that it is important as a researcher to understand this not as failure but as an opportunity: "if we think of ethnography as both a site of failure and a site of reinscription, then possibilities for different kinds of ethnography can be envisioned" (266-67). Failure to establish clean research findings can also be productive for a researcher. Deacon, Pickering, Golding & Murdoch (1999) suggest that "in many ways, contradictory or counter-intuitive findings

offer the greatest opportunities for theoretical development, as they may indicate that things are more complex than [the researcher] initially suspected" (130).

Once I began to stop imposing my pre-conceived notions on my subjects and began listening more carefully to their responses, my questions became more open-ended and exploratory. I found that as soon as I stopped using loaded terms such as "relationship-building strategy" and started asking participants to describe their role in their organization that responses become more elaborate and full of relevant information.

At times I let participants "just talk" (Ostranger, 1993: 21), as I found that some of my questions were more relevant than others. Interview questions then became a way to frame and direct what ended up being conversations about how each ENGO used social media and their interaction with traditional media forms, enabling me to understand the relationship between the so-called 'new' and 'old media.

During the interviews I took notes and used a digital recorder in order to fill in points I missed. My main mode of textual analysis was thematic and so important phrases were carefully transcribed and inserted into the data analysis. While discourse analysis might have provided a more complete set of data, a thematic approach was sufficient for this study, especially when the findings were reinforced via content analysis and participant-observation.

Exiting the field

Although I had only spent two weeks in the field, removing myself from my research surroundings proved initially more difficult than I thought. Spending countless days and nights in the blogger hub, for instance, I cultivated many relationships not only with participants but also other activists, bloggers and journalists. While these posed few

problems ethically in that information revealed to me by participants was largely uncontroversial (causing no major conflicts of interest), I had to actively remind myself that I was in the field as a researcher and that the time would come to exit and begin the process of reflection, transcription and analysis. This became much easier, however, when I noticed how many of these quickly dispersed at the end of COP15 to return home for the winter holiday season. While many of the media personnel were already acquainted with each other through various media pools, workshops and organizations, others were hired on to ENGO teams in an ad hoc fashion for the purposes of COP15. In this sense, environmentalism becomes another media task as opposed to an activist issue.

Research tools

Of all the tools and platforms used at COP15, E-mail, SMS and Skype were the most important tools used to send updates regarding news and information; to keep in contact during protests; to communicate with others across long distances; and as a way to coordinate meetings and social events. SMS was also crucial for the interview process, helping me recruit individuals, arrange meeting times and conduct interviews.

SMS was often used as an organizational tool to communicate with members of an entire delegation or an SMS-based group (e.g. TckTckTck's and Climate Justice Action's rapid response networks[16]), informing recipients about plenary sessions, upcoming meetings and any breaking news. SMS was also used as a tool to fuse the "social cohesion" of COP15, a term one participant used when comparing SMS use at

[16] Anecdotally, neither of these SMS services functioned properly on every cell phone, suggesting that the unreliability of certain carriers would have made it difficult to successfully implement coordination via SMS.

COP15 to the role of cell phones during the WTO Battle of Seattle in 1999[17] (R. Kleef, TckTckTck, 05/02/10).

While E-mail and listservs are taken for granted as basic media, they also played an integral role at COP15. The two main listservs for participants were TckTckTck's "The Climate Insider" and the COP15-mediacentre list utilized by many grassroots and UK/EU based groups such as Climate Justice Action[18] as a space for news and discussion.

As a researcher, I used E-mail to coordinate meetings and send letters of information and consent forms. E-mail was also a more secure method than SMS or social media: Even if one sent direct messages via Twitter or Facebook, the newness of these platforms is not an effective conduit for two-way communication. Furthermore, because E-mail addresses typically represented one person and social-networking sites represent groups (at least in this case study), it is easier to reach individuals via personal media.

Skype also played an integral role both on the ground and as a research tool. At COP15, Skype was often used to facilitate long-distance calling between ENGOs and their national headquarters or media outlets. Skype was also extremely important in establishing communication and providing news coverage in situations of restricted access. After many accredited individuals had their passes revoked at COP15, Skype

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[17] Intended to help keep members of the press informed about breaking news stories at WTO, SMS was more often used to coordinate social gatherings and meeting places.
[18] In retrospect, the listserv would have been an effective space for recruitment, especially for those groups that did not using social-networking sites as prevalently as major ENGOs.

became an effective way to transmit and broadcast images from the security-restricted Bella Centre to various independent media outlets.

As a researcher, Skype was also extremely important. Because the computer became the largest conduit of communication and information in this space, interviews often consisted of verbal conversation as well as instant messaging to send and exchange links for more news and information or to illustrate a point.

While Skype and telephone interviews are convenient, they are not without disadvantages. Face-to-face interviews enabled me to keep the discussion focused by using nonverbal cues (Ostranger, 1993: 19), which became more difficult with voice-based interviews. As a researcher, I had to negotiate between letting participants tell their own stories while also trying to keep the conversation relevant. Time also played a role: 45 minutes into the interviews, I often noticed a sense of fatigue from participants as well as myself, meaning that I had to structure the conversation so that responses could be gathered more efficiently. In-person interviews, on the other hand, tended to last longer and did not seem to cause fatigue in the same way.

Case study as a method: Limits and opportunities in fieldwork

Although my fieldwork was intensive, the short period of time I spent onsite only demonstrates an "immersion in a particular case" (Miller & Slater, 2000: 21) as opposed to a long-term engagement with environmental activism more broadly. On the other hand, Geertz (1988) notes that despite the intense and lived experience of the researcher in more immersed settings, "ethnographic truths [always] are inherently partial" as case studies are often bound by a specific time and place.

Criticisms of case study often raise issues related to theory, reliability and validity (Ruddin, 2006: 800). Flyvbjerg (2001) suggests that the criticisms of case study are grounded in several assumptions: that theoretical knowledge is more valuable than practical knowledge; that one cannot generalize on the basis of a single case; that case studies are only useful for generating hypotheses early on in the research; that case study contains a bias toward verification; and that it is often difficult to develop general theories on the basis of specific case studies.

Is it fair to suggest that social media is not being used as a form of relationship-building and two-way communication based on one researcher's experience alone? As Ruddin notes, "It is an issue of some contestation as to whether generalization is an appropriate requisite to demand of case study research" (797), making one question the validity of generating theory from a single case. Flyvbjerg (2001), however, suggests that one case can actually *advance* knowledge: "One can often generalize on the basis of a single case, and the case study may be central to scientific development via generalization as supplement to other methods" (425). While my case is not representative of all instances of non-profit communication, communication during major international events or of social media usage more generally, the exception does prompt us to ask in which contexts relationship-building through social media can or does occur. From a theoretical perspective, this suggests that we do not infer things 'from' a case study; we impose a construction, a pattern on meaning, 'onto' the case" and try to generalize findings to theory (Ruddin, 2006: 799).

Content analysis

Selection and timeframe

For this case study I also performed a content analysis of the Twitter and Facebook profiles pages of 11 ENGOs[19]. The content analysis was important in that it helped to identify which types of activism and engagement were being promoted online and provided an interesting comparison to the responses elicited during interviews with participants. For example, the interviews and participant-observation provided a glimpse at how respondents understood social media while the data analysis illustrated how some of their respective organizations were using Web 2.0 technologies. While it would be impossible to collect an entirely representative sample, the ENGOs selected represented established "premier league" (Deacon, 1999: 182) ENGOs (e.g. Greenpeace International, Sierra Club), groups with a more grassroots-orientation (e.g. Camp for Climate Action, Climate Justice Action) and more recent Internet-based campaign groups (e.g. TckTckTck, 350.org). The timeframe of 15 November 2009- 15 January 15 2010 was a suitable choice as it captured not only the dates of the conference, but also some of the preparation and post-event periods. As a research technique, content analysis is well-suited for large datasets, as it is a method that aims to produce a "big picture" of trends, patterns and absences over large aggregates of texts (Deacon *et al.*, 1999: 117).

While on Twitter, users are represented by a single profile page; on Facebook, ENGOs can choose to be represented as a user, group, or fan page. In this case, fan pages

[19] The original sample consisted of 13 groups that also included the official COP15 and Klimaforum '09 pages. However, it was decided that because these were not organizations but rather events pages, that they would not be included in the final results.

were selected because they are typically used to represent non-profits on Facebook. Groups or individual pages were selected if the ENGO used it instead of a fan page[20].

Content analysis 2.0

Content analysis has been applied to a wide variety of texts including newspaper articles, television programs, one-on-one conversations and advertisements (Weare & Lin, 2000). Because tweets and Facebook status updates often resemble newspaper headlines in that they are text-based and short, content analysis is a suitable method.

Recent scholarship about social-networking sites have mainly relied on content analysis, which has classically been defined as "a research technique for the objective, systematic and quantitative description of the manifest content of communication" (Berelson, 1952: 147). Deacon *et al.* (1999) note that the "purpose of content analysis is to quantify salient and manifest features of a large number of texts, and the statistics are used to make broader inferences about the processes and politics of representation" (116; cf. Gerbner, 1969). At the same time, these definitions are problematic as meaning cannot always be manifest and must be extrapolated through careful analysis. Therefore by quantifying major aspects and patterns within texts, content analysis can be used to reinforce the findings of qualitative data with raw numbers (Krippendorf, 2004). As a research method, it is unobtrusive, accepts unstructured material, is context-sensitive and can cope with large datasets. Unlike discourse analysis, which has also been used to examine online communication *within* a text, content analysis is suitable to be read

[20] Campaign Against Climate Change was represented by a single profile page--"Climate Campaigner"; Climate Justice Action was represented by the page "Climate Justice at COP15" because the group page was mainly used as a discussion board by others. UNEPandYou was omitted from the Facebook analysis because it did not have a social media presence during the November 15-January 15 timeframe.

across multiple texts, helping researchers establish trends, patterns and interesting comparisons (Deacon *et al.*, 1999: 117; cf. Graber, 1989).

Although this stable research technique has been applied to dynamic media forms such as social-networking pages, the rapid growth and change of online content presents challenges for researchers (McMillan, 2000: 80) in that the analysis is only a "snapshot" bound to a specific timeframe. This makes it difficult to generalize findings outside of this timeframe. The editable web also means that information can be erased or changed[21]. To compensate for this, a PDF file of each group's Twitter and Facebook page was archived in order to provide a reference point and the Twitter archiving platform Searchtastic[22] was used to help organize the data by date[23]. The availability of web archives is an asset for the research community as it enables researchers to have free or low-cost access to a variety of texts that were previously too cost-prohibitive or otherwise unavailable.

