MANAGING CHAOS, 140 CHARACTERS AT A TIME:
HOW THE USAGE OF SOCIAL MEDIA IN THE 2010 HAITI CRISIS ENHANCED DISASTER RELIEF

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Social Media, the 2010 Haiti Earthquake, and Disaster Relief

Since we’ve been overtaken by events, at least let’s try and organize them.

Jean Cocteau

Disaster Relief and Technology

In *The Charity of Nations*, Ian Smilie divides the world of humanitarian relief into three broad sets of people and organizations:

The first is composed of those in need—refugees, displaced people, victims of war and famine, people trying to put their lives back together after a cataclysm. The second set is made up of the front-line organizations that minister to them: UN agencies, international and local NGOs, the Red Cross movement, private sector firms, and sometimes the military. The third set is made up of those who pay the bills: mainly the governments of industrialized countries and the individual donors who make contributions to NGOs.¹

The interaction between these sets of people and organizations is crucial to the world’s ability to react to humanitarian crises and provide disaster relief. However, enabling collective action among disaster survivors, front-line organizations, and donors has continually proved difficult to disaster relief efforts. In Web 2.0 social media, the world may have found a way to narrow the gaps between these three categories of people and organizations by improving channels of contribution, communication, and coordination. This possibility was widely demonstrated during the massive relief effort that ensued following the 7.0 magnitude earthquake that struck Haiti on January 12, 2010.

This project seeks to answer the questions, “What role did social media play in the 2010 Haiti Earthquake relief effort?” and, “What do social media offer to the future of disaster relief?”

By analyzing the role of social media as a product of the Web 2.0 revolution, and by examining their varying usages in the Haiti crisis, this project attempts to document social media’s current and likely future contributions to disaster relief. This question is significant to disaster relief because the usage of social media is dramatically increasing in the U.S. and world communities; the extent to which social media technologies should be incorporated into disaster relief initiatives should be analyzed in order to promote their usage in the best ways possible. If they play an important role in the future of disaster relief, it is vital to examine the ways in which social media are best incorporated into relief initiatives in order to maximize their future effectiveness. On the other hand, if social media prove relatively unimportant, or even harmful to the future of disaster relief, their usage is worth analyzing so that they might be more effectively applied to relief initiatives in the future, or further, so that their application to such situations might be strictly limited.

In any case, social media technology will continue to develop and expand rapidly in future years. The possibilities they can achieve are still untapped to a great degree. This project will speculate as to likely future developments in social media technology and the role of these developments in disaster relief. Based on this analysis, this project will make recommendations to the U.S. government and military regarding the current and future usages of social media technology in disaster relief initiatives. Through these methods, this project seeks to promote a better understanding of social media and its advantages and limitations in the field of humanitarian disaster relief.

Based on the widespread accounts of the uses of social media in the Haiti relief effort, this project proceeds under the proposition that social media technologies provide at least some value to disaster relief. While so far there has been minimal academic research and debate on the
usefulness of social media technologies in disaster relief, there furthermore has been limited debate on the usefulness of social media in governmental and military affairs more extensively. Along with non-governmental organizations (NGOs), militaries and governments are the three most important actors in disaster relief efforts; in this sense, the usage of social media by governments and militaries (as well as by NGOs) more broadly is important to any discussion of the usage of social media in disaster relief.

Competing Perspectives

In this arena, one line of thought argues that social media are extremely useful tools to the U.S. military and government, but makes little mention of their limitations specifically or generally. With global time spent on social media sites up 82 percent from the previous year alone, it would not be unreasonable to believe that the future of the U.S. government and military depends critically on their abilities to leverage social media.² It would be conceivable for social media to potentially replace many forms of communication, just as Twitter interaction (real-time information sharing software characterized by messages 140 characters long or fewer) has replaced other forms of interaction (written, telephone, and sometimes even email) for many people. Likewise, government agencies such as USAID are reaching out to the public through social media as a partial replacement of traditional outlets, as are companies advertising, marketing, and recruiting through the use of social media tools instead of alternatives. Current literature aggrandizes social media to new heights, claiming that they are becoming the centerpiece to just about everything. Likewise, the claim that social media enable an important

enhancement in international contribution and collaboration in disaster relief efforts—in ways that have never before been possible—could be viewed alternately as a reasonable notion or a commonplace exaggeration of the potentialities of social media.³

According to this latter line of thought, social media have little place in the military, and likewise in the government. As with all data, information disseminated via social media can potentially end up in the wrong hands. The difficulty with social media is that their viral nature enables them to greatly magnify mistakes, due to their ability to disseminate information at such unprecedented rates. For example, the Office of the Director of National Intelligence cited security concerns as the rationale behind its decision to shut down the U.S. government-wide secure information sharing and communication systems “uGov” and “Bridge.”⁴⁵ As social media-based information sharing networks greatly increase individuals’ access to sensitive information, these collaborative databases could increase the damage caused by defectors or cyber attacks. Likewise, the U.S. military’s eventual decision to allow its personnel to access social networking sites while abroad was only finalized after years of uncertainty and incoherent policy: innocuous bits of information posted by soldiers to social networking sites could be pieced together by enemies to give away sensitive information regarding U.S. military efforts.⁶


Activist Brian Reich offers a different concern directly related to social media-based disaster relief initiatives in Haiti: “I fear that most of the innovative uses of technology that people rushed to deploy either won’t help much, or worse, may have been a distraction.”\(^7\) In this sense, while social media are tremendously useful for social networking and business, their utility to the government and military could potentially be outweighed by their inherent risks or problems.\(^8\)

### Project Hypothesis and Contribution

Positions for and against the incorporation of social media into U.S. government and military functions are offered mainly through informal statements by officials, and while such remarks are scarce in general—perhaps social media are too new in practice, or too innocuous in perception, to spark much strongly opinioned public commentary—academic publication of social media’s usage in government and military has so far been all but ignored altogether. Somewhere between the extremes in viewpoint is the notion—which many public officials likely observe—that social media technologies are neither a waste of time and money nor a universal cure to the U.S. government’s and military’s difficulties.\(^9,10\) This project shares this last hypothesis, more specifically the hypothesis that while social media provide important advantages to disaster relief, they are not an altogether new form of disaster relief technology or

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methods; rather their primary addition to disaster relief is their capability to update and build on current non-social media disaster relief methods and technologies.

Additionally, this project seeks to go one step further, identifying how exactly social media benefit disaster relief, and through what methods their utility might be maximized. While it seems a reasonable expectation that social media would be a useful addition to government and military disaster relief technologies, but with limits, this project seeks to actually show the extent of the utility of social media in these situations. In this way, this project will articulate the position that social media are useful but limited, as other statements and research have neglected to do in the past. Both positive and negative aspects of social media in disaster relief so far have been left unexplored by academics, which is not altogether unsurprising in such a new research topic. This project will show both sides—what social media can and cannot do—and will explain a reasonable middle ground for the incorporation of social media into disaster relief efforts, none of which has been done yet by academic research.

In these ways, this project seeks to provide a foundation for the research topic of social media in disaster relief. Furthermore, this project makes an original contribution to a number of overlapping subjects: disaster relief, emerging technologies, government and military operations, and humanitarian crises security. Through a combination of primary sources including interviews and journal entries, and secondary sources including news articles and academic publications, this project will provide an overview of the developing relationship between social media and disaster relief, as well as original research on the subject matter. As emerging technologies—social media included—continue to develop and expand, and as militaries, governments, and NGOs continue to provide humanitarian disaster relief, the importance of this subject will continue to increase. Social media will continue to prove important to disaster relief, as well as to
governments, militaries, and NGOs more broadly. This project will attempt to chronicle the usage of social media in the Haiti relief effort, to identify the ways in which social media potentially alter the field of disaster relief, and to envision its likely role in disaster relief in the future.
How are Social Media Related to Disaster Relief?

*Business today consists in persuading crowds.*

T. S. Eliot

The Web 2.0 Revolution and Social Media

The term social media or “new” media refers to the group of technologies associated with rapid information dissemination via highly accessible web-based platforms. Social media represents a fundamental transformation of broadcast media monologues into multiple community dialogues, mirroring the Web 2.0 revolution of the Internet. “Web 2.0” refers to the fundamental shift that swept across the Internet at the dawn of the 21st century, transforming the information producer-consumer (one-to-many) model into a network in which every user has the ability to produce and consume Internet content (many-to-many). Through these terms, Tim O’Reilly’s article, “What is Web 2.0” is probably the most successful work in explaining the Web 2.0 revolution and the rise of social media.11

Important examples of Web 2.0 social media include blogs (individuals or groups producing ongoing narratives of information), wikis (collaborative information productions and collections), Facebook and MySpace (streamlined social networking programs), eBay reputation (performance-based user reviews), Flickr (highly accessible photo sharing software), YouTube (community-based video sharing software), Google Maps (mapping software enabling collaborative point of interest sharing), Amazon user reviews (comprehensive user contribution

to product reviews), and Twitter.\textsuperscript{12} For a technological application to be considered a “2.0” technology is not for it to be the second version of something, or the twentieth version of something; instead, it means that the technology is characterized by data sharing and collaborative information collection and organization.