Content analysis as method: Limits and opportunities

While the recruiting and interview process was lengthy, the content analysis took much longer than anticipated[24]. Weare and Lin (2000) note that "coding is the most labor intensive and least intellectually stimulating aspect of content analysis. Extensive training and careful attention have always been required to produce reliable data. Coding of Web-

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[21] The dynamic nature of hyperlinks was noticeable in the analysis of the COP15 Twitter page. After the conference, the official COP15 website was redesigned as Denmark's official homepage, meaning that the destination of links to news stories had changed.
[22] http://www.searchtastic.com
[23] The private and closed nature of Facebook meant that no archiving platforms were available to export status updates, which can potentially hinder potential research about Facebook profiles, as researchers may be concerned about ethics and privacy.
[24] Content analysis lasted approximately two months.

based content is no different except that researchers must take a number of added precautions due to the complexity and volatility of Web-based content" (287). With over 3579 tweets and 991 Facebook status updates collected and coded manually, a smaller dataset might have been more manageable while producing a similar result[25].

Because Twitter and Facebook are still relatively new technologies, so are the tools and methods used to analyze them. The literature about social-networking sites was therefore used to build a suitable coding scheme. Tailoring a coding scheme to a particular communications medium permits a great deal of reflexivity, "(enabling) the researcher to work with more abstract and potentially more valid constructs than is feasible with manifest categorization schemes" (Weare & Lin, 2000: 286). Researchers can therefore generate new opportunities to conceptualize Web 2.0 communication.

This does not come without some confusion on the part of the researcher. Jones *et al.* (2008) note that content analysis of websites must also account for the "entrenched theoretical and practical issues that arise when integrating text, graphic, and audio media into a single, valid categorization scheme" (Weare and Lin, 2000: 285). Sometimes it became extremely difficult to classify a link into one category, as blogs blend video, audio, image and text. Consequently, my coding scheme meant that more emphasis might have been placed on form (e.g. the blog) rather than content (e.g. video)[26].

Coding scheme

For the Twitter sample, the coding scheme was designed to evaluate tweets across 5 broad categories (and 48 possible index items):

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[25] For resource-related reasons, an intercoder reliability test could not be completed.
[26] It was important to code in this manner to better understand how ENGOs used blogs as an intermediary space between themselves, media publics and their constituents.

1) Function/Purpose of Communication

Taken from the literature (see Java *et al.*, 2007; Honeycutt & Herring, 2009), each post was categorized in one of the following ways:

- Chatter (e.g. "Man, it's tough to focus on this weekend when so much is going on--yet your vigils will be SO crucial--regardless of outcome. Argh!"[27])
- Link-sharing (e.g. "Just blogged: Sinking feeling gives rise to hope? http://cli.gs/J2spSy"[28])
- Reporting news (e.g. "Friends of the Earth suspended from #COP15 climate talks. Press release: http://tinyurl.com/yg3cxf3…"[29])
- Conversation (e.g. "Yep, saw your @BeThatChange video on #thewave site - very creative ;-)"[30])
- Act of friendship/Show support (e.g. "Thanks to everyone that came yesterday, we hope you enjoyed it…"[31])
- Mobilization/Coordination (e.g. "Join the facebook group 'Release climate activist Tadzio Müller now' http://bit.ly/6S0LVl…"[32])
- Recruitment (e.g. "If you are in CPN we desperately need volunteers to help w/ Fresh Air Center. Easy stuff, set up tables, etc…"[33])
- Commentary (e.g. "These elitist & undemocratic talks are part of a political & economic system that puts corporate profits before the needs of people #cop15[34])

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[27] 350.org, (09/12/09) [Twitter post]: http://twitter.com/350/status/6495586950
[28] WWF, (10/12/09) [Twitter post]: http://twitter.com/WWF/status/6534600675
[29] FOE (16/12/09) [Twitter post]: http://twitter.com/foeint/status/6727228073
[30] SCCC, (24/11/09) [Twitter post]: http://twitter.com/scccoalition/status/6005001985
[31] CACC, (06/12/09) [Twitter post]: http://twitter.com/campaigncc/status/6409618962
[32] CJA, (15/12/09) [Twitter post]: http://twitter.com/actforclimate/status/6704277926
[33] TckTckTck, (09/12/09) [Twitter post]: http://twitter.com/tcktcktck/status/6500875431

- Direct to other users (e.g. "#FF for #cop15: @350 @tcktcktck @Avaaz @WWF_Climate @solargeneration @oneclimate @oxfam…"[35])

2) Links

With most tweets containing at least one link, it was important to identify where ENGOs were directing their Twitter followers. 10 categories were established and sub-divided into 27 index items:

- News Story (Internal, Independent, Mainstream)
- Blog (Internal, Government, Mainstream News, Alternative Media with Blog Aesthetic, External)
- Photos (Internal, External)
- Videos (Internal, External)
- Websites (Internal-Homepage, Petition, Map) (External-Website, Petition, Map)
- Social-networking page (Organizational, External)
- Audio (Organizational, External)
- Media Release (Internal, External)
- Other (e.g. Report, Twitterlist)
- Broken/Expired

3) @username

The literature (Honeycutt & Huberman, 2009) provided a framework with which to code and analyze the @username function. Each @username was placed in one of the following categories:

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[34] CCA (16/12/09) [Twitter post]: http://twitter.com/climatecamp/status/6726283488
[35] GP, (04/12/09) [Twitter post]: http://twitter.com/Greenpeace/status/6339202019

- Mention/reference another user (e.g. "Great work by our blogger @richardgraves, his story on the Copenhagen rally made it to front page of Daily Kos…"[36])
- Self-reference (e.g. "Most important actions @COP15 are happening in yr hometown, so 2 hlp get the word out about this wknd, we're launching @350actions"[37])
- Reply to a user (e.g. "@climatevanguard Ah! Sorry. After Splashdance Waterloo comes Splashdance King's Cross…"[38])
- Location (e.g. "NO BORDERS DAY OF ACTION dec 14 - meet at 11am @ israels plads…"[39])
- Time (e.g. "… Press Conference TODAY @ 4:30…"[40])
- Twitterlist (e.g. "…follow our #cop15 Twitter list @greenpeace/Copenhagen"[41])

4) Retweets (RT)

Based on the literature that identifies retweeting as a practice that recirculates content or quotes/paraphrases the words of another speaker (see Honeycutt & Herring, 2009; boyd, Golder & Lotan, 2010), retweets were classified in 3 ways[42]:

- Recirculating content if it featured a link (e.g. "RT @indiasaleCOP15 : Ho Ho Ho, here come the Climate Santas: http://bit.ly/7w6KK5 #cop15 #climatejustice via @climatecamp"[43])

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[36] TckTckTck, (14/12/09) [Twitter post]: http://twitter.com/tcktcktck/status/6660131789
[37] 350, (08/12/09) [Twitter post]: http://twitter.com/350/status/6466458321
[38] SCCC, (26/11/09) [Twitter post]: http://twitter.com/scccoalition/status/6078504207
[39] CJA, (13/12/09) [Twitter post]: http://twitter.com/actforclimate/status/6629937202
[40] 350, (11/12/09) [Twitter post]: http://twitter.com/350/status/6564676576
[41] GP, (14/12/09) [Twitter post]: http://twitter.com/Greenpeace/status/6657325952
[42] While RT was typically an indication of a retweet, this analysis also counted items that used terms such as "via @username", "thanks @username" and "from @username".
[43] CJA, (08/12/09) [Twitter post]: http://twitter.com/actforclimate/status/6458507438

- A quote if it recirculated a specific tweet (e.g. "RT @BenWessel: Spending the day in the warm, cozy #freshair Center rather than getting jostled in line for the Bella Center, thx @TckTckTck"[44])
- "Other" if the retweet quoted a speaker as a form of reporting (e.g. "Nasheed, speaking about prison confinement to get democracy in the Maldives...'But we refused to believe that change wasn't on it's way!'"[45])

5) Hashtags

- It was anticipated that most ENGO would use tags such as #COP15, #Climate and #Copenhagen in their posts (e.g. "Gore at climate talks: Polar ice may go in five years http://bit.ly/7JSFYB #cop15 #climate #copenhagen /via @cop15"[46]), and therefore these were included in the coding scheme. This scheme also employed reflexivity as it counted and classified additional tags used in each post in order to identify trends.

Facebook coding

Although Facebook and Twitter are often treated similarly, there are key differences between them that resulted in a slightly modified scheme for each. While Twitter updates were classified according to five major categories (e.g. function, link, hashtags, retweets and @username), Facebook was only coded according to two (function and links) as hashtags, retweets and the @username function are a prevalent and distinct feature of Twitter. Occasionally, some organizations used these functions on

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[44] TckTckTck, (15/12/09) [Twitter post]: http://twitter.com/tcktcktck/status/6693785249
[45] 350, (12/14/09) [Twitter post]: http://twitter.com/350/status/6666925022
[46] GP, (14/12/09) [Twitter post]: http://twitter.com/Greenpeace/status/6674984266

Facebook; yet this did not happen frequently enough to identify any major trends and patterns. While the function of posting was coded in the same manner on Facebook as it was on Twitter, the classification of links was slightly amended to reflect the differences in technical design of each platform. Most categories remained the same, although a micro analysis divided photo, video and social-networking platform links into three categories instead of two: internal (on the organizational webpage), Facebook (if the content was hosted on Facebook itself through applications such as Photo and Video) and external (if the content was hosted on an external platform such as Flickr or YouTube).

Conclusion

This case study of ENGOs at COP15 took a multi-method approach consisting of participant-observation over a two-week period, supplemented with semi-structured interviews and an extensive content analysis of social media output. Case study is an approach that requires a significant amount of preparation and researcher reflexivity, as one must be prepared to constantly navigate through and reconcile the relationship between theory and practice.

As a researcher, it is crucial to maintain a presence in the field, despite the ubiquity of online information and archiving. Being 'on the scene' carves out different spaces of access that would otherwise be unavailable while also creating a richer understanding of events, enabling one to compare experiences in the field to those of others and those portrayed in media accounts of the event. This experiential knowledge was particularly important, as it helped me better understand why Web 2.0 technologies did not function in the ways outlined in the literature and which I had imagined.

Moreover, as part of this case study, content analysis encourages one to consider the social context of raw data and attempt to understand its relevance to observations made in the field. The multi-method approach of this study contests the meaning and locality of "the field" (Gupta & Ferguson, 1997), transforming it from one geographically-limited place to a fluid network (Wittel, 2000) of spaces that align with the networked architecture of the information society (O'Reilly, 2005).

Despite the limitations associated with a short stint in the field, case study has been a valuable research strategy to pursue the larger theoretical and empirical questions about ENGOs uses of Web 2.0 in protest situations. With deep immersion in the field comes intense relationship-building with participants that produces knowledge to make sense of the raw data triangulated from content analysis of social-networking sites. This highlights the importance of a multi-method approach that not only strengthens findings but also helps first-time researchers become more assertive, creative and reflexive.

Chapter IV: Click Here, Tweet This, Stream That: Data Analysis

Introduction

To explore how ENGOs are using Web 2.0 technologies to build relationships with constituents, coordinate and mobilize individuals and reach out to prospective supporters, this study involved a combination of participant-observation at COP15, interviews and content analysis. The content analysis examines the tweets from the Twitter profile and Facebook status updates from the Fan or Group Pages of 11 organizations from 15 November 2009- 15 January 2010.

This chapter explores two major themes: 1) the role and nature of Web 2.0 in building relationships between organizations and their stakeholders through dialogue (see Gruing, 1989; Pearson, 1989; Kent & Taylor, 1998; *ibid*, 2002) and 2) how these practices are situated within a framework of late modernity (Giddens 1991, 1994a, 1994b; Beck, 1994, 1996, 2001, 2004). Ultimately the analysis reveals that while ENGOs are attempting to leverage the collaborative nature of online communication to demonstrate solidarity and reciprocity as well as engage audiences through information provision, they are not as frequently using new media to encourage horizontal, dialogic forms of communication between themselves and their key stakeholders.

Are Web 2.0 technologies being used to foster relationships built on trust, dialogue and two-way flows of information, and if so in what ways?

Scholars suggest that organizations can build relations of trust through disclosure, information dissemination and by providing opportunities for involvement/engagement

(Taylor, Kent & White, 2001; Waters *et al.*, 2009). What organizational objectives can social-networking sites achieve and which types of media content do they recirculate?

During the interviews, it became clear that ENGOs are not using social media to build relationships in the ways anticipated in the literature. Many of the participants shied away from discussing social media in this manner, instead emphasizing its benefits as an organizing tool. What was interesting, however, was how some participants understood concepts such as "relationship-building" and "engagement" through the lens of marketing rhetoric. A content manager with several years of experience in strategic web communications noted that: "relationship-building is the normal route, where I would figure out what [the company] is selling or offering-- the best way to engage" (S. Rio, TckTckTck, 15/12/09), understanding his role within an ENGO to be different than within a more corporate space. Because environmental activism is often part of a broader social marketing agenda that emphasizes citizen participation as opposed to material consumption, non-profit and corporate communication strategies can often be understood as separate-- in other words 'marketing' becomes a dirty word replaced by terms such as 'outreach'.

It is important to note, however, that while ENGOs consider relationships to be important, they also understand relationship-building as an intensely time-consuming process that is difficult to establish through Web 2.0 alone. In this study, however, it became clear that ENGOs frequently used Web 2.0 to build upon pre-existing relationships among individuals in personal social networks. The value of Web 2.0, according to one participant, is found in the sociability of social media: "these are social communities. The software does not dictate their value-- the question is, how many of

your friends are on it? How many check in per day? It's like a party. 10 people leave and then everyone else does too" (S. Rio, TckTckTck, 15/12/09). Web 2.0 platforms can be used to aggregate pre-existing, seemingly fragmented communities of like-minded individuals interested in environmental issues.

Link-sharing: Aggregation

The content analysis of the social-networking profiles of the ENGOs demonstrates that relationship-building is not as highly prioritized as more traditional one-way, top-down modes of communication. Link-sharing is the most popular activity in this space (50.3% on Twitter, 64.7% on Facebook), mostly used to direct audiences to a mainstream news story favourable to the organization's perspective or, less frequently, to the organization's own blog.

Table 1: Function of communication, by social-networking platform

Function	Twitter		Facebook	
	Frequency	**Percentage**	**Frequency**	**Percentage**
Share link	1802	50.3%	641	64.7%
Reporting	685	19.1%	111	11.2%
Mobilization/Coordination	380	10.6%	129	13.0%
Chatter	277	7.7%	30	3.0%
Commentary	203	5.7%	38	3.8%
Act of friendship/Show support	75	2.1%	17	1.7%
Conversation	76	2.1%	4	0.4%
Direct to others	56	1.6%	4	0.4%
Recruitment	25	0.7%	17	1.7%
Total	**3579**		**991**	

This emphasis on link-sharing was echoed in the interviews, as participants frequently used the word "share" to describe both the goals and primary activities associated with Web 2.0. For many participants, links make syndication easy and

efficient: "sharing content is easy…Just tell me the URL," (S. Rio, 15/12/09). They can also facilitate information provision, as another participant noted that his ENGO primarily used social-networking sites to "share a link with people to pre-input a call to action or breaking news" (J. Solomon, 350.org, 26/01/10).

Additionally, the Web 2.0 language of 'feeding' (e.g. News Feeds, RSS Feeds, Twitterfeed) suggests a relatively passive and perpetually consuming audience, where Web 2.0 platforms become social media machines that aggregate, syndicate and amplify the voices of bloggers, journalists and ENGOs. Communications teams become a type of conduit for ENGOs as distributing content becomes their primary goal. For other ENGOs that managed multiple accounts and profiles (such as local chapters of international groups), one participant noted the difficulty in maintaining a decentralized and distributed web presence. In her case, one main profile page was maintained regularly and streamed to other platforms in order to "keep the other sites cooking" (L. Hoffmeier, WWF Denmark, 27/01/10) and maximize the reach and frequency of messages. Indeed, with a variety of third-party platforms such as Tweetdeck and Hootsuite, it frequently became yet another task to organize and update sets of micro-web communities (e.g. Twitter pages, Facebook Fan Pages, Flickr pools, YouTube channels, etc.). While Web 2.0 tools can make the dissemination of messages more efficient, they can also have the unintended effect of creating more tasks, as multiple media spaces need to be regularly maintained and updated.

The reflexivity of reporting

Although link-sharing was the most popular activity on Facebook and Twitter, other activities pointed to equally interesting findings. While reporting was the second

most popular activity on Twitter (19.1%) and third most popular on Facebook (11.2%), it did not happen frequently enough so that organizations were generating their own news on a regular basis. While ENGOs occasionally sent live event updates via Twitter[47], reporting was primarily second-hand news filtered from mainstream sources such as *The Guardian*, The BBC and *The New York Times*. In this case, new media platforms have not entirely replaced conventional news media but have reconfigured them into smaller bits of information for audiences with different information needs. As one respondent noted, his ENGO emphasized four or five separate shows as opposed to one daily report, adding that these "short kind of chunks" (YouTube clips) are now the way in which "people want to consume media" (M. Atkin, WWF International, 03/02/10).

Reporting also took place in the blogger domain, suggesting a reflexive relationship. ENGOs use Web 2.0 platforms to amplify both the voices of mainstream sources and bloggers, who in turn amplify the voice of the ENGO through their blogs. One participant whose organization received a great deal of alternative media attention noted that his organization no longer needed to supply its own media: "instead of reinventing a new outlet, we were fortunate to have a community that wanted to be a part of that narrative and amplify those voices" (J. Solomon, 350.org, 26/01/10). This suggests that more collaborative relationships are emerging from the use of Web 2.0 platforms. For another participant, his organization's live website was designed to

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[47] E.g. Camp for Climate Change (16/12/09): "300 ppl from inside pushing through police line with arms in the air saying "we are people, let us through". Police use batons. #rpa #cop15". (http://twitter.com/climatecamp/status/6727170319).
ibid.. "Road blockaded. Borders breached. Most bikes tossed in bushes…current stand off with police. #cop15". (http://twitter.com/climatecamp/status/6727236485).
ibid.. "Lots of people inside fence. Police arrest activist who made it across river…" (http://twitter.com/climatecamp/status/6727507068).

"aggregate the voices of the NGO coming out of COP15 as well as aggregating the blogger's voices coming out of COP15" (S. Rio, TckTckTck, 15/12/09). This suggests a particular conception of the audience as searching for news and information primarily from the point of view of NGOs and the alternative media community. Furthermore, some participants emphasized that new media platforms functioned as important sites for bloggers and journalists through the use of media briefings, information about upcoming demonstrations, and links to press releases and photos. Securing media representation through these platforms then becomes a crucial goal for ENGOs.

Table 2.1: Links on Twitter

Item	Frequency	Percentage
Blog	669	25.4%
Website	542	20.6%
News Story	451	17.1%
Photo	383	14.6%
Video	357	13.6%
Social-Networking Page	108	4.1%
Media Release	66	2.5%
Other	28	1.1%
Audio	18	0.7%
Broken/Expired	10	0.4%
Total	**2632**	

Table 2.2- Links on Facebook

Item	Frequency	Percentage
Blog	377	37.1%
Website	190	18.7%
News Story	137	13.5%
Photo	110	10.8%
Video	106	10.4%
Social-Networking Page	52	5.1%
Media Release	36	3.5%
Audio	4	0.4%
Other	4	0.4%
Broken/Expired	0	0.0%
Total	**1016**	

Table 3: Links to news and blogs, by social-networking platform

Twitter				Facebook			
Media	**Location**	**Origin**	**Freq.**	**Media**	**Location**	**Origin**	**Freq.**
News Story	External	Mainstream	23.5%	Blog	Internal	Organizational	33.4%
Blog	Internal	Organizational	11.8%	News Story	External	Mainstream	7.0%
Blog	External	Alt media with blog aesthetic	5.7%	News Story	Internal	Organizational	4.7%
Blog	External	External	4.0%	Blog	External	Alt media with blog aesthetic	2.5%
News Story	Internal	Internal	2.2%	News Story	External	Independent	1.8%
News Story	External	Independent	1.6%	Blog	External	External	1.3%
Blog	External	Mainstream News	0.8%	Blog	External	Mainstream News	0.0%
Blog	External	Government	0.2%	Blog	External	Government	0.0%

From a theoretical standpoint, we are witnessing the disembedding and re-embedding of expert systems (cf. Giddens, 1991) encoded in professional journalism, where the conventional news cycle and authority embedded in news media are removed from a traditional context (e.g. television and print) and reset in a new format (e.g. digital media and the blogosphere), forming a network of important information exchange between activist ENGOs and mainstream media. While online newspapers and magazines emphasize the reporting of news, blogs blend media forms by emphasizing practices such as link-sharing, reporting and commentary.

Linking to alternative media sources like *Huffington Post*, *Mother Jones* and *Grist* happened less frequently, comprising 5.7% of all links on Twitter and 2.5% on Facebook, while independent news sources, like *Democracy Now!* and *Indymedia* comprised only 1.6% and 1.8% respectively. Less popular were external sources such as personal blogs (4.0%/2.5%), internal newsletters from ENGOs (2.2%/4.7%), mainstream news blogs coming from conventional newspapers such as *The Guardian* or television station CNN.com (0.8%/0.0%) and government blogs (0.2%/0.0%).