While some studies identify text messaging as a form of social media, this one does not. Text messaging does not characterize collaborative information sharing and organization in the same manner as do the other technologies listed in the study. Text messaging would likely fit better under the “new media” label than the “social media” label. As a direct extension of cell phone technology, text messaging is likely part of a broader technological revolution—of which social media tools are a distinct part—that likely has greater implications on the field of disaster relief.\textsuperscript{13} As U.S. Army Major Kelly Webster wrote about his time as a part of the Haiti relief effort, “In the initial weeks of Operation Unified Response, Blackberry text messages became the primary means of communication, chiefly because they were the simplest and most reliable means of corresponding with the host of U.S. Government agencies, United Nations offices, and NGOs coordinating the relief efforts.”\textsuperscript{14} To study the role of cell phones and satellite technology in disaster relief would be beyond the scope of this project, though the findings of this study would speculate that their impact has been and will continue to be revolutionary. In any case, this study seeks to explore the impact of specifically social media technologies on the field of disaster relief, examining whether social media technologies comprise an original revolution of


disaster relief on their own. Their capability to integrate with existing phone and text messaging services will be central to this discussion.

Individuals and Social Networking

During the past decade, individuals have extensively used social media to interact with others and to pursue personal interests. Social media enable individuals to follow these interests, share their ideas, and expand their knowledge in ways that are faster and more efficient than ever before. For social interaction purposes, social media offer individuals a nearly limitless amount of possibilities on the Internet: persons may share, collaborate, follow, and correspond to their hearts’ content, restricted only by their privacy preferences or security concerns. In this way, social media are slightly more useful for individuals over organizations, businesses, or governments—which are subject to multiple preferences and often stricter security concerns. Though they integrate seamlessly with businesses and organizations, social media offer the greatest number of possibilities to individual users. Social media and the Web 2.0 revolution provide a greatly enhanced Internet experience to individuals by enabling them to contribute to content, harnessing collective intelligence and user-added value. By “crowdsourcing” the perceptions and opinions of millions of web users, websites improve their abilities to provide useful content.15,16,17


Social Media and Business

These changes in the participatory structure of the Internet have additionally brought change to the business world, as companies have begun using social media to enhance their advertising, marketing, and sales capabilities. Along with O’Reilly’s “What is Web 2.0,” Erik Qualman’s *Socialnomics* is an immensely useful work in understanding this phenomenon.\(^\text{18}\) Social media software enable businesses to more effectively reach out to customers than ever before. Businesses are more capable of specifically tailoring their advertising campaigns to interested markets via social media-based information gathering tools. Social media has also inspired a revolution in product branding, as companies reach out to client networks, adjusting products based on information disseminated from customers through social media outlets.\(^\text{19}\) People referring products and services via social media is the new king in business.\(^\text{20}\) A variety of sources discuss the growing role of social media in business, though as with other applications of social media, the business world is only beginning to explore and understand social media’s variety of potential future applications.

The U.S. Government and Military Begin to Incorporate Social Media

More recently, the U.S. government has begun to embrace social media, and in a sweeping manner. Though it has been more cautious and less comprehensive in its applications of them, the U.S. military has begun to do the same. All military branches and most government organizations now use Twitter, Facebook, and Flickr to reach out to American populations in

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\(^\text{20}\) Qualman, xviii.
order to build goodwill and transparency. These tools also enable them to contact potential recruiting, constituent, and grassroots networks to share information and to pursue organizational objectives. They further enable substantially increased interaction between the people and their government and military, and with one another regarding related issues. Groups are able to more effectively communicate their views to the government, and the government is more effectively able to tentatively gauge widespread opinion concerning policy. Various government agencies also use interactive maps to alert citizens regarding traffic patterns, crime waves, and other live-updating statistics. Additionally, the government designed a government-wide wiki-style classified information database, “Intellipedia,” to foster collaborative participation and interagency information sharing. Finally, the U.S. military has begun experimenting with collaborative wiki-style training manuals to make training and educational functions more practical and effective.21 Through this variety of methods—and as with social media’s usage in business—the U.S. government and military are only beginning to explore social media’s multitude of potential applications in improving their service. This diverse set of methods and practices are most thoroughly explored in William Eggers’s Government 2.0.22

Mark Drapeau and Linton Wells II provide a useful framework for analysis of the usage of social media in government applications in their work, “Social Software and National Security: An Initial Net Assessment.” They describe four broad government functions of social media that contribute to the national security missions of defense, diplomacy, and development:

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inward, outward, inbound, and outbound information sharing.\textsuperscript{23} First, inward information sharing is one agency’s ability to effectively disseminate information among its own ranks. This idea refers to social media’s capability to increase information sharing within agencies through collaboration-based databases and systems, such as the military’s experimentation with collaborative training manuals. Second, outward sharing is an agency’s ability to share information with other agencies. This idea refers to interagency information sharing databases and networks such as the Intellipedia project.\textsuperscript{24} Third, outbound sharing is an agency’s ability to share information with extra-governmental actors. Examples of this include the government’s and military’s attempts to disseminate information to the public via Facebook, Flickr, and Twitter. Finally, inbound sharing is an agency’s ability to receive shared information from other agencies and outside actors. This concept refers to the government’s and military’s attempts to gauge public opinions and reactions to policies via Facebook, Twitter, and other social media outlets. While perhaps overly straightforward, these four types of information sharing identify the central ways in which social media enable the government and military to more effectively interact with their constituent populations, as well as within their own ranks. Through these functions, social media enhance the government’s and military’s flexibility, transparency, and avenues of collaboration.


Social Media’s Beginnings in Disaster Relief

As social media continue to develop and expand, their potential usefulness seems to increase more and more. Most recently, social media have been incorporated into disaster relief initiatives. This latest application of social media so far has been largely undocumented by academic publications, perhaps because it is such a recent phenomenon. George Haddow’s and Kim Haddow’s *Disaster Communications in a Changing Media World* is one of the few works that provides a brief overview of the initial uses of social media in disaster relief efforts. It primarily focuses on the 2008 cases of the Burma Cyclone and the Sichuan Earthquake, instances in which social media were particularly useful for their capability to permeate government efforts to restrict traditional media from publishing negative stories.\(^{25}\) Social media technologies were additionally leveraged during previous crises, including particularly during the 2007 Southern California Wildfires crisis, a case in which social media demonstrated their utility in disaster relief efforts via mash-up mapping and microblogging software (primarily Google Maps and Twitter).\(^{26}\) Other mechanisms, including blogs, wikis, and people finding software began playing a role in disaster relief efforts in the first half of the 2000s.\(^{27}\)

In all of these cases, social media began demonstrating their initial usefulness to disaster relief efforts primarily through their ability to inform the outside world regarding the details of the crises. These initiatives increased disaster relief efforts’ access to news coverage, improved international awareness, and galvanized global participation and financial contribution. Social media also played a more minor role in enabling victims to access live-updating relief


\(^{27}\) Haddow and Haddow, 43.
information (in situations in which local populations possessed widespread Internet access, such as during the 2007 Wildfires crisis). A basic understanding of the ways in which survivors and humanitarian actors leveraged social media tools in these relief efforts is important for understanding the social media-based relief efforts in the 2010 Haiti relief effort. Rather than discussing each of these social media-based disaster relief tools with respect to their emergence as technologies and initial incorporation into disaster relief efforts, this project will discuss them in the following section by comparing their usage in Haiti to their previous uses in disaster relief efforts.

The difference between previous social media-based disaster relief efforts and those in the 2010 Haiti relief effort is that the social media-based relief efforts in Haiti were incorporated on a much grander scale. In Haiti, many of the social media tools leveraged in previous disasters were combined in unprecedented ways, enabling a substantially increased level of international participation and contribution. Through these methods, social media technologies contributed more to the disaster relief effort in Haiti than they did to any preceding disaster relief effort. The social media-based relief initiatives in Haiti significantly altered the ways in which the international community provides disaster relief. It is crucial to examine these extensive uses of social media in Haiti in order to develop an understanding of the ways in which they likely will be incorporated into future disaster relief efforts. By studying the advantages and disadvantages of applying social media to disaster relief initiatives, the international community can better prepare itself to administer their usage in the future, and to develop other methods for approaching problems which social media cannot ameliorate on their own.
How Social Media Improved the 2010 Haiti Disaster Relief Effort

*Mighty things from small beginnings grow.*

John Dryden

New Relief Possibilities from New Technologies

The relief efforts following the 2010 Haiti Earthquake were the product of immense global activism. They were also the result of the application of a variety of innovative new technologies. Social media in particular played a substantially larger role in the Haiti relief effort than they had in any previous disaster relief effort. In the Haiti effort, social media tools incorporated into previous disaster relief initiatives were increased in scale, and new social media-based platforms and databases were developed to enable drastically improved levels of international relief contribution. Social media proved extremely effective at enhancing the ways in which traditional disaster relief efforts are implemented, if unable to replace traditional disaster relief methods and technologies altogether. The three ways in which social media most significantly altered the disaster relief efforts in the Haiti crisis were by enhancing technical search and rescue operations, expanding volunteerism opportunities, and increasing Haiti’s access to news coverage. Together, these developments substantially improved the overall relief effort in Haiti, and forever enhanced the field of disaster relief.

Enhancing On-the-Ground Operations

Social media dramatically improved Haitians’ and outsiders’ abilities to locate missing persons and repair critical infrastructure. Moments after the earthquake struck, social media
served as a first responder. A small amount of survivors who were unable to use phone lines to alert their status to friends and family—due to massive infrastructure breakdowns—used social media to do so, primarily through Facebook and Twitter.\(^{28}\) Individuals with Internet access, those who did not lose power, also used social media to describe conditions of local structures and to communicate locations of potential survivors to search teams as relief organizations began to arrive on the scene.