With blogs being linked to most often by ENGOs on Twitter (25.4%) and Facebook (37.1%), they become as important as social-networking profiles because they reach audiences who might not necessarily be visiting Twitter or Facebook pages on a regular basis; furthermore, social-networking sites may not be as continuously updated as the blog. In a mediascape that is continuously being reshaped by personalized media, ENGOs can use social-networking sites to extend the reach of their web presence. ENGOs frequently used social-networking platforms to link to websites (20.6% of links on Twitter and 18.7% on Facebook), especially to their homepages (15.9%/ 13.9%). Organizations are becoming increasingly reflexive in their media practices as they attempt to adapt to a changing mediascape rather than cater to or impose upon one specific audience. As WWF International's Martin Atkin noted when discussing the multiple audiences aggregated through new media technologies, he recognized that there was a strong "rush for online content but we can't forget that people still get info from conventional broadcast television and radio" (03/02/10), meaning that ENGOs must still attempt to maintain a strong cross-media presence. Like the nature of a Web 2.0 sphere premised on digital bits of information, reflexivity in this sense means that organizations

must be able to adapt their online presence to suit the information needs and consumption habits of their audiences.

Blogs can also help ENGOs engage audiences by providing ongoing updates as well as an organizational voice for members to identify with. The personal tone of many blogs can lend a human face to an organization, helping audiences identify with the mission of the ENGO or with its public face. As a hybrid form that blends interpersonal and mass forms of communication, blogs retain a personal tone, aggregating the voices of organizational leaders such as Bill McKibben (350.org), Nnimmo Bassey (Friends of the Earth) and bloggers working for ENGOs such as Kevin Grandia (of DeSmog Blog/TckTckTck) and Richard Graves (of It's Getting Hot in Here/TckTckTck).

DIY publishing as media control

The do-it-yourself (DIY) publishing aspect of blogs is also important. As a few participants noted, blogs can reduce an organization's reliance on mainstream media as gatekeepers to accept, edit, review and publish content, helping ENGOs control and shape public representation. From a theoretical standpoint, the use of the blogosphere by ENGOs illustrates Giddens' concept of symbolic tokens in the form of reciprocity as organizations create, manage and distribute their own 'news'. By readily supplying media outlets with full press releases, edited video clips and properly captioned photos, organizations maximize both the frequency and accuracy of representation in the press because they have more control over the content: Speaking about media releases, the WWF's Martin Atkin noted that prior to the inception of Web 2.0, organizations were "totally reliant on [mainstream media] to look at links [within the releases] and use them…If you're holding a press conference, you're in their hands. Will they turn up?"

(03/02/10). With the use of new media tools, however, organizations can "be in control of their own content, be less reliant on mainstream media and be in control of their own messaging" (*ibid.*). Later on, this chapter will also explore how this tension is manifest from a theoretical point of view, as organizations are still largely reliant on mainstream media for representation and increasingly shift organizational resources to generating and assembling content for mainstream media consumption.

Uneven development of Web 2.0 platforms

While sharing links and blogging were generally the most popular activities online, ENGOs used each platform differently. A closer examination of the links reveals subtle differences: Twitter was most often used to aggregate mainstream news (23.5% of links), while Facebook functioned mainly as a space for groups to syndicate their blogs (33.4%).

Table 4.1: Twitter links, by ENGO (%)

ENGO	News Story	Blog	Photo	Video	Website	Audio	Media Release	Social-Networking Page	Other	Broken/Expired
350	10.1	37.9	13.1	11.6	18.7	0.5	0.7	7.4	1.0	0.0
CCA	25.7	12.8	27.8	16.0	12.3	2.1	1.1	0.0	1.1	1.1
CACC	5.9	5.9	58.8	0.0	29.4	0.0	0.0	0.0	0.0	0.0
CJA	35.1	15.8	13.0	8.9	21.8	0.3	1.6	1.3	1.3	0.9
FOE	0.0	0.0	10.0	0.0	75.0	0.0	10.0	20.0	0.0	0.0
GP	17.1	28.3	17.7	11.0	22.6	1.0	1.1	0.3	0.8	0.0
SC	2.7	47.9	2.7	1.4	26.0	1.4	15.1	2.7	0.0	0.0
SCCC	12.4	16.2	15.0	11.1	27.4	0.0	0.9	16.2	0.9	0.0
TckTckTck	14.1	32.4	10.7	17.3	18.5	0.5	1.5	3.2	1.9	0.0

UNEP	1.5	0.0	0.0	46.2	15.4	0.0	36.9	0.0	0.0	0.0
WWF	19.3	16.8	9.9	22.8	16.8	0.5	2.0	8.4	1.0	2.5
Total	**17.1**	**25.4**	**14.6**	**13.6**	**20.6**	**0.7**	**2.5**	**4.1**	**1.1**	**0.4**

Table 4.2: Facebook links, by ENGO (%)

ENGO	News Story	Blog	Photo	Video	Website	Audio	Media Release	Social-Networking Page	Other	Broken/Expired
350	4.4	25.3	28.5	13.3	24.1	0.0	0.0	4.4	0.0	0.0
CCA	40.7	10.2	3.4	6.8	11.9	0.0	6.8	20.3	0.0	0.0
CACC	0.0	0.0	68.8	0.0	25.0	0.0	6.3	0.0	0.0	0.0
CJA	40.0	0.0	0.0	0.0	20.0	0.0	0.0	40.0	0.0	0.0
FOE	10.0	20.0	0.0	20.0	45.0	0.0	5.0	0.0	0.0	0.0
GP	16.5	39.6	8.0	12.3	21.7	0.0	0.5	0.9	0.5	0.0
SC	0.5	77.9	5.6	2.1	10.3	1.0	2.1	0.5	0.0	0.0
SCCC	27.6	16.2	4.8	15.2	22.9	1.0	1.9	8.6	1.9	0.0
TckTckTck	7.3	22.2	14.8	22.2	22.2	0.9	10.2	0.9	0.0	0.0
UNEP	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
WWF	17.9	42.7	2.6	6.0	11.1	0.0	19.7	0.0	0.0	0.0
Total	**13.5**	**37.1**	**10.8**	**10.4**	**18.7**	**0.4**	**3.5**	**5.1**	**0.4**	**0.0**

On Twitter, groups such as Climate Justice Action mainly used it to share news (35.1%), while ENGOs like 350.org (37.9%), Greenpeace International (28.3%), Sierra Club (47.9%) and TckTckTck (32.4%) used links to promote their blogs.

Facebook, on the other hand, was used less frequently as a news source and more often as an extension of the organization's homepage via applications such as Photo, Notes and Video. Facebook was used to link to news for groups like Camp for Climate Change (40.7%), Climate Justice Action (40%) and the Stop Climate Chaos Coalition (27.6%). The Notes Application was most effective for aggregating blog postings as it permitted organizations to syndicate their blogs onto Facebook via Really Simple

Syndication technologies (RSS). ENGOs like Greenpeace (39.6%), Sierra Club (77.9%), TckTckTck (22.2%) and WWF International (42.7%) mainly used Facebook to syndicate blog postings.

The content analysis also revealed the importance of media-sharing platforms like Flickr and YouTube that rely on user-generated content to engage audiences and promote participation. Most popular were external photo-sharing platforms (11.7% of Twitter links/3.1% of Facebook links) and external video (10.1%/8.8%). The discrepancy between each organization's use of photo is explained by the fact that Facebook provides its own internal photo-sharing application, which was used in 6.9% of links. Less emphasis was placed on internal video (1.9%/1.6%) and photo (0.4%/0.9%), as ENGOs mainly relied on external Web 2.0 platforms to host, rather than embed content themselves. From a Communications standpoint, these platforms enable more dialogic forms of communication as audiences have the opportunity to co-create and syndicate content. However, as will be discussed below, the possibilities for dialogic communication and participation are limited by an emphasis on professionally-produced content designed to reflect the strategic organizational objectives of ENGOs.

Table 5.1: Photo/video sharing on Twitter

Media	Location	Origin	Freq.
Photo	External	External	11.7%
Video	External	External	10.1%
Video	Internal	Internal	1.9%
Photo	Internal	Internal	0.4%

This emphasis on professional content was evident in the photo-sharing platforms used by groups like Camp for Climate Action (27.8% of links on Twitter/3.4% of Facebook links) and Campaign Against Climate Change (58.8%/68.8%) to illustrate, rather than narrate, news. As one participant noted, his ENGO was primarily a photo-based movement reliant on Flickr pools for content. For him "photos are instant and tell a story....they are pivotal to connecting the movement together" (J. Solomon, 350.org, 26/01/10). Most interesting was the way in which 350.org used photo-sharing platforms more often on Facebook (28.5%) than on Twitter (13.1%), suggesting that Facebook could be a highly effective way to help construct the visual identity of a movement by providing its own photo-sharing platform.

Table 5.2: Photo/video sharing on Facebook

Media	Location	Origin	Freq.
Video	External	External	8.8%
Photo	Internal	Facebook	6.9%
Photo	External	External	3.1%
Video	Internal	Organizational	1.6%
Photo	Internal	Organizational	0.9%
Video	Internal	Facebook	0.1%

Video-sharing platforms were used to represent organizations like UNEP and You (46.2% of links on Twitter), WWF International (28.8%/6.0% of links on Facebook) and TckTckTck (17.3%/22.2%). With its own YouTube channel and affiliations with the Fresh Air blogger hub at COP15 and social-networking video platforms OneClimate.net and Ustream.tv, WWF International compiled daily web episodes and embedded video content within its blog during COP15, amplifying the voices of bloggers and journalists onsite. Again emphasis was placed on hiring "multi-skilled crews" of photographers,

bloggers and journalists using conventional broadcasting equipment (M. Atkin, WWF International, 03/02/10).

The uneven nature of Web 2.0 platforms not only illustrate how each group uses social-networking sites but also suggests a particular conception of audiences and users into member (or volunteer) and media publics[48] (Taylor *et al.*, 2001). For many of the participants, their online audiences seek a diversity of media forms and sources: "They are no longer content just to read something or watch a video. You have to be prepared to work across all media. Journalists must also blog, capture video" (M. Atkin, WWF International, 03/02/10). This statement describes the reflexivity that accompanies this new mediascape. As another participant noted when asked whether or not the fragmented audiences produced through multiple media channels was a challenge, he noted that he found this question problematic, explaining that "the old power horses use such a term because they are losing their power base. The audience is no longer coming to them and it is [now] up to content producers and managers to identify their niche and do best at that" (J. Barnett, The Uptake, 12/12/09). Barnett also added that these micro and niche communities form part of the new business model of communication of which writers like Pavlik (2001) have discussed:

> There is emerging a new form of journalism whose distinguishing qualities include ubiquitous news, global information access, instantaneous reporting, interactivity, multimedia content and extreme content customization. . . . The way journalists do their work is being retooled in the digital age. . . New media are bringing about a realignment of the relationships between and among news organizations, journalists, and their many publics, including audiences, sources, competitors, advertisers and governments (xi-xiii).

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[48] Member or volunteer publics are defined as supporters, constituents or stakeholders who participate in a range of activities, from simply expressing public support to formal membership, volunteering or financial contribution. Media publics are defined as media and communications personnel such as journalists, bloggers and photographers who can provide public representation of an organization.

One example of micro communities is found in the different usages of video-sharing platforms such as YouTube and Vimeo. While many ENGOs used both, their reasons for using each were different. YouTube is an effective way to reach out to member publics, as one participant noted that the "networking capabilities of YouTube are light years ahead" (M. Gaworecki, Greenpeace USA, 16/12/10). YouTube serves as a basic free medium for many organizations, as it is accessible on many types of devices and browsers and is available in many countries and regions. Although Vimeo often produces higher-quality video, with an annual subscription cost for organizations and limited usability for older browsers and devices, it has a smaller user base. For participants, their decisions to use specific Web 2.0 platforms was largely dependent on the audience's media consumption habits: "We can't engage with things if everyone is not using them, so while Vimeo is better than YouTube, everyone is on YouTube" (S. Rio, TckTckTck, 15/12/09). Where content is distributed then becomes as important as the production and creation of the content itself.

Table 6: Links to websites, by social-networking platform

Twitter				Facebook			
Media	**Origin**	**Destination**	**Freq.**	**Media**	**Origin**	**Destination**	**Freq.**
Website	Internal	Homepage	6.6%	Website	Internal	Homepage	8.5%
Website	Internal	Petition	2.4%	Website	Internal	Petition	2.5%
Website	Internal	Map	0.3%	Website	Internal	Map	1.6%
Website	External	Website	6.3%	Website	External	Homepage	2.6%
Website	External	Petition	1.7%	Website	External	Petition	1.6%
Website	External	Map	0.2%	Website	External	Map	0.2%

Analysis of the platforms also revealed how ENGOs adapted their web presence to encourage audiences to visit the homepage (6.6% of links on Twitter/8.5% of links on Facebook), also encouraging them to sign petitions (2.4%/2.5%) and view maps (0.3%/1.6%). Linking to webpages was most prevalent among organizations like Friends of the Earth International (75% of links on Twitter/45% of links on Facebook) and Stop Climate Chaos Coalition (27.4%/22.9%). Organizations that link back to webpages, especially their homepages, not only encourage regular visits but also make themselves available to non-users of social-networking sites. Unlike Facebook, which takes a closed approach to its content (membership is often required to view content), the open structure of both Twitter and webpages enable broader audiences to access information. In this case accessibility, availability and ease of use become major considerations when constructing an effective Web 2.0 presence.

Based on the analysis of Twitter and Facebook content, it appears that while social technologies create opportunities for two-way dialogue, where audiences can participate by uploading photos, reposting content and subscribing to updates, these technologies were more often used to re-embed and reinscribe one-way forms of communication. This was illustrated by the emphasis on using platforms to distribute/redistribute mainstream news stories and blog postings. While these enable audience participation by allowing users to comment on posted content, this is not the type of real-time, interactive feedback required for symmetrical, two-way forms of communication (Greenberg & MacAulay, 2009).

Interestingly, the emphasis on professional forms of communication, as opposed to more interpersonal forms of conversation, could be one way in which the push to professionalism can hinder an organization's ability build relationships with its constituents. The lack of emphasis on chatter (7.7% on Twitter/3% on Facebook), conversation (2.1%/0.4%) and commentary (5.7%/3.8%) could be an example. Because the new mediascape places an emphasis on 'viral' content (i.e. content that is circulated and re-circulated as a form of promotion) little emphasis is put on actual exchange and conversation between users. As a prominent activity, link-sharing is used largely in a top-down form, where content is syndicated and fed to web audiences. An emphasis on pushing out content meets the information needs of audiences but provides them with little opportunity for meaningful engagement and response.

Equally interesting is how Web 2.0 platforms were used to either reproduce "old" media or adapt to changes in communications technologies. The reflexive and reciprocal relationship that exists among ENGOs, journalists and bloggers through Twitter and Facebook revives the authority of conventional news media whenever ENGOs post links to news stories that are later picked up and re-syndicated through blogs and social-networking pages. At the same time, conventional news media has arguably lost its hegemony over directing the form of news and information. With increasingly fragmented groups of audiences who are no longer content to simply view a news program or read a newspaper, both ENGOs and newsmakers must adapt their web presence for audiences accustomed to shorter bits of information complete with print, visual and audio media. Content managers must also be sensitive to the needs of media

publics in order to secure public representation: this means not only creating information-rich blogs for member publics, but also creating content for media publics.

This creation, aggregation and syndication of web content for multiple publics reveal the types of relationships that ENGOs have in mind. Rather than use social technologies to reach out to current or prospective audiences and foster relationships based on two-way forms of communication, organizations are increasingly aware of the difficulties associated with these activities. While ENGOs such as 350.org use new media to distribute information about large demonstrations, for example, they primarily rely on word of mouth and interpersonal networks to build these movements and garner public presence and support. Understanding the social value behind social media, ENGOs are attempting to leverage the interpersonal connections already existing online to build these "imagined communities" (Anderson, 1991) rather than generate relationships between themselves and their key stakeholders. These findings also suggest that achieving dialogic communication might not be an effective or achievable activity; rather, it seems that ENGOs should continue to emphasize reflexivity as they try to shape and adapt their presence to fit the anticipated needs of their audiences.

How does the use of Web 2.0 technologies by ENGOs illustrate the place of new media in late modernity?

If Web 2.0 technologies are a part of modernity, how does the mediation of activism through these platforms fit into this framework? In the social mediascape, mobile technologies like cell phones and laptops allegedly enable the micro-coordination of life and "recurrent scheduling on the move" (Nyiri, 2007: 101), separating place from

space as part of the dynamism of space and time within late modernity (Giddens, 1991). In this case, however, time and space were reproduced rather than reconfigured online.

Time/Space: Journalism and the role of the nation-state

In order to understand this process, it is useful to consider the role of the nation-state (Beck, 2006) online. The tendency of new media to revive and reinforce the hegemony of an 'old' media firmly entrenched in the framework of the nation-state reinforces the salience of place in a networked society. In this analysis, ENGO linking to news stories tended to link to nationally-based publications such as *The Guardian* (UK), *The New York Times* (USA) and the BBC (UK). While foreign and independent coverage was somewhat present (e.g. *Al-Jazeera* and *Democracy Now!*), it formed a very small part of overall reporting. With mainstream sources reinforcing the container of the nation-state, blogs could arguably mitigate against this by facilitating a global conversation across networks. In this context, however, blogs performed the same nationalizing function as traditional news media by amplifying the voices of English-speaking, nationally-based bloggers writing about climate change from what was largely a nationalist point of view (see Trenz, 2009).

The reliance on professional news sources online provides an interesting counter-narrative to the literature on citizen journalism (see Rheingold, 2002; Kahn & Kellner, 2003, 2004). Despite the spaces for participatory journalism enabled through mobile devices such as iPhones, the news circulated in these spaces was largely reported by professional journalists, in addition to professional bloggers from *Huffington Post*, *Grist* and *Mother Jones*.

Content-sharing platforms like Flickr were extremely useful in distributing the images of the movement. Although many ENGOs on Twitter and Facebook encouraged audiences to submit photos of demonstrations to photo-sharing pools in order to aggregate users' images, it is important to note that many of the photos that stood out in these platforms were not crowd-sourced from 'the people' but taken from news agencies such as the Associated Press or from professional (paid) photographers. For some participants, amateur journalism, "is first, meeting that need for immediacy, but it is not always best" (M. Atkin, WWF International, 03/02/10), as grainy mobile phone images are most important when no other images are available. Respondents noted that high-quality content helped distinguish them from other organizations, by providing a "near broadcast quality experience" for member and media publics: "Because there is so much video [online], one of the ways you can stand out is by maintaining quality," (personal interview, Martin Atkin 03/02/10). Web 2.0 technologies can then become a type of status symbol (see White, 1992), as an organization's emphasis on high-quality, live streaming content indicates a rich amount of media resources. For more mainstream ENGOs such as the WWF, TckTckTck and Greenpeace, for example, the thousands of dollars spent on tools such as iPhones and professional video editing equipment is only a fraction of total expenditures. For grassroots groups on the other hand, these technologies are not nearly as affordable, meaning that staff/volunteers used their own personal devices, shared resources or utilized other alternatives (e.g. waiting to post content when online access was available or carrying mobile web USB sticks). As ENGOs become increasingly professionalized, this need for 'elites' to distinguish themselves from the rest separates more media-savvy organizations such as Greenpeace International from more

grassroots-oriented groups, arguably transforming them into "managed media [strategies]" (Newlands, 2009) that can obscure the original goals of a movement premised on community-based action.

Time, in this sense, was not often instant or live as much as it was structured around the physical meeting space of the Bella Centre. ENGOs frequently tweeted about waiting for upcoming speakers (e.g. "Hey every1 waiting in line @ #COP15, Prez Nasheed's gonna rock the movement in 2 hours @Klimaforum09, Come join! "), getting prepared for an action (e.g. "@350Australia is organizing actions @ four metro stops before the Bella Centre, Thurs morn… "), or rallying individuals to meet at a specific location (e.g. "NO BORDERS DAY OF ACTION dec 14 - meet at 11am @ israels plads and march to ministry of defence… ").

While in a few instances, groups like Climate Justice Action, Camp for Climate Action and the Stop Climate Chaos Coalition sent live updates via SMS or web-enabled devices (e.g. "Mass arrest after kettling at hit the production demo. Chants of "let them go" #cop15 police incredibly violent after no provocation "), reporting was mostly asynchronous and edited, rather than live and unfiltered. Again, this was due to organizational styles as groups with a strong media presence opted for high quality footage and accurate reporting. Live, instant reporting is susceptible to inaccuracies, as The Yes Man stunt at COP15 illustrated[49].

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[49] By this, I refer to the Yes Men's hijacking of the Environment Canada website and the "announcement" that Canada was willing to cut emissions by 40% and pay reparations to Uganda.

Click and retweet: Online mobilization as digital and symbolic

While some of the literature about online mobilization constructs the web as a tactical/coordinating tool to start flash mobs, organize demonstrations and direct protestors (Rheingold, 2002; Kahn & Kellner, 2003, 2004), in this case, the types of mobilization and coordination involved were mainly symbolic and digital: signing petitions, joining Twitter lists or Facebook groups and redistributing/sharing content across personal digital networks (10.6% of posts on Twitter/13% on Facebook).