Open-source mapping software also played a pivotal role in these efforts. A variety of organizations created mapping programs to track developing relief initiatives, identifying locations of medical centers, relief shelters, and emergency threats. Individuals with Internet access could log on and update local data; even when individuals were able to share only small amounts of information, the extensive levels of on-the-ground and international contribution accumulated to create expansive and detailed response maps. These maps were further able to identify the areas most badly damaged by the earthquake, allowing relief teams to more effectively navigate the streets. Non-mapping inbound and outbound information sharing databases likewise were centrally important to relief coordination among major relief organizations. Regarding the value of collaborative information sharing systems to a multitude of relief organizations, Christopher Daniel—chief operating officer of the NGO World Connect—said:

> Through the Logistics Cluster … just about any organization who is involved in response can tap into this, can participate within the coordination meetings; that doesn’t mean they all do, and it doesn’t mean they’re perfect, but it does give you the opportunity to identify many of the resources that are coming in … You can utilize an online system to identify some of the goods as well as services such as

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transportation that are available, and put in a request. It doesn’t always mean you will get what you want or what you need, but it is available.\(^2^9\)

For any organization that chose to participate, these social media-powered Internet databases steadily increased their access to relief supplies and services. Before the Haiti crisis, these tools had never been so comprehensively integrated into on-the-ground relief efforts. In Haiti, these efforts experienced measured success: by combining multiple technologies, and by allowing large numbers of individuals and organizations to provide live information, social media enabled a diverse group of rescuers to coordinate complex relief initiatives.

Social media additionally enhanced governmental initiatives in assisting ongoing relief and rebuilding efforts in Haiti. The Department of Homeland Security joined the social media disaster relief movement by creating the Haiti Social Media Disaster Monitoring Initiative. The initiative was designed to track up to 60 social media websites in order to learn about conditions in Haiti and send alerts to U.S. Government agencies in the country.\(^3^0\) In one example, a Homeland Security employee discovered a message on Twitter giving the location and coordinates of a person trapped under a building. The Department of Homeland Security forwarded the information to the State Department, which sent a rescue team to the site. In this way, social media enabled foreign governments to involve themselves more closely with on-the-ground efforts to deliver relief with Haitian earthquake victims in need.

Finally, blogging from the disaster-affected area played a critical role in preparing incoming relief teams for their upcoming roles. As Kate Moon, a physician’s assistant who deployed to Haiti with an independent group of medical volunteers, said, “The UN representative


at our clinic blogged daily to reach out to groups coming in following ours. New teams coming in were significantly better prepared than we had been; they knew what to bring, what they were going to do, what their roles would be. The blogging was amazingly helpful.\textsuperscript{31} Under these circumstances, there was no time for training. Blogging served as a tool for uploading large amounts of information onto the web, which numerous groups could access at any time; in this situation it was much more efficient than other forms of communication, such as making dozens of phone calls.

The use of Twitter, blogging, and crisis mapping software in search and rescue operations were not at all new to disaster relief during the Haiti relief effort. Twitter had been used previously as a relief tool in a number of crises, as had Google mapping software, particularly in the Southern California Wildfires Crisis.\textsuperscript{32} What was unique in Haiti was the extensive role these tools played in technical operations, particularly with the U.S. government collaborating with outsiders through these tools, and with Google directing a satellite to catalog damaged infrastructure and safe zones.\textsuperscript{33} The U.S. military even diverted a spy drone from Afghanistan to further this effort.\textsuperscript{34}

\textsuperscript{31} Moon, Kate. Physician’s assistant student involved in the Haiti relief effort with an independent medical volunteer group. Personal interview. April 6, 2010.


Expanding Foreign Volunteerism Opportunities

Social media technology drastically increased the global public’s ability to contribute via microvolunteerism. Through three main activities, individuals were able to contribute volunteer work from anywhere in the world to help provide relief to survivors in Haiti. The Haiti earthquake relief effort marks the single greatest microvolunteerism effort in human history; social media made this effort possible by providing new avenues of communication and collaboration.

First, foreign volunteers contributed by developing computer programs and technology applications to assist the relief effort. Many of these programs helped enable the massive social media relief effort that proceeded. The program “We Have We Need” was quickly developed as a Craigslist-type database enabling relief providers and donors to connect in order to distribute telecommunications equipment, medical supplies, food, and other items to the people that needed them most. Ushahidi, a program originally designed to track election violence in Kenya, created Haiti.Ushahidi.com, a site that tracks people, emergency incidents, and search and rescue operations. The maps created for this initiative rely on an open-source mapping program that depends on volunteers to provide geographical information. Prior to the earthquake, the map of Haiti contained only major roads. A day after the quake, Port-au-Prince had been almost completely mapped by groups of volunteers, a task that normally would have required a great

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deal of time and money. These maps enabled people on the ground to more effectively provide relief when and where it was needed.

Second, foreign volunteers contributed to the Haiti relief effort by participating in people locating projects. One example, the Haiti Earthquake Support Center project, created by “The Extraordinaries” — a micro-work volunteer website—allowed volunteers to log online to match photos of missing persons in Haiti to pictures taken at relief centers. By doing this, friends and families of the missing individuals would be alerted that the missing were safe. Individuals would post photos of missing relatives and friends, and others would post photos taken at relief centers. Volunteers had two primary tasks: to sort and tag these thousands of photos by age, gender, and other attributes in order to develop a missing person database, and to sift through this database in an attempt to match missing persons with people photographed in relief centers. Each time a match was confirmed, the survivor’s friends and family would be alerted: a photo of the survivor had been taken at a relief center; thus the survivor had made it out of the destruction and was out of immediate danger. The organization also created an iPhone application, which allowed volunteers to work remotely. Through these implementations, social media enabled volunteers to contribute to the relief effort from anywhere in the world.

Third, foreign volunteers assisted the Haiti relief effort by participating in “crisis camps,” groups that would do both of the aforementioned activities, and also scour Twitter and other social media sites for information from victims. They would respond to requests from relief teams on the ground in Haiti, looking up coordinates for buildings, finding directions, and

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answering other needs from people on the ground with limited technological access. These crisis camps set up command centers in major cities including Washington, Los Angeles, London, and Bogota, pooling the efforts of groups of volunteers to provide assistance to survivors and relief teams in Haiti. Google also created a crisis response center to provide similar initiatives. Along with missing person finders and mapping systems, these crisis relief centers were a significant contribution to the Haiti relief effort as an example of microvolunteerism through the application of social media technology.

As noted above, crisis mapping software existed before the Haiti crisis. What was different in the case of Haiti was that it was highly collaborative, opened up to the entire Internet so that anyone could contribute. It was also integrated with other social media-based technologies, so that individuals on the ground could create and update points of interest via mobile phone technology. Likewise, people locating projects existed before the Haiti crisis, but not to the same extent. The Hurricane Katrina relief effort inspired the creation of the Katrina PeopleFinder Project, a volunteer-based program that combined lists of survivors and missing person requests. People finding programs in Haiti took this effort one step further, combining list-matching projects with photograph-matching projects, enabling them for mobile system use, and opening them up to the entire world. The development of crisis camps was a phenomenon original to the Haiti relief effort, which quickly took off in cities across the world. When an 8.8 magnitude earthquake struck Chile only a few weeks after the Haiti Earthquake, crisis camps, the Google crisis response center, and other foreign volunteerism opportunities were quickly


replicated for the comparatively minor disaster relief effort that followed.\(^{45,46,47}\) As Patrick Meier—the director of crisis mapping at Ushahidi—wrote, the organization “simply cloned the Ushahidi-Haiti version for Chile … So everything is actually moving twice as fast.”\(^{48}\) The Haiti relief set the tone for the disaster effort in Chile, which turned out to be significantly less devastating than had been expected, but likely Haiti also set the tone for future major disaster relief efforts as well.\(^{49}\)

Increasing Access to News Coverage

Social media also served as an extremely effective tool for keeping Haiti in the news. The rapid growth of social media has enabled everyone with access to technology outlets to receive live-updating information on disaster relief efforts. Social media’s ability to seamlessly integrate with traditional media outlets sustained a heightened sense of urgency as the days and even weeks passed.\(^{50}\) Various television and Internet news outlets featured live-updating Twitter and Facebook messages from individuals on the ground in disaster relief initiatives. As a result,


traditional news coverage of relief efforts was more comprehensive, and as a result of its real-
time characterization, likely more compelling as well.

As the weeks passed and journalists began to leave the scene one by one, disaster relief
providers were able to fill the gap by continuing to update their social media outlets—Twitter,
Facebook, and blogs—which were in turn integrated with traditional media outlets. Even after
the majority of journalists returned to their homes, relief providers continued to supply new and
traditional media sources with photos, interviews, and updates. Popular access to high-quality
cameras, cell phones, and the Internet made this effort possible, with the help of highly
integrated information sharing technologies. Facebook soon created a page dedicated to
providing disaster relief information. As a result of these phenomena, an issue that might
normally have become unpopular after dominating traditional news outlets for several weeks was
given additional time on the front pages and headlines.