Table 7: Mobilization/coordination by social-networking platform

ENGO	Twitter	Facebook
350	9.2%	9.1%
CCA	17.7%	24.6%
CACC	13.9%	13.9%
CJA	8.5%	36.0%
FOE	33.3%	14.3%
GP	12.7%	17.3%
SC	19.7%	6.7%
SCCC	12.0%	28.6%
TckTckTck	6.0%	3.8%
UNEP	4.5%	n/a
WWF	4.2%	4.2%
	10.6%	**13.0%**

The discrepancy between the rates on Twitter and Facebook could be attributed to design, as Facebook's "Events" Application creates full-page invitations to events that are embedded on the Fan page. While these activities can also be understood as a form of 'armchair activism' (or slacktivism), where signing petitions or 'attending' events require little commitment or participation, they fulfill several important functions. ENGOs can use these avenues to gain a sense of audience by creating E-mail lists and promote

sustained interaction by sending regular invites and newsletters to followers. For audiences, these types of activities can deepen levels of interaction with the environmental movement, while it could also pique the interests of those who might not otherwise be involved. As one participant noted, social-networking platforms "not only grow but deepen our audiences" (J. Barnett, The Uptake, 12/12/09), providing opportunities for some audiences to make the transition from audiences to donors to volunteers, or as another responded, to help individuals transform "from active citizen[s] to activist[s]" (L. Petersen, Avaaz, 17/12/09).

Retweeting as a symbolic token

From a theoretical view, these activities illustrate the disembedding and re-embedding of abstract systems in the form of symbolic tokens (Giddens, 1991). When individuals follow a particular ENGO, retweet a post, or sign a petition, they engage with activities that demonstrate solidarity and reciprocity (see Downey & Fenton, 2003) with and among organizations, a key mechanism of trust and relationship-building. On Twitter, reciprocity was maintained through retweets as a form of amplification, agreement, promotion or active listening (Honeycutt & Herring, 2009). Found in approximately 41.4% of tweets (1481 times), ENGOs used retweets to optimize the reach and frequency of messages to their followers and their followers' followers.

Table 8: Function of retweets

Purpose	Freq.	Percentage
Reference content	1061	71.6%
Rephrase others' tweets	312	21.1%
Other	108	7.3%
Total	**1481**	**41.4%**

Many ENGOs retweeted frequently, such as 350.org (45.6%), Climate Justice Action (46.2%), Greenpeace International (41.9%), Stop Climate Chaos Coalition (55.8%) and TckTckTck (41.5%). As members of the Climate Action Network, groups such as 350.org, Greenpeace International and TckTckTck frequently retweeted each other's content, indicating a type of alliance and cross-promotion. Retweeting is a highly effective tool for amplifying an organization's online presence as it allows groups to communicate with new and invisible audiences and promote cross-communication among groups.

Table 9: Retweets, by ENGO

Organization	Freq.	Percentage
GP	368	41.9%
350	287	45.6%
TckTckTck	255	41.5%
CJA	207	46.2%
SCCC	196	55.8%
WWF	98	40.3%
CCA	60	17.1%
CACC	4	11.1%
SC	4	21.1%
FOE	1	11.1%
UNEP	1	1.5%
Total	**1481**	**30.3%**

While Facebook also enables organizations to recirculate/share posts, this practice was not as prevalent on Fan Pages, meaning that less reciprocity appears to occur in this context. This observation challenges the suggestion that Twitter is less about reciprocity, as individuals need not "follow" or "friend" each other to communicate (for more discussion, see boyd, Golder & Lotan, 2010).

Interviews with participants revealed how the practice of retweeting functioned to amplify voices-- particularly those of other ENGOs and journalists. Amplification also

becomes a story about collaboration and aggregation. Indeed, as one participant noted when discussing the role of the Fresh Air blogger centre at COP15, "it became as important to have enough bodies in the room and have others physically there to retweet content" (S. Rio, TckTckTck, 15/12/09), meaning that a physical co-presence played a crucial role in aggregating and amplifying content and communication. By creating media spaces for face-to-face communication paired with mediated exchange, centres like these reconstruct physical spaces online, as members of the multiple audiences can tweet and retweet what is happening, either reporting a live event or speech.

Web 2.0 not only amplified the voices of journalists but also facilitated the collaborative nature of media teams working to co-create and syndicate content. Journalists from news or campaigning organizations such as The Uptake and OneClimate.net worked with campaign organizations such as TckTckTck to create a strong media presence by uploading photos, tagging images with press-ready captions and writing media releases. Alternative media outlets such as *Democracy Now!*, *Mother Jones* and *Huffington Post* also amplified the voices of ENGOs in their publications, which were later re-circulated as link-embedded tweets and Facebook status updates. Content managers effectively worked with, or managed individuals with their own news agendas and deadlines, suggesting a careful balance of coordination, supervision, management and collaboration.

Many participants indicated that their organizations were still heavily reliant on mainstream media for representation, whether they sent out press releases anticipating that journalists would pick it up or participated in events and stunts where they knew reporters would be. Again, The Yes Men's hoax of a press conference at COP15 is a

good example of this, as it both parodies and disrupts conventional news media formats (pointing to the "laziness of journalists," as one participant reflected). The blogosphere serves as an important intermediary space in this regard. Speaking about the Yes Men stunt, one participant noted that his organization's original engagement with classic media work-- that is, distributing a false press release, "started flying because it was picked up by bloggers and other media" (Nils Brøgger Jakobsen, Action Aid, 29/01/09). Twitter demonstrates the amplifying power of Web 2.0, as some ENGOs tweeted the incorrect information (e.g. "Sounds like #Cop15 is reconvened. Amazingly Canada has signed up to 40% reduction by 2020…"[50]; "Hold that last message! Apparently the Canadian 40% reduction announcement might be a spoof... what a shame!"[51]).

Hashtags

ENGOs not only reciprocate through the act of retweeting, but also through the hashtag (e.g. #COP15). The Twitter sample contained 3978 tags, or 1.11 per tweet, making it a standard feature of most exchanges in this space. The hashtag can be understood as a form of aggregation as it lists and display all tweets containing this label. On the other hand, hashtags can also reproduce fragmentation by aggregating isolated comments that have little in common as this remains an experimental and idiosyncratic activity (boyd, Golder & Lotan, 2010).

Table 10: Frequency of hashtags, by ENGO

Organization	Frequency	Percentage
350	586	87.6%
CCA	383	57.2%

[50] SCCC, (14/12/09) [Twitter post]: http://twitter.com/scccoalition/status/6661979597
[51] SCCC, (14/12/09) [Twitter post]: http://twitter.com/scccoalition/status/6662360619

CACC	10	1.5%
CJA	643	96.1%
FOE	12	1.8%
GP	1253	187.3%
SC	43	6.4%
SCCC	476	71.2%
TckTckTck	359	53.7%
UNEP	5	0.7%
WWF	208	31.1%
Total	**3978**	

While more hashtags generally meant more tweeting, some ENGOs such as 350.org and TckTckTck used fewer hashtags in more strategic ways. With newer organizations like TckTckTck and 350.org (est. 2009 and 2007, respectively) this difference could be attributed to the fact that they emerged alongside other Internet-based groups like Avaaz (2007), 38 Degrees (2009), MoveOn (1998) and GetUp (2005), meaning that they did not have to integrate their former print, television and radio audiences, as can be the case with older, more established ENGOs.

Table 11: Tweets, links and hashtags, by ENGO

ENGO	Tweets	Links	Hashtags	# of tags
GP	879	707	1253	115
350	629	410	586	60
TckTckTck	614	411	359	25
CJA	448	316	643	87
SCCC	351	234	476	37
CCA	351	187	383	27
WWF	119	202	208	25
SC	76	73	43	26
UNEP	67	65	5	1
CACC	36	17	10	5
FOE	9	10	12	8

Total	3579	2632	3978	

Three hashtags were most prevalent in the sample. While #climate was promoted as the "official" COP15 tag (13.6% of tweets), ENGOs primarily used #COP15 (30.5%). The #copenhagen hashtag was third most popular (9.5%). This could be significant as it also reinforces the importance of place, even in a digitally connected environment.

Table 12: Top 3 tags, by ENGO

ENGO	#COP15		#climate		#copenhagen	
	Freq.	%	Freq.	%	Freq.	%
350	231	39.4	57	9.7	5	0.9
CACC	4	40	0	0	3	30.0
CCA	205	53.5	2	0.5	3	0.8
CJA	195	30.3	65	10.1	52	8.1
FOE	2	16.7	3	25	2	16.7
GP	304	24.3	285	22.7	220	17.6
SC	7	16.3	0	0	1	2.3
SCCC	114	23.9	41	8.6	18	3.8
TckTckTck	107	29.8	46	12.8	38	10.6
UNEP	5	100	0	0	0	0.0
WWF	43	20.7	43	20.7	26	12.5
Total	**1215**	**30.5**	**542**	**13.6**	**376**	**9.5**

As a symbolic token, hashtags (like retweets) can demonstrate solidarity among groups. The #realdeal hashtag, for example, refers to a specific Climate Action Network campaign, and was used 9 times in 350.org's posts (1.5% of tags), 16 times by Greenpeace International (1.3%) and 49 times by TckTckTck (13.7%). Although this study did not analyze which organizations retweeted each other, the prevalence of these tags suggests a relationship between ENGO that have high levels of retweets and use similar tags. The Wave hashtag (#TheWave), a UK-based demonstration on December 5, 2009 in London, was used by groups like the Stop Climate Chaos Coalition 176 times (37% of tags) while other organizations used the same tag to express solidarity, including

Climate Justice Action (7/1.1%), Greenpeace International (3/0.2%), TckTckTck (2 times, or 0.6%), Camp for Climate Action (2/0.5%), Campaign Against Climate Change (1/10%) and 350.org (1/0.2%). "Reclaim Power", the name of the December 16th, 2009 demonstration organized by Climate Justice Action at COP15, was used as a hashtag 36 times by Camp for Climate Action (9.4% of tags) and 7 times by Climate Justice Action (1.1%).

Table 13: Campaign hashtags, by ENGO

ENGO	Hashtag			
	#thewave	**#realdeal**	**#reclaimpower**	**#wave**
350	1	9	-	-
CCA	2	-	36	-
CACC	1	-	-	-
CJA	7	-	7	2
FOE	-	-	-	-
GP	3	16	-	-
SC	-	-	-	-
SCCC	176	-	-	-
TckTckTck	2	49	-	-
UNEP	-	-	-	-
WWF	-	1	-	-
Total	192	75	43	2
Percentage	4.8%	1.9%	1.1%	0.1%

Although these figures seem minor, it should be noted that after the three top hashtags, ENGOs seldom used a particular tag consistently, with the exception of their organizational name as a form of branding in an attempt to 'trend' themselves. 350.org did this frequently, using #350ppm 187 times (31.9% of its hashtags), while other ENGO also followed suit: Climate Justice Action with #climatejustice (118/18.4%) and WWF International #WWF (34/16.4%).

Table 14: Hashtag as a form of branding, by ENGO

Hashtag	Organizational (per profile page)		Total (of all tweets)	
	Frequency	Percentage	Frequency	Percentage
#350ppm	187	31.9%	212	5.33%
#climatecamp	2	0.52%	4	0.10%
#climatejustice	118	18.35%	161	4.05%
#cja	15	2.33%	15	0.38%
#foei	0	0.00%	1	0.03%
#friendsoftheearth	0	0.00%	1	0.03%
#greenpeace	6	0.48%	9	0.23%
#cop15sc	4	9.30%	4	0.10%
#TckTckTck	12	3.34%	14	0.35%
#WWF	34	16.35%	34	0.85%
#wwf24	26	12.50%	1	0.03%
#WWFCop15	1	0.48%	1	0.03%
#WWFUS	2	0.96%	2	0.05%

As this portion of the analysis demonstrates, certain Web 2.0 features enable the activation of elements of modernity, particularly the disembedding and re-embedding of abstract systems in the form of symbolic tokens. While the literature explores social-networking technologies as pathways to live, instant information that transcend place through Web 2.0 technologies, the data suggests that time is, in fact, still largely governed by space and that new media technologies usher in the resurgence of the nation-state, in this case, by utilizing nationally-based media sources. While blogging can potentially open up global spaces for conversation and exchange, an emphasis on high-quality, professional forms of communication means that ENGOs increasingly rely on professional news sources to supply this content and that live, amateur reporting remains a novelty and not a standard practice.

Live and amateur news is not only susceptible to issues related to credibility and fact-checking but can also fail to capture and construct a movement effectively. While citizen forms of journalism enabled through mobile devices has its place for capturing

breaking news, the predictability of events at COP15-- planned plenary sessions and scheduled demonstrations, for example-- means that journalists and skilled crews are already on the scene with full camera crews ready to cover a story.

Conclusion

As ENGOs work toward maintaining a professional web presence and extending their base across networks, one of the ways they do so is through creating symbolic events that enable individuals to participate online. While such activities are often used as reasons to discount the legitimacy of Internet-based activism, they can in fact reinforce participation as individuals can add layers of action and invite their pre-existing peer groups to join.

Because social marketing has its origins in marketing literature, we see how Web 2.0 technologies utilize similar strategies-- whether they use retweeting as a form of word of mouth advertising or hashtags as a form of branding. On the other hand, the major activities in these spaces involve collaboration, reciprocity and solidarity, separating non-profit from corporate communication.

While it appears that ENGOs are using new media platforms to establish dialogical relationships, it is mainly used to support existing relationships with news media and other ENGOs. Little room is carved out for meaningful citizen participation in these spaces as audiences are still largely positioned to consume pre-assembled content that they are encouraged to amplify and syndicate to their peers. While "user-generated content" appears to hold democratic values of amateur and citizen participation, this concept obscures the assumption that users are necessarily amateurs. While audiences

have access to a diversity of platforms that can generate opportunities for participation and two-way exchange, we must be careful to not place too much value in software whose value is generated from participation that may not always be possible in digital spaces.

The two major research questions in this study explored 1) how Web 2.0 platforms like Twitter and Facebook could enable more dialogic forms of communication (Gruing, 1989) based on symmetrical, two-way forms of exchange, and 2) how social-networking technologies fit into a framework of late modernity. The findings of this study suggest that relationship-building was most dependent on information provision (through link-sharing) rather than providing opportunities for involvement (i.e. as a tool for mobilization/coordination). ENGOs use of Twitter was an interesting manifestation of late modernity as it illustrated 1) the recasting of the nation-state and the demands of physical time in the digital sphere, and 2) the disembedding and re-embedding of abstract systems that promote relationships based on solidarity and reciprocity.

To conclude, the literature about activism through social-networking platforms narrates tales about coordinating autonomous individuals and groups to facilitate action on the ground, while the data analysis of the communication in these spaces suggests more of an emphasis on activities related to promotion and amplification, or an adaptation and addition to more traditional ways of communicating and organizing. Online tools therefore exist on the level of the symbolic that runs parallel to traditional and more physical forms of protest (e.g. sit-ins, walkouts and rallies). New media in this case has a curious relationship with ENGOs, where organizations use technologies to offset some of the challenges associated with innovations in technologies and provide

alternate opportunities previously rendered impossible by the determinants of space and time. Ultimately, while Web 2.0 platforms provide a range of communicative possibilities for ENGOs, they often function as the same vehicles for information provision formerly reserved for E-mail, television, print media and radio.

Chapter V: COP15 and the Story of Social Media

COP15 2.0

While in many respects COP15 was a 'failure', it also functioned as an opportunity for ENGOs to experiment with social media, learning about how it can enable or constrain action in different contexts. According to 350.org's Bill McKibben:

> The [Internet] is really interesting. It's useless to use it to send people e-petitions or whatever — I think that's not a useful strategy. But it's incredibly useful to use it to organise things in the real world — and then use the web to make them larger than the sum of their parts....we're trying to figure out how you make real political work out of Facebook and Twitter and things like that. Sometimes you can't do it, but sometimes you can really figure things out.[52]

McKibben's perspective on the Internet illustrates how Web 2.0 technologies operate within activism and campaigning situations. While literature from both the academic and marketing community tends to document spontaneous, ground-up mobilizing that results in meaningful social change (for example, the Iran election) or exceptional stories of relationship-building and outreach (consider the Haitian disaster relief efforts), this case study explores Web 2.0 in a decidedly less dynamic way, examining the role of new media in communicating climate change from an ENGO position. While communications technologies can play an important role in the construction and public understanding of environmental issues and function as tactical tools for activists, the findings from this study suggests that Web 2.0 technologies mainly perform the function of aggregating interest-based communities through networks, amplifying the voices of journalists in the blogosphere and syndicating content across a wider and more diverse audience base.

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[52] Excerpt from Simon Butler's interview with Bill McKibben (31/05/10). Bill McKibben: Beyond 350. *Green Left Weekly Magazine*. Retrieved online 2 July 2010 from http://www.greenleft.org.au/node/44299.

While these findings seem to be at odds with the accounts of "Twitter revolutions" made possible through social-networking sites and mobile devices for example, they also suggest that tactical uses of communications technologies emerge from a unique set of social, cultural, political and economic conditions. Therefore, while the city of Copenhagen did not become a major site for iPhone and Blackberry-armed activists to coordinate direct action on the ground via SMS or for citizen journalists to capture and livestream spectacular footage onto Facebook and Twitter, this is not to say that such activities cannot or will not happen in future cases (especially in significantly less open, liberal-democratic systems where activists typically adopt more expressive and disruptive tactics).

From a Communications standpoint, this study also investigates the possibilities and potentials for horizontal, two-way forms of communication that are allegedly enabled via Web 2.0 technologies such as blogs and social-networking sites. While ENGOs often used new media to cultivate two-way relationships between themselves and journalists in order to secure and control public representation, they also continued to use new media to address member publics according to a conventional broadcast model by 'feeding' them pre-assembled web content or by encouraging them to redistribute information through their personal networks as a form of digital 'participation'. While this pattern is interesting in that the blogosphere could potentially become a space to revive news media and strengthen the relationship between organizations and journalists, are there different ways in which member publics can engage more directly with ENGOs through Web 2.0 technologies or have we reached the limits of an Internet limited to petitioning, fundraising and creating mailing lists?

As for COP15 itself, the efforts of activists and NGOs were ultimately circumvented by the events that unfolded at the institutional level. After two weeks of deliberation, protest and controversy, the conference ultimately failed to secure a legally-binding agreement. Among the many factors behind this was the opposition to a binding deal by several key governments such as India, China, and the U.S; a U.S political system that limits what its President can agree to; mismanagement of the conference by the Danish government; and the role of the European Union supporting Obama's Copenhagen Accord.

Drafted by the U.S, The Copenhagen Accord was derived from a controversial leaked document exposed by *The Guardian* that contained a secret agreement between the U.S, the U.K and Denmark signing over more authority to richer, more developed countries and sidelining the role of the UN in any future decision-making procedures. Finalized on 18 December 2009 by U.S, China, India, Brazil and South Africa, the accord was 'taken note of' but not adopted or passed unanimously by all countries. As a result, there is uncertainty about how this accord will reflect all of the preparation and deliberation that took place among the UNFCCC committees.

Meanwhile the activist and NGO community was reportedly outraged, ignited by police raids in Christiania and Ragnhildgade, kettling and mass arrests by police at public demonstrations and having their COP15 accreditation passes revoked, effectively locking them out of the consultation process. While ENGOs publicly expressed optimism that a fair deal could be reached, privately, the heads of many of these organizations were upset and frustrated, knowing that no major binding agreement would emerge from what was the result of months of planning, organizing and fundraising. Publicly, many in the

environmental movement, such as Naomi Klein, argued that "no deal" was preferable to a "bad" one, as many nations of the Global South would be offered no viable solutions or necessary resources to deal with the effects of climate change.

Next steps

As someone interested in communications technologies and environmental activism, COP15 served as an interesting opportunity for me to be a participant observer, exploring how new media technologies can become tools for coordination, lobbying, fundraising, advocacy and self-generated media representation, something especially important for non-profit organizations.

This study offers up several alternate avenues of exploration. For environmental organizations (and non-profit organizations more generally), this thesis has examined some of the possible uses for relatively inexpensive and accessible communications tools that require a fairly basic level of web expertise from both content producers and audiences alike. New media technologies can help organizations expand their communications strategies, whether its through the use of photo-sharing pools to distribute images from the latest demonstration or through the use of Twitter to inform and update audiences on the most recent environmental disaster.

As Web 2.0 technologies evolve and become tailored for micro-communities of users (e.g. Vimeo for journalists seeking higher quality video content), it becomes even more important for organizations to understand the specific media consumption habits of the audience. Social technologies derive their value from the size of their audiences and their online activities. Therefore, while certain platforms such as Facebook remain

important networking and marketing tools, organizations must practice reflexivity and make themselves visible in the digital spaces frequented most by their supporters, essentially to "meet them where they are" (J. Solomon, 350.org, 26/01/10). While using specific technologies can help organizations learn more about their audiences, it also creates pressure for the organization to keep both content and media fresh, meaning that while Web 2.0 technologies can make communication more efficient, they cannot necessarily make it easier or more effective.

This study also encourages us to re-examine the relationship between technology and social change. While some later analyses of Web 2.0 revolutions have begun to contest the allegedly vital role of social media in countries such as Iran and Moldova (see Bennett, 2009; Friedman, 2009; Morozov, 2009), is it possible that overemphasizing the 'power' of technology in fact "mischaracterizes and trivializes" (Erlich, 2009, para. 1) the larger mass movements taking place offline? While we can gather a great deal of information about online activity in popular Web 2.0 spaces such as Twitter and Facebook, what happens to those narratives of direct action, resistance and subversion taking place through E-mail and listservs, or even those taking place on the ground? We must understand that the narratives of meaningful social change 'achieved' through new media technologies form only a small part of the mobilization and coordination that occurs gradually over space and time.