As the Haiti relief effort was given an extended stay in the news, relief efforts received
continued funding and support. As Tim Poster, author of the blog First Draft said, “The
participatory nature of [social media-based] news coverage … erases the line between those
affected by the news and those who cover the news. In a world of digital and reflexive
communication, we are all reporters.” This statement reflects the ability of social media to open
up news coverage to individual participants, donors, victims, and even distant observers. More
time in the news kept Haiti relief efforts in daily conversation longer, kept microvolunteers

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http://www.computerworld.com/s/article/9145259/FacebookCreatesSiteDedicatedToProvidingEarthqu
ake_info

52 Haddow and Haddow, 37.
engaged longer, and allowed the viral social media-powered “text ‘Haiti’ to 90999 to donate $10 to Haiti” campaign to continue running longer.

In the past, massive disasters have generally yielded an initial outpouring of humanitarian relief, which would then quickly subside.\(^{53}\) Perhaps, for the first time, social media have demonstrated that they are capable of slowing or reversing this trend. One organization, operated by the popular technology magazine *Wired*, has established itself as an ongoing recovery tool for Haiti. “Haiti Rewired” is a collaborative, social media-powered network of blogs, forum discussions, and volunteering outlets, designed to serve as an ongoing conversation about technology, infrastructure, and the future of Haiti.\(^{54}\) While traditional news media have generally long since given up on covering Haiti, at the date of submission of this project (three months after the earthquake), Haiti Rewired is still engaging discussion and contribution.\(^{55}\) By enabling the broader public to contribute in the publication of news and updates, social media give the rebuilding effort in Haiti additional life. Social media, in these ways, benefited the relief efforts in Haiti by increasing their access to news coverage, via both traditional and alternative outlets, which in turn benefited numerous other aspects of the relief effort.

Social Media’s Role in the U.S. Military’s Haiti Relief Efforts

As noted earlier, in the past few years, the U.S. military has begun to incorporate social media tools into its operations as well. Foreign disaster relief missions are an important part of U.S. military operations. Sometimes viewed as a distinct—if vitally important—actor in

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\(^{53}\) Livingston.


international disaster relief, the U.S. military’s role in disaster relief efforts is important to any discussion of humanitarian relief missions. Likewise, the military’s decision to apply social media technologies to the disaster relief efforts in Haiti, or its decision not to do so—as well as its level of success in the matter—is significant to this discussion. Though the military, for well-reasoned security concerns, has not been as quick to adopt social media into its operations as quickly as many NGOs and governmental organizations, it occasionally applied social media-based relief initiatives during its Haiti relief efforts. As with non-military social media-based disaster relief initiatives in Haiti, these efforts were successful and important, though not by providing replacements to current non-social media disaster relief techniques, but by providing moderate enhancements to them.

The U.S. military was given an extremely specific role in the Haiti relief effort as agreed by the U.S. government, Haitian government, and UN. The U.S. military’s role was defined by a Statement of Principles on Field Coordination:

> to ensure the safe and effective functioning of the transportation infrastructure, including: the identification and preparation of staging sites; protection of air and sea port installations; and access to air and sea ports and roads … [and] to assist as needed in augmenting security in support of the Government and people of Haiti and the United Nations, international partners and organizations on the ground.\(^{56}\)

The U.S. military coordinated very closely with the Logistics Cluster (run by the World Food Program), in optimizing the use of supply shipments. The two worked together to schedule flight slots and increase the number of overall shipments to the Port-au-Prince airport.\(^{57}\) Since the

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international relief effort in the Haiti crisis was so massive, there were actually more flights than the airport was able to handle. Social media-based databases were vital in scheduling and organizing flights in order to maximize the airport’s efficiency, with planes landing at all hours of the day and night. The U.S. military also worked closely with the Logistics Cluster in providing security to areas in which local law enforcement bodies did not operate. Information sharing and mapping databases were crucial in these efforts. Beyond its primary security and port operation missions, the military further collaborated with on-the-ground NGOs to develop a social media-based database—or humanitarian assistance common operational picture (HA COP)—to locate Haitians in need of assistance and match them with capable providers.

While the U.S. military’s role in the relief effort was specifically defined as somewhat separate from those of many NGOs and other organizations, social media still played an appreciable role in the military’s ability to coordinate its activities, primarily through the scheduling of flights via inbound and outbound information sharing databases. Social media tools further increased the military’s avenues of coordination with NGOs via the HA COP. However, compared to NGOs’ and other actors’ use of social media, the military actually incorporated social media tools into its operations on a limited basis. Most military operations generally proceeded as normal, except with an increased emphasis on online coordination and scheduling. Social media played a more central role for other relief actors, especially for outsiders interested in contributing to the effort via the Internet, and for on-the-ground relief.

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59 Webster, 3.

providers using crowdsourced mapping databases. The military’s role—once defined by the Statement of Principles—was somewhat separate from these sorts of tasks: to enforce security, and to operate ports and medical facilities—tasks confined specifically to the military’s own specific areas of operations.\textsuperscript{61}

Why the Haiti Relief Effort was Different

Social media have likely changed disaster relief forever. Future natural disaster relief efforts likely will continue to feature social media-based response initiatives similar to those developed in Haiti, enhancing technical operations, expanding foreign volunteerism opportunities, and increasing access to news coverage. As social media continue to develop and expand, their growth likely will enable new advances in technology that supply additional avenues for relief. These new advances in the provision of disaster relief have already been demonstrated to an extent in the 2010 Chile Earthquake, though the disaster was miniscule compared to that in Haiti—despite the earthquake’s significantly greater magnitude—as a result of their comparative locations and characteristics of their affected populations.\textsuperscript{62}

A series of reasons likely magnified the capabilities of social media in the Haiti relief effort, and likely changed the future application of social media to disaster relief. The most obvious of these reasons are the increasing expansion of social media’s role in international society, and the scale of the tragedy. Social media were much more pervasive across international society at the time of the earthquake than they had ever been in the past.

Additionally, the earthquake struck a particularly vulnerable geographical location, one featuring

\textsuperscript{61} United Nations in Haiti and U.S. Department of State.

a massive population and characterized by widespread poverty and failing government institutions. In comparison to many recent crises, Haiti needed help desperately, which likely increased international organizations’ willingness to respond.

Haiti’s close proximity to the U.S. may also have enabled the social media-based disaster relief evolution to take place: the U.S. is a nexus for social media, a highly modernized country, and one with a vast collection of relief organizations. Foreign volunteers and NGOs in the U.S. had substantially greater access to the disaster than they had to the 2004 Indian Ocean Tsunami, for example. NGOs and independent relief volunteers do not commonly have logistical resources expansive enough to project relief influence across the globe in the same way as, for instance, the U.S. military does. The U.S. military commands a prodigious stock of ships, planes, helicopters, and the supplies to remain in place for vast quantities for extensive periods of time. NGOs, IGOs, individual volunteers, as well as other militaries simply do not have the resources to conduct drawn-out far away relief missions. Since the Haiti earthquake occurred so close to the U.S., U.S.-based NGOs and independent volunteers had a much greater capability to reach the disaster site by chartering planes or coordinating with the U.S. military to set up relatively short and inexpensive flights. Haiti’s accessibility allowed them to then set up on-the-ground social media-based platforms to communicate with one another as well as the outside world.

In this sense, a monumental social media relief effort similar to that which took place in Haiti would be likely to take place near, say France or Japan, but less likely in central Africa. While militaries, the UN, and major IGOs and NGOs would be able to reach the disaster, smaller groups and individual volunteers would have an exceedingly difficult time getting to the disaster

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site. While social media relief efforts can take place without them, the great variety of organizations present in Haiti contributed significantly to the extensive social media-based relief efforts that ensued. Additionally, the growing embrace of social media-powered relief tools by the U.S. military in particular—and its usage of them to coordinate with other relief actors—is likely evidence of a continued increase in the application of social media technologies to disaster relief initiatives. As a result, while social media’s impact on natural disaster relief efforts will likely continue to increase on average in the future, it will also be heavily influenced by other variables including the scale of the disaster, geographical location, and characteristics of local institutions.

In any case, the relief effort that followed the 2010 Haiti crisis demonstrated as never before that social media provide substantial advantages to disaster relief efforts. Compared to social media-based disaster relief efforts following previous disasters, those incorporated into the Haiti response were far greater in scale. The Haiti relief effort featured some of the same social media tools that had been used in previous disaster relief initiatives, but dramatically increased in scale. Through the use of social media-powered systems, outsider participation in relief operations was greater than had ever been possible. As a result, crisis mapping and people finding databases were more immense, more detailed, and more comprehensive than they had been in previous relief efforts. Further, social media-based relief efforts in Haiti were often characterized by the combination and integration of multiple social media technologies, in ways that had never before been applied to disaster relief. Persons from other countries used hard copy map information to develop web-based maps of Haitian cities and roads, which were then updated with relief information by relief actors on the ground. On-the-ground NGO and relief provider accounts were more widespread than they had ever been in previous disaster relief
efforts; Haiti was kept in the news, and social media-powered donation systems enabled a maturation in global giving. Through these practices, the social media-based relief efforts in Haiti accounted for a dramatic improvement in the current and future provision of disaster relief. During this response effort, social media were integrated and applied in ways that created new avenues of contribution, communication, and coordination, which not only saved lives in Haiti, but also will continue to save lives in the future.
What Social Media Can and Cannot Do

To redirect technology so that it serves man instead of destroying him requires primarily an effort of the imagination and an abandonment of fear.