These findings also encourage us to reconsider the potential for two-way communication allegedly embedded in new media technologies. While blogs and social-networking sites could potentially function as spaces for meaningful debate, dialogue and deliberation, why is it that they are seldom used in this way? Although Web 2.0

technologies have often been described as 'participatory', 'social' or 'interactive' these terms obscure the more conventional broadcast activities that occur, where content is produced and redistributed among a relatively passive audience that have now been dubbed active 'users'. Indeed, the relationship between media, access, participation and power needs to be revisited (see Cammaerts & Carpentier, 2007), as access *to* communication becomes too easily conflated with participation *through* communication (Cammaerts, 2007).

Conclusion

This thesis began by exploring the role of new media technologies in communicating climate change and investigating whether or not they could enable dialogue among organizations and their key stakeholders. While the findings mainly demonstrated that online forums did not function as the communicative spaces envisioned in the literature on public relations through the web, they indicated that digital spaces can function as a vehicle to deepen participation and engagement by those already engaged offline. While narratives of Web 2.0 revolutions elide the more complex activism taking place beyond the desktop, so do the criticisms of online mobilization that reduce any form of mediated action to 'slacktivism'. While online activism cannot singlehandedly engage voters to think more critically about climate change or convince political leaders to draft more binding agreements, it can help the environmental movement maintain its efforts by aggregating dispersed communities of active citizens to help propel the momentum of the movement, by amplifying the voices and actions of activists, journalists and opinion leaders who are engaged in discussions about climate

change, and by syndicating these images, ideas and messages across a variety of media platforms. Ultimately, while these technologies are not being used to promote dialogue, perhaps this is not an achievable ideal for organizations that could direct more efforts toward promoting interactivity, participation and collaboration in these online spaces.

As the summer of 2010 comes to a close with the aftermath of the G8/G20 summit that took place in Toronto, thousands of users are uploading YouTube videos of police/protestor clashes in downtown and taking to the blogosphere and social-networking sites to discuss the controversial actions and policies adopted by authorities, not to mention the billions of dollars spent on security measures for a relatively non-violent protest. While again, social media was not used as a tactical/coordinating tool, it still performed an important role in helping citizens share and distribute images from demonstrations to form a collective memory of events and engage in productive discussions about the role of police and the state in situations of protest. While an international event like COP15 can make it more difficult to generate discussion across linguistic and national borders, more localized events like the G8/G20 can use social media to aggregate communities of users based on a shared national reference point. To close, it is important to remember that while Web 2.0 technologies alone cannot produce engaged forms of citizen dialogue and debate or tactical mobilization and coordination, the spaces for these activities are slowly being carved out by audiences as they attempt to navigate their own shifting mediascape. As Web 2.0 technologies continue to expand and evolve, there is no telling what types of dynamic protest and action they may accompany in the future.

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Appendix

List of Participants

1. Atkin, Martin. (3 February 2010). WWF International.
2. Banks, Ken. (7 February 2010). Kiwanja.net.
3. Barnett, Jason. (12 December 2009). The Uptake.
4. Brøgger Jakobsen, Nils. (29 January 2010). Action Aid Denmark.
5. Coles-Riley, Sophia. (9 February 2010). Camp for Climate Action.
6. Gaworecki, Mike. (16 December 2009). Greenpeace USA,
7. Givens, Gemma. (16 January 2010). SustainUs/Indigenous Peoples Caucus.
8. Hoffmeier, Lise. (27 January 2010). WWF Denmark.
9. Kleef, Rolf. (5 February 2010). TckTckTck,.
10. McCormack, Dominic. (30 December 2009). SustainUS.
11. McIntee, Michael. (12 December 2009). The Uptake.
12. Morningstar, Cory. (9 December 2009). Canadians for Action on Climate Change.
13. Neidl, Chris. (18 December 2009). Solar One.
14. Petersen, Linda. 17 December 2009Avaaz,.
15. Rio, Steve. 15 December 2009TckTckTck,.
16. Solomon, Joe. (26 January 2010). 350.org.
17. Wu, Ken. (17 January 2010). Ancient Forest Alliance/Canadian Wilderness Committee.

Interview Questions

1. How is using social media on a web page different than the traditional HTML format?

2. Some environmental activists and organizations feel conflicted about using computer technology that uses a great deal of energy and non-renewable resources. Do you feel this way, and if so, what are the steps you take to deal with this?

3. How prominently do Web 2.0 platforms like *Facebook, Twitter* and *YouTube* fit into your communications campaigns, in comparison to more traditional media like paper newsletters and direct action campaigns?

4. Many volunteer and non-profit organizations face issues with funding and staffing that prevent them from staffing people with the appropriate skills or from obtaining newer technologies. Have you encountered this and if so, how have you tried to overcome this, if at all.

5. Some would say that effective PR facilitates dialogue, negotiation and two-way relationships between organizations, the public, the media, government and industry, etc. What does a statement like this mean to you? Does your organization have a relationship-building strategy? What kind of methods do you use?

6. Does your organization use social-networking services like *Twitter* and *Facebook*? If they do, how do you feel about it in terms of strengthening campaign support. If it doesn't, why is that?

7. Some organizations like the Red Cross have found tremendous success through mobile giving campaigns that allow individuals with cell phones to contribute through short codes. What are your thoughts on this practice? What are some of the ways you have used new media technologies for donations?

8. Some marketers see social networking sites as a strategy to reach a fragmented audience through user's relationships. In terms of your organization, have you found that social network permeation is effective?

9. What about the costs of using new media technologies? Are employees given mobile devices or do they purchase their own?

10. In terms of the costs of short codes, messaging and processing transactions, have mobile technologies expanded or reduced the costs of communication and transaction?

11. Does your organization have a broadcast program (eg. television, web video, radio, etc)? If so, what is the format?

12. How do you keep your supporters updated on news? Are you regularly updating a blog or sending an E-mail?

13. What would be your desired audience use of technology for your organization?

14. How sophisticated is your organization's use of technology?

15. What kinds of devices and platforms is your organization most familiar with?

16. Is there a Web technology that hasn't worked for your organization, in your opinion?

Letter of Information

Dear (Name of potential participant),

My name is Maggie MacAulay and I am a graduate student at Carleton University with the School of Journalism and Communication. With my supervisor, Dr. Josh Greenberg, I am part of a larger project about the communications strategies of environmental groups in Canada, funded by both the Social Science and Humanities Research Council (SSHRC) and an Ontario Graduate Scholarship (OGS). As part of my master's thesis, I am researching how environmental activists use social media and mobile technologies. Would you be willing to speak to me about your own experiences?

Interviews and Research Process

I will be conducting research at the UN COP15 Climate Change Conference in Copenhagen, DK from December 7-18, 2009 and would like to interview you on-site so that I may see how activist communication functions "in the field". I would also like to request a follow-up interview to address certain questions that may have been omitted in the frenzied nature of activism. At any point you are free to decline answering questions or end the interview. Interviews will be audio and/or video recorded and transcribed for research purposes and a copy can be requested in the event that you would like to clarify or retract certain points. You may also request access to the final manuscript by contacting me. Along with the interviews, I will also be performing an analysis of the tweets and online conversations of activists during the conference in Copenhagen from November to January to see how activism manifests itself in the online sphere and so I would like to request access to your organization's Twitter and/or Facebook page.

Personal Information and Security

Personal information obtained during the study will be kept in a password-protected file on my computer and shared only with my supervisor and his collaborator. After a period of 5 years the document containing this information will be permanently deleted from the computer hard drive. Recordings will be digitally archived on a password-protected computer and backed up to an external hard drive, which will be kept in a locked cabinet in my supervisor's office. The recordings will be permanently deleted after a period of 5 years.

Ethics, Confidentiality, Anonymity, Disclosure

This project has already been subject to review, revision and clearance by Carleton University's Research Ethics Board. Although I do not anticipate that the information you give me will cause any sort of organizational or personal conflict of interest, you may request to be represented through pseudonyms and not be personally identified in any reports, thesis chapters, research articles or presentations. This project attempts to explore how environmental activists use technology and so specific figures or groups need not be named. You may also request to withdraw from the project if you so desire. In the event that a crime is committed by participants onsite and I happen to capture it, I may have to

surrender materials to the authorities if I am subpoenaed. By signing the consent form (attached below) you acknowledge the potential risks involved and agree to participate with this knowledge.

Implications

This area of research is relatively new in the field of communications. Interviews with environmental activists will provide rich data and knowledge for those of us interested in how mobile communications devices can facilitate dialogue between organizations, the public and the media. Do the relative inexpense and interactive nature of Internet technologies enhance or revitalize communication? Do these technologies help level out the playing field vis-à-vis corporations? These are the types of questions I hope to explore.

Because social media is such a new technology and because researchers have not quite yet fully grasped the nature of its use, particularly by environmental activists, the ability to understand these uses would be helpful for groups trying to create messages for a mass audience and understand how activist communication is different than corporate or institutional forms of communication.

Contact

If you are interested and would like to arrange a meeting, you may contact me via E-mail at mmacaula@connect.carleton.ca. You may also contact Carleton University's Research Ethics Board Chair, Prof. Antonio Gualtieri or my supervisor, Prof. Josh Greenberg via the contact information provided at the end of this letter.

Looking forward to meeting with you

Maggie MacAulay (researcher)

Prof. Josh Greenberg (supervisor)

For more information, please contact:

Prof. Antonio Gualtieri, Chair
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Consent Form

I, _____ have read the above letter and understand that I am participating in a research project and I voluntarily agree to participate.

_____
(Signature of participant)

_____
(Date signed)

Oral Consent Script

Hello

My name is Maggie MacAulay and I'm a Canadian graduate student with Carleton University's School of Journalism and Communication. I am researching how environmental activists use mobile technologies at the COP15 Conference. Do you have 10-15 minutes to talk to me about how you are communicating to others while you are here? Would you also be willing to participate in a follow-up interview in case our interview gets cut short by the action at the conference? I also have a written consent form outlining the project that you can sign.

This project will help us better understand how non-profit groups use mobile technologies. Are you willing to be recorded while you are interviewed? If not, are you willing to be interviewed without recording? I understand that you might not want personal information revealed due to the nature of your work but I will make every effort to conceal your identity with pseudonyms and change details if you are concerned about this. The only exception would be if you participated in an illegal activity that was recorded and I was subpoenaed by police. This project has been reviewed and approved by my university's Research Ethics Board and I can provide you with contact information to the Board's chair if you have questions or concerns.

This interview will only be accessed by myself and my research team and data will be stored in a locked and/or password-protected place. 5 years after the project is complete, the data will be destroyed. I also want you to know that participation is voluntary and you have the right to refuse to answer any questions and you may end this interview at any time. We can also exchange contact information and I can provide you with a copy of the interview and the manuscript so that you may make any clarifications or changes you deem necessary. Shall we begin?