E. F. Schumacher

The Limits of Social Media in the 2010 Haiti Earthquake Relief Effort

Social media tools are undoubtedly capable of expediting and improving humanitarian relief efforts, but there is a range of objectives that they cannot accomplish. While they increased a sense of immediacy in responding to the earthquake in Haiti, that did not necessarily equate to a sweeping impact. They brought solace to worried family members, and even saved lives, but no one can say just how many lives they saved. More sophisticated communication and coordination among major relief organizations—with or without extensive use of social media tools—likely could have improved relief efforts in ways that social media alone did not, saving far more lives than were saved by all the collaborative mapping and that took place. While social media can assist in developing new avenues for coordination and cooperation, it is unlikely that they can actually foster coordination and cooperation in ways that traditional technologies cannot. Actual coordination and cooperation depends on the preparedness and willingness of the organizations themselves. Still, for what they can do, and for their future potentialities, social media give the world reason to be optimistic in the future of disaster relief.

The international relief community’s experiences in disaster relief in Haiti will hopefully enable it to be more successful at providing disaster relief in the future. It is clear that social media enable the international relief community to respond to disasters more quickly, and to
sustain response initiatives longer. Yet however important social media are to disaster relief efforts, there are many tasks they cannot accomplish on their own. To be more effective at providing disaster relief in the future, the international relief community must continue to increase its capacity to leverage social media, but more importantly it must find more successful ways to coordinate relief efforts among multiple government organizations, militaries, and NGOs. When coordinated effectively, these groups have the power to open up entrances into disaster-affected countries and manage the receipt and distribution of aid; without their presence first, all other relief efforts—including those powered by social media—fall short. By finding ways to improve these organizations’ abilities to communicate with one another, they will be more effective in performing their own missions and will increase the capabilities of other relief initiatives as well. The world cannot rely on social media alone to accomplish this increase in coordination and cooperation, though their capability to create new avenues of interaction does offer hope.

Social Media in Disaster Relief at their Best

The 2010 earthquake relief effort in Haiti clearly demonstrated the usefulness of social media in improving the abilities of NGOs, IGOs, individual volunteers, and militaries to perform disaster relief initiatives. As discussed in previous sections, social media primarily aided the relief efforts of these organizations by enhancing their technical operations, expanding foreign volunteerism opportunities, and increasing Haiti’s access to news coverage. These three developments displayed on the ground in Haiti, combined with the previous discussion of characteristics of the Web 2.0 social media revolution as a phenomenon, provide an explanation of a series of ways in which social media are the most advantageous in disaster relief initiatives.
The three ways in which social media most significantly advantage disaster relief initiatives are by enabling widespread participation and contribution, increasing information sharing capacities, and improving current non-social media technologies.

Enabling Widespread Participation and Contribution

Social media provide a fundamental improvement in any cause’s ability to engage widespread participation and contribution. The 2010 Haiti Earthquake relief effort exemplified the increase in contribution that social media characteristically enable in disaster relief initiatives on a broader scale. In Haiti, this effort was signified by all four major ways in which social media contributed to relief initiatives: enhancing technical search and rescue operations, expanding volunteerism opportunities, enabling efficient donation systems, and increasing Haiti’s access to news coverage. Each of these categories of relief benefited from an increase in overall international contribution. This enabling of widespread contribution was not specific to the relief initiatives in Haiti; rather, all future disaster relief initiatives will likely benefit from the increasing contribution brought on by social media.

Social media enable individuals to, first and foremost, find and engage topics in which they are interested, and more quickly than ever before. They further enable individuals to participate in causes or efforts remotely. These facets of social media thus broaden the range of potential contributors, as well as the scope of modes of contribution. Social media not only create new modes of potential disaster relief contribution, but they further open new avenues to engage individuals who otherwise might not participate.

In future disaster relief initiatives, social media will continue to broadly enhance technical search and rescue operations—by connecting international mapping contributors to on-
the-ground relief providers. Social media will continue to expand foreign volunteerism opportunities—by enabling individuals, regardless of geographic location, to participate in mapping and person identification projects. Finally, social media will continue to increase disaster relief efforts’ access to news coverage and donation efforts through its viral ability to engage networks of individuals across the Internet. As social media continue to develop and expand, they will furthermore create additional outlets for contribution and participation in disaster relief initiatives. This capability to enable a widespread increase in worldwide contribution and participation is one of social media’s most substantial contributions to the field of disaster relief.

Increasing Information Sharing Capacities

If anything is immediately apparent about social media, it is that they enable information sharing in a more rapid and comprehensive manner than other forms of technology do. Information sharing is vital in disaster relief efforts. Social media enable an important increase in information sharing in disaster relief efforts particularly by introducing technical information sharing databases and by increasing widespread awareness of developing on-the-ground situations. While other technologies are capable of performing these tasks, social media technologies enable substantial improvements in speed and accuracy during disaster relief initiatives. Just as the relief efforts in Haiti benefited from increases in information sharing capacities brought on by social media tools including collaborative spreadsheet databases and crisis response mapping software, future disaster relief initiatives likely will benefit from them as well.

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65 Haddow and Haddow, 35.
In Haiti, social media-based disaster relief information sharing platforms—particularly crisis mapping software and collaborative spreadsheet databases—were effective in alerting on-the-ground NGOs and independent relief actors as to the locations of supplies; the difficulty was that they were not always accessible in the crowded boundaries of the crippled city. Massive stockpiles of medical supplies—unknowable tons of them—lingered at the airport for days at a time as relief agencies struggled to find a means to coordinate their distribution effectively. In this way, Social media technologies can greatly enhance information sharing during disaster relief initiatives, but they cannot force relief agencies to actually coordinate and cooperate. Still, the social media-based information sharing databases that were developed for the Haiti relief effort were unprecedented, setting the standard for information sharing in future disaster relief initiatives.

Not only do social media enable organizations on the ground to more easily share primary disaster relief information, but they also allow external actors to share mapping and logistical information with on-the-ground actors. Social media-enabled inward, outward, inbound and outbound information sharing patterns will all continue to prove crucial to disaster relief efforts, and social media will continue to substantially improve their capacities. Social media will similarly continue to increase disaster relief initiatives’ access to news coverage via information sharing from relief actors to outsiders, and from outsiders to one another. This ability to provide a dramatic increase in information sharing capacities is another of social media’s most significant contributions to disaster relief. The question becomes whether this revolution in information sharing actually equates to improvements in coordination.

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66 Moon. Personal interview.
Enhancing Current Non-Social Media Technologies

Finally, the 2010 Haiti relief efforts demonstrated that social media technologies do not replace current non-social media technologies. Social media technologies signify an important evolution in disaster relief, but they do not generate an altogether new way of doing things. Rather, they enhance current non-social media technologies, providing new avenues—often, but not always, better avenues—to accomplish the same objectives. This phenomenon was clear in the Haiti relief effort, as social media technologies combined with cell phone, satellite, and mapping technologies, as they likely will continue to do in future disaster relief efforts.\(^{67}\)

Though social media likely will prove more important to disaster relief initiatives in the future, their usage would never replace several current technologies that are truly vital to disaster relief efforts. Among these technologies are cell phones, traditional Internet software, satellites, and regular news channels.\(^{68}\) The technology behind these and social media tools overlaps; it would not make sense to expect one to replace the other. Rather, the two are designed to build up and integrate with one another. In this way, social media represent an important evolution of these traditional technologies: their ability to update and enhance current technologies is what makes them so important to future disaster relief initiatives. Social media has a viral capability to reach out to individuals and networks, and in this way it extends other technologies to new avenues of participation and collaboration. Its seamless integration with these other technologies is what enables social media to so successfully perform these tasks.

These phenomena were demonstrated across the board in the Haiti relief effort. Whenever social media technologies were incorporated, they were done so in a way as to build on other technologies, not replace them. In the future, the improvements that social media bring

\(^{67}\) Moon. Personal interview.

\(^{68}\) Abbot.
to disaster relief will continue to serve as enhancements to non-social media technologies. Likewise, the improvements that social media bring to disaster relief initiatives will continue to be characterized by their capabilities to enable widespread contribution and participation and to increase information sharing capacities. And as social media continue to develop and expand, their ability to advance these ideals likely will grow as well. But while social media will continue to prove extremely important to disaster relief initiatives—through their abilities to enable widespread contribution and participation, increase information sharing capacities, and enhance current non-social media technologies—they do not provide an altogether new way of providing relief.

The Limitations of Social Media in Disaster Relief

While social media provide numerous useful advantages to disaster relief actors, they also have shortcomings. Combined with the experiences in the Haiti disaster relief effort, the previous discussion of characteristics of the Web 2.0 social media revolution enables an analysis of the ways in which social media are limited in their capabilities to improve disaster relief initiatives. Two of the most important ways in which social media are limited in their capabilities to improve disaster relief efforts are their inability to increase survivors’ access to help in areas with damaged infrastructure and to enhance civil-military cooperation.

Inability to Increase Survivors’ Access to Help in Areas with Damaged Infrastructure

One interesting phenomenon of social media in disaster relief initiatives in Haiti was that they improved outside volunteers’ ability to help Haitians significantly more than they improved Haitians’ ability to help themselves. This facet of social media’s role in disaster relief will likely
continue to occur in the future, particularly in impoverished nations with limited access to the Internet and other forms of communication. In this way, social media technologies are vitally dependent on the support of other basic technologies: electricity grids, phone networks, and Internet availability. Social media are capable of providing important contributions to relief efforts in a variety of ways, but their reliance on other technologies and infrastructure substantially diminishes their utility to victims in areas with limited or damaged communications capabilities.

In areas with no electricity, computers, phones, or Internet connections, or in areas in which these infrastructure are damaged—which often include natural disaster-affected areas—social media have little capacity to improve victims’ abilities to contact the outside world. As Tom Watson—author of the social media activism book CauseWired—said, “Mobile raised tons of money in the world that still had a power grid and IT infrastructure. And it failed rather completely in a world devoid of those industrial luxuries. No ‘app’ was capable of getting anything done in Haiti itself. And we should be up front about that.” Social media do not enable any substantial increase in accessibility over traditional technologies; if phone lines remain intact, individuals can use these to contact others—social media do not upgrade them in any way. Furthermore, as satellite phone technology continues to expand and improve in the following years, this technology will prove even more useful to survivors in disaster-affected areas. But as this technology continues to increase, it will likely continue to be integrated with social media tools, allowing individuals to communicate information in multiple forms—phone as well as Internet—more quickly.

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69 Abbot.
70 Livingston.
This shortcoming of social media will continue to prove important in future disaster relief initiatives. Just as social media played only a limited role in enabling Haitians to contact outsiders in the aftermath of the earthquake, they will continue to provide minimal utility directly to the victims of disasters in impoverished areas and areas in which phone, Internet, and power infrastructure have been damaged. Social media are substantially more successful in improving outsiders’ abilities to provision relief than they are at improving affected individuals’ abilities to help themselves and one another. This shortcoming reflects social media’s complete dependence on other technologies; social media can improve upon other technologies, but they cannot provide new forms of disaster relief altogether.

Inability to Enhance Civil-Military Cooperation

However, while social media demonstrated their ability to provide new avenues of coordination between military and civilian actors during the Haiti relief effort, they fell short of providing meaningful improvements in the willingness of the two to cooperate with one another. While social media provide innovative ways for relief actors to coordinate and cooperate, the mere existence of these new outlets does not necessarily mean they will actually be used in an effective manner. As Christopher Daniel said about the coordination between the military and the Logistics Cluster, “They have planes at their disposal; they have fleets of trucks that in many cases they will make available. … All of this is done from an NGO standpoint, more or less free of charge. From that standpoint, as an NGO, it’s a wonderful benefit. The issue is, it’s not always timely, they can’t always meet your need, and you don’t find out immediately that they can’t meet your need.”

Although social media enabled dramatic increases in potential avenues for

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71 Daniel.
coordination in the Haiti effort, that did not always equate to a substantial increase in effective coordination.

In this sense, neither do increased avenues for cooperation between military and civilian actors necessarily increase in cooperation. Despite social media’s creation of new outlets of cooperation between military and civilian actors in the Haiti crisis, the two struggled to work together at first. The military received criticism for its ineffectiveness in coordinating with other relief actors from various civilian groups, including UN officials.\(^{72,73}\) Only when the U.S. military was given a specific mandate from an agreement between the U.S. and the UN, a role that dramatically reduced its necessary interaction with other relief actors, did the criticism stop.

In this sense, just as an increase in immediacy is not the same as an increase in impact, neither is an increase in coordination avenues the same as an increase in cooperation. Social media can increase militaries’ and other relief actors’ capabilities to share information, collaborate, and coordinate, but it cannot make them cooperate. The cooperation must emerge from a willingness to cooperate and a mutual respect. If major disaster relief initiatives are going to dramatically improve in the future, civilian and military organizations must find ways to improve their coordination and cooperation: civil-military coordination (as well as coordination amongst NGOs, governments, and other civilian actors) almost always plays a pivotal role in major

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disaster relief efforts. An improvement in international relief actors’ abilities to coordinate effectively would signify a substantial advance in disaster relief.

However, social media’s inability to directly increase militaries’ and international relief organizations’ willingness to cooperate is not altogether condemning to their role as a provider of additional avenues of coordination. Just because they are imperfect does not mean they are useless. Social media’s abilities to provide new avenues of interaction and cooperation may prove highly beneficial in the event that civilian and military actors choose to cooperate and coordinate more closely in the future. This possibility seems likely, if anything, as military, governmental, and NGO reports from Haiti are characterized by a growing appreciation for one another and a willingness to cooperate.

In this sense, this aspect of disaster relief may be improving on its own. The U.S. military’s extensive role in Haiti, alongside the presence of so many international actors—as a partial result of social media’s capabilities to increase international participation—may have begun to change the way it comes to the table in humanitarian relief operations. As Army Major General Simeon Trombitas said, “Instead of the from-the-military perspective of commanding and controlling, our forte now has to be coordination and collaboration. In order to get things done, because we are not the lead agency, we have to work with and through others.” This statement reflects the growing understanding within the U.S. military of the importance of working through the UN in disaster relief efforts, and the competency of many NGOs and relief organizations. As Major Webster wrote,

While non-alignment policies typically prevent NGOs from working directly with military forces, such barriers are easily overcome during disaster relief operations.

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… Faced with a humanitarian crisis of historic proportions, differences and longstanding misperceptions quickly faded into the background. Over time, several of the NGOs became the BCT’s [Brigade Combat Team’s] closest relief partners.75

In this way, civil-military relationships in disaster relief may be improving on their own as the two continue to develop an appreciation of one another’s capacities. But this trend likely will not continue as a direct result of the existence of new social media outlets of coordination. While social media will continue to help create new modes of communication and collaboration, civil-military cooperation will continue to depend primarily on the abilities and willingness of these differing groups to work together, not new technologies that make it easier to do so.

Do Social Media Improve Security Operations?

It is less clear whether social media are capable of improving security operations during humanitarian relief missions, though tentative analysis is unoptimistic. Joint security operations are highly important to major disaster relief efforts; enhancing militaries’ capabilities to collaborate with international peacekeeping forces and local law enforcement would be strongly beneficial in these situations.76,77 Classified information sharing databases would be a primary means for attempting this, but so far in other areas of military and government, security difficulties have brought their use into question.

75 Webster, 2.
In the civilian sector, the U.S. government developed “Intellipedia” to encourage interagency information sharing.\(^78\) Intellipedia allows government employees to instantaneously collaborate classified information, reducing institutional barriers.\(^79\) Information sharing is crucial in security operations, especially in disaster relief initiatives, when a variety of security purveyors are usually present: local police and military forces, foreign militaries, and UN security personnel. Collaborative information databases can be used to foster information sharing in joint security operations in disaster relief scenarios, allowing various security teams—irrespective of organizational boundaries—to share classified tactical information.

However, while classified collaborative information sharing databases are laudable for their capabilities to enable experts from different organizations to pool their knowledge, form virtual teams, and make quick assessments, they are subject to considerable security concerns.\(^80\) Increasing the sharing of classified information is not always a good thing. In the event that an individual were to defect, he or she would have access to a much larger body of classified material in the existence of such a database. Likewise, in the event that the whole system were undermined by a cyber attack, a multitude of classified information would be compromised. The Office of the Director of National Intelligence cited security concerns upon announcing its

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decision to shut down the Intellipedia spin-offs “uGov” and “Bridge.” Some in the U.S. intelligence community fear Intellipedia will share the same fate.

While social media technologies enable useful collaborative information sharing tools, the dissemination of classified information on these systems is somewhat risky. Secure information sharing databases could prove highly useful to joint security operations in humanitarian relief initiatives, though their potential setbacks in the unlikely event of a security breach would be costly. In the future, as social media continue to develop, they may become more suitable for classified security operations, but for now the risks are likely on par with the benefits. In any case, as demonstrated in this project, social media tools are well suited for many other sorts of operations in disaster relief efforts, so any increased effort to leverage them should preferably begin in these other, more administrative, capacities.

On another level, and along the lines of crisis mapping software, social media-based crisis response maps can be developed to identify criminal activity. Crime maps aggregate crime instances in a mapping program, displaying individual events as well as an overall crime risk, divided by neighborhood. These maps are useful in alerting citizens as to the most dangerous places in a given area, but they do not necessarily change citizen behavior. For example, individuals forced to follow a dangerous route coming home from work late at night may not have much choice in selecting an alternate route if it requires additional hours of travel.

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Likewise, individuals living in dangerous areas cannot immediately sell their homes and move to safer areas. These factors likely are intensified in impoverished nations such as Haiti.

While crime maps may be particularly well suited in disaster-affected areas, which can feature dynamic changes in type and severity of criminal activity over time and location, their actual utility may be highly limited. Furthermore, such maps provide little utility to persons without Internet access, which many individuals lack during disaster situations, preventing them from receiving such outbound information. However, as satellite and Internet technology continue to expand, the utility of crime maps to disaster relief will likely increase for their capability to provide a real-time security picture in a changing environment. In any event, social media tools’ capabilities to improve security operations, for the time being, appear to be limited at best.

Current and Future Outlook

Social media can improve channels for cooperation and coordination, but they cannot make groups of people actually cooperate and coordinate: this characteristic seems to capture the essence of social media in disaster relief efforts more generally. Just as stockpiles of relief supplies routinely sat untouched for days as authorities tried to coordinate their distribution, many NGOs and relief actors involved in Haiti were consigned to fending for themselves in a free-for-all of supplies procurement.\(^85\) For all the mapping and people finding that took place through social media-based action, more effective coordination and cooperation among major relief organizations likely would impact disaster relief in a more considerable way than social media do. Social media can increase awareness and immediacy, but that does not always

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\(^{85}\) Moon. Personal interview.
generate an increased impact. This must come from the efforts and sacrifices of relief actors themselves.

That said, social media are capable of providing extensive improvements to disaster relief initiatives. They enable widespread participation and contribution, increase information sharing capacities, and improve current non-social media technologies. Conversely, social media are limited in their capabilities to increase survivors’ access to help in areas with critically damaged infrastructure (or areas with already limited network access) and to enhance civil-military cooperation. Central within these conclusions is the idea that social media are more effective at increasing outsiders’ abilities to help victims than they are at improving victims’ abilities to help themselves and one another.

In social media, the international community may have found a way to narrow the gaps between victims, relief providers, and donors by improving channels of contribution, communication, and coordination. While social media do not offer an altogether new method of implementing disaster relief, they do offer important enhancements to traditional disaster relief methods and technologies. Undoubtedly, they are a small part of a much larger technological revolution that has forever transformed disaster relief: cell phones, satellite networks, and now social media are all closely interrelated. In their own right, social media save lives in disaster relief efforts, and this fact alone justifies their continued use in the field. Their capability to save lives on a grand scale, by enabling a revolution in coordination and cooperation among major relief agencies, remains to be seen. Whether or not this happens likely will come down to relief agencies’ abilities to leverage these emerging technologies effectively, and to follow through with their integration across interagency boundaries. In any case, the world has reason to be optimistic in the future of social media technologies in disaster relief.
Potential Future Developments in Social Media-Based Disaster Relief Technologies

If experience tells the international crisis response community anything, it is likely that it cannot expect the next major humanitarian crises to closely resemble the previous. For factors including scale, type, and location, the world cannot expect the same levels of international engagement in future humanitarian crises as it saw following the disaster in Haiti. While future levels of international engagement are uncertain, what the world can expect is a continuing reliance on social media technologies as a disaster relief platform—for their demonstrated usefulness. Three social media-based disaster relief phenomena that likely will play an increased role in the future of disaster relief include crisis mapping software, social media integration with satellite and cell phone technology, and microvolunteerism programs. These tools are not significantly different from those that were used in Haiti, but neither were the tools used in Haiti noticeably different from those that were used in disaster relief efforts before it. Instead, the social media tools used in Haiti relief were different because they were more comprehensively employed, and because they integrated multiple technologies into single relief platforms.

Crisis mapping software likely will play an increased role in the future of disaster relief for its capability to amass enormous amounts of data from a multitude of collaborators, and to allocate it into simple, intuitive formats. Disaster relief actors developed crisis mapping software before the Haiti crisis and improved it tremendously during the 2010 relief effort.\(^8^6\) As the effort unfolded, crisis mapping software became perhaps the most vitally important form of social media-based relief for its ability to connect on-the-ground actors with one another, as well as to

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http://www.wired.com/dangerroom/2010/01/disaster-relief-20-haitis-virtual-surge/
connect them with the outside world. In the future, crisis mapping software will become vastly more detailed and comprehensive, as more actors choose to participate in the collaborative mapping process. Future crisis mapping software may be characterized by the attribution of reputation points to collaborators’ contributions (similar to eBay). When relief actors post information to the database, for instance the location of a new temporary shelter, other actors will be able to assess the validity of their post and assign them a rating to acknowledge their credibility as an information source. Major relief organizations may also choose to more directly integrate crowdsourced mapping software into their operations, in hopes of more effectively fostering coordination with other relief actors.\(^8^7\) Live-updating satellite imaging technology likely will play a role in improving the detail and accuracy of future crisis mapping databases as well.

Social media’s integration with satellite technology likely will be important to a variety of other disaster relief functions in the future as well, in addition to social media’s integration with cell phone technology.\(^8^8\) Cell phones are among the most vital forms of technology in disaster relief initiatives. They enable instantaneous mobile communication among survivors, relief actors, and donors. However, they rely critically on power infrastructure, and thus are susceptible to power outages in disaster-affected areas. Still, worldwide cell phone and text messaging use are rapidly increasing, and in the future, most areas of the world likely will feature improved cell phone operating capacities.\(^8^9\) Following the earthquake in Haiti, some

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experts advocate skipping rebuilding landlines altogether and leapfrogging directly to a robust cell phone network. Satellite communications technologies are also rapidly increasing, enabling Internet and telephone services truly wireless global permeation. Social media are often at their best when integrated with satellite and cell phone technology: texting information to networking software, accessing crisis mapping databases, and corresponding with outside actors are all crucial to survivors and response personnel alike in disaster relief efforts. As cellular and satellite capabilities continue to increase, they will continue to prove vital in enabling social media-based communication and collaboration in even the most remote and hardest hit disaster situations.

Finally, social media-powered microvolunteerism software likely will play an increased role in the future of disaster relief. Just as volunteers in foreign countries collaborated to develop accurate maps of Port-au-Prince and to identify survivors in photos taken at relief centers, international participation in similar social media-based microvolunteerism activities will expand in future disaster relief initiatives. Individuals are able to contribute to such activities from anywhere in the world, and often from mobile devices. Crisis camps are another important example of social media-based volunteerism: these organizations enable everyday citizens to get involved in disaster relief from anywhere in the world. Through crisis camps, disaster relief microvolunteerism experts are able to quickly train dozens of people at a time to run miniature disaster relief operations in conjunction with on-the-ground personnel in day-long sessions. As more people continue to embrace these tools and techniques, new forms of international disaster relief are on the horizon.

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relief microvolunteerism will continue to emerge, and as social media continue to grow, so will the capabilities of these activities.\textsuperscript{92}

Social media technologies will continue to depend on traditional technologies as platforms, and will continue to be more successful in improving relief providers’ abilities to help survivors than improving survivors’ abilities to help themselves and one another. They will continue to depend on local infrastructure, but as cell phone and satellite technology continue to increase in the coming years, this barrier obstacle likely will gradually diminish. At the minimum, these changes social media technologies bring to disaster relief will continue to experience measured success in on-the-ground operations. At the most, social media tools’ abilities to provide enhanced avenues of coordination, contribution, and communication will substantially increase major relief providers’ capabilities to work together successfully.

Maximizing the Advantages of Social Media in Disaster Relief

In future disaster relief initiatives, social media likely will continue to most significantly advantage disaster relief initiatives by enabling widespread contribution, increasing information sharing and collaboration, and improving current non-social media technologies. Additionally, social media likely will show strictly limited usefulness in their capacities to increase survivors’ access to help in areas with critically damaged infrastructure and enhance civil-military cooperation. While the international community has reason to be highly optimistic regarding the use of social media in disaster relief initiatives, applying social media to disaster relief is clearly a process with limits. It is crucial that the U.S. government and military begin to identify these limits and focus their efforts accordingly. A careful analysis of the strengths and weaknesses of social media-based disaster relief initiatives compels the following series of policy implications for the U.S. government and military in order to maximize the advantages brought on by social media in future disaster relief efforts.

Develop a Government-Wide Crisis Mapping Database

To improve on-the-ground disaster relief initiatives, the U.S. government and military should jointly create and administer a common humanitarian assistance mapping system. This mapping system would be a more powerful version of private sector programs including the
Google crisis response center and Ushahidi. These private sector programs are laudable for a variety of reasons, not the least of which being that they were developed from scratch for nonprofit efforts, but a U.S. government-run crisis mapping database could be significantly more powerful and effective. However, any such database would have to be substantially better than current alternatives to be worth the cost and efforts. This is an initiative that would be all-or-nothing; if the U.S. government is prepared to invest itself only partially in this effort, it likely will fail.

A sufficiently powerful U.S. government-run crisis mapping database would maximize the government’s ability to conduct all four types of government information sharing: inward sharing within agencies, outward sharing among agencies and military branches, inbound sharing from sources outside the U.S. government, and outbound sharing from the U.S. government to actors outside its confines. All government actors, the military included, would upload information into the same central database, which would be a map overlay with diagrams, symbols, and colors representing different types of information, aligned by location. This is exactly how private crisis mapping databases operate, but a U.S. government-powered one could provide additional benefits.

For the first time, all U.S. government bodies participating in disaster relief, including the military, would use the same central database. Currently, differing government agencies leverage a variety of databases and mapping programs, as does the military. A government-wide mapping database would combine all of each respective agency’s information on developing crisis situations into one place. Each data point on the map would feature a tag identifying the details of the data point (be it the location of a new medical station, a group of trapped...

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93 Hodge, Nathan. “Disaster Relief 2.0: Tech Tools Help Focus Haiti Resources.”
individuals, or a fresh deposit of relief supplies), the time it was tagged, and the agency that
tagged it. This way, each data point would have an identifiable organization behind it, which
could be held accountable for its addition to the database. Private databases do not feature this; in
Haiti they were masses of data points lumped by type. Information regarding who tagged data
points and when they were tagged was seldom available; information was thus less reliable. This
government-run system would likely provide the most reliable information possible, and in a
live-updating system: as situations and circumstances changed, geotagged data points would be
edited in a wiki-style format. Such a database would advance U.S. government and military
humanitarian relief actors as close to a unified response as possible.

Furthermore, such a live-updating system could be filtered in a variety of ways:
individuals searching the database could sort by type of occurrence, time, severity, or author
agency. Sorting by author agency could be a particularly useful feature. The U.S. government
could reach out to NGOs and individual crisis relief actors to use the U.S. government-run
mapping software rather than private mapping software out of its increased accuracy and
efficiency (this is why it would be crucial for the government to fully commit itself to investing
in the project upon its launch). Separate filters would then be available for major NGOs. All
information tagged by these organizations would presumably be backed by their reputations for
providing reliable information. Likewise, the database could also allow smaller NGOs and
individuals to tag information on the same database, grouped under their own filter. If users
deem information provided by unknown individuals less reliable than that supplied by known
U.S. government, IGO, or NGO sources, they would be able to filter it away instantly. Users
assessing information on the crisis mapping database would thus be able to better assess the
reliability of information—based on how many groups were tagging it, and which groups—and
would be able to make better-informed decisions regarding where and how to concentrate their resources.

Ideally, such a crisis mapping database would eventually be operated by the UN’s Office for the Coordination of Humanitarian Affairs (OCHA), since it is the arm of the UN Secretariat that is responsible for bringing together humanitarian actors to ensure coherent response to emergencies.94 OCHA currently runs a mapping program, but it is not nearly as sophisticated as the one identified in this recommendation, nor does it coordinate participants as effectively. Until the UN develops a more effective mapping database for coordinating disaster relief, it would substantially benefit U.S. agency and military collaboration to create a U.S. government crisis mapping platform. It is imperative that the military and government would jointly operate this software, because major U.S. government disaster response efforts almost always include significant detachments of both civilian and military personnel.95

Ultimately, this sort of crisis mapping database represents the best that social media has to offer to on-the-ground operations in disaster relief initiatives. It features information sharing in all of its forms: inward, outward, inbound, and outbound, and perhaps more importantly, it features a way to certify the reliability of such information. It is modular, allowing participation by as many or as few government and non-government groups that decide to join the relief efforts. It builds on traditional disaster relief practices and technologies rather than attempting to revolutionize them completely. More specifically, its information overlays would identify the aggregate levels of mission success, divided up into relief needs by area or neighborhood:

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95 Abbot.
security, subsistence (divided up into food, water, and shelter), sanitation, medical, mobility (roads, bridges, ports), and leadership (governmental and community leaders).  

This effort would signify a substantial improvement upon current efforts, and a reasonable solution to enhancing the allocation of U.S. resources in disaster relief. Because social media will continue to depend heavily upon current non-social media technologies, the U.S. military and government would best complement this effort by incorporating into their disaster relief initiatives satellite and cell phone systems that are specifically capable of integrating with social media tools. For example, satellite phones capable of connecting to information sharing databases will be dramatically more useful than satellite phones that are not. Through the application of these tools, and the development of this crisis mapping database, social media can supply major improvements to the U.S.’s—and world’s—abilities to provide disaster relief.

Continue Incorporating Social Media into Government and Military Administrative Functions

With so many government agencies involved in U.S. disaster relief initiatives, it is in the government’s best interest to continue its efforts to incorporate social media into its daily operations, with the military included. Daily usage of social media technologies likely will enable the government and military to leverage them more effectively in a variety of capacities, including humanitarian crisis relief operations. This continued incorporation of social media technologies into the U.S. government likely will further benefit the U.S.’s ability to respond to humanitarian crises by enhancing its flexibility, transparency, and channels of collaboration. These results of adopting social media tools into the government and military have already been

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96 Major Webster’s unit, the 2nd BCT of the 82nd Airborne Division used this framework as a foundation for its daily meetings and operations. Webster, 3.
demonstrated to an extent in several instances, including via the leveraging of social media to enhance recruiting outlets, improve training and educational operations, and increase public engagement. Incorporation of social media technologies into the government and military could be even more advantageous in the future.

First, the U.S. government and military enjoy a major boost in recruiting from social media technologies. The U.S. Army’s Facebook webpage, for example, boasts more than 206,000 “friends,” individuals who are connected to the Army’s live-updating information feed on Facebook.97 This webpage allows individuals to engage in discussions about the Army lifestyle and ask questions to soldiers in forums. In this capacity, the U.S. military and government learned a lesson from business: social media networks provide an extensive advantage in reaching out to individuals and disseminating information. All service branches now have Facebook pages, as well as MySpace sites and Twitter feeds to improve their abilities to reach out to potential recruits and distribute information.98 The same is true for many government agencies and organizations.

These networks are crucial for enabling potential recruits to access information that will help them decide whether or not to join a government organization or the military. By communicating with other potential recruits, current and former soldiers and employees, potential recruits can develop a better idea of what to expect in the government and military. They are able to receive more information than ever before, and faster than ever as well.

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Contacts on social media networks can also put one another directly in touch with recruiters. Social media networks thus allow recruits to access both official and nonofficial information about the U.S. government and military. Not only do social media enable recruits enter the service better informed, but they also encourage U.S. government agencies and military branches to exercise transparency by providing realistic information to their recruits—something government agencies and militaries are not always good at doing in their own right.

Social media-based recruiting could have substantial benefits to U.S. government- and military-based disaster relief. The U.S. government’s disaster relief activities are not always highlighted via traditional recruitment outlets. Perhaps the difficulty is that because so many government agencies (as well as the military) participate in disaster relief, each agency often plays a small role—granted some smaller than others—in disaster relief missions. Disaster relief is rarely a primary mission of any government agency—aside from the Federal Emergency Management Agency (FEMA), which focuses primarily on domestic relief—so these activities are seldom highlighted in government recruiting efforts. Still, the government needs capable people for its disaster relief efforts. Social media tools—such as Facebook, Twitter, and Flickr—could likely enable government recruiting to more effectively reach audiences interested in disaster relief, audiences who might otherwise choose to work for NGOs or other organizations instead.

Additionally, the U.S. military has been experimenting with incorporating wiki-style manual changes to enhance training and educational operations. Wikipedia, a web-based

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100 Abbot.

encyclopedia in which the content is created through the collaboration of a potentially unlimited number of participants, signified one of the greatest advances in modern research technology. Not only does the success of Wikipedia demonstrate the ability of collaborative production to provide information on an exhaustive list of subjects, but also the ability of that information to be well-documented and correct.\footnote{Tapscott, Don, and Anthony D. Williams. *Wikinomics: How Mass Collaboration Changes Everything*. New York: Portfolio, 2006.} This extremely successful form of collaborative participation—enabled by social media technologies—has substantial repercussions on any sort of educational or training enterprises, and this idea has not been lost on the U.S. Army.

In the summer of 2009 the Army conducted a 90-day online test that would allow any soldier, from private to general, to modify and expand any of seven training manuals in a “wiki”-style environment.\footnote{Cavallaro, Gina. “Army to test wiki-style changes to 7 manuals.” *Army Times*. June 29, 2009. Accessed January 23, 2010. http://www.Armytimes.com/news/2009/06/Army_manuals_062909w/} Later the program was expanded to 17 manuals, and in the future Army officials expect to ramp up the program to 230 manuals. Results so far have been optimistic, demonstrating the value of collaboration and information sharing in military education and training. According to Price Floyd, principal deputy assistant secretary of defense for public affairs, “Men and women who are in the field fighting in Afghanistan and Iraq are sending back and communicating with people back here in the States to update the counterinsurgency manual—how we fight counterinsurgency wars—in real-time. We don't have to wait several years or until the conflict is over to do that, and we're able to do that because of this technology.”\footnote{American Forces Press Service. “Social Media Sites Provide Morale Boost, Official Says.” United States Department of Defense. March 17, 2010. Accessed March 18, 2010. http://www.defense.gov/news/newsarticle.aspx?id=58357} In this way, social media technologies have begun demonstrating their success opening up the U.S. military to constructive revision; this culture of collaboration, adaptability,

A similar approach could prove extremely useful when extended to the U.S. government’s and military’s training and education of disaster response. As noted earlier, a wide variety of U.S. government agencies perform disaster relief initiatives, as do all branches of the military. Each organization applies different training standards and procedures, and some are more effective than others. Wiki-style disaster relief training manuals, opened up to all U.S. government organizations that participate in U.S. government disaster relief, could potentially revolutionize government disaster relief training. Varying government and military bodies have a great deal to learn from one another about disaster relief, and a body of collaborative government-wide training manuals could greatly increase their capabilities to share their experiences in disaster relief and lessons learned.

As Kate Moon wrote in her field notes about the Haiti effort, “On my team’s final day we spent several hours training the new medical teams that had arrived, so they could take over the hospital shifts and continue the organization that we all worked so hard to set up.”\footnote{Moon. Personal field notes, 3.} Managing the training of new actors cannot be taken for granted; the hours established relief providers spend familiarizing and training arriving teams are hours in which they cannot provide direct assistance to victims. Even as current relief initiatives are progressing, collaborative social media systems would enable relief providers to update education, training, and familiarization manuals in real-time. These training manuals could provide specific guidance to thousands of preparing
relief actors abroad, minimizing the time in which relief providers would later be diverted from their primary relief efforts to provide training.

Finally, social media technologies are increasing the U.S. government’s and military’s abilities to engage the American public. Social media have an unsurpassed ability to reach out to broad populations, enabling greater transparency in the government’s and military’s activities, and hopefully, improving their image. As Ray Mabus, the Secretary of the Navy, said about the U.S. military:

Those are the most highly skilled, the most patriotic, the most dedicated people you will ever meet, and people just don’t get to see them enough. I mean, the Navy and the Marine Corps, we’re always the away team. We’re doing our job; we’re always somewhere else. And the people don’t get to see that sort of skill level, that sort of training, and that sort of representation of America that’s going on all around the world, and we ought to be really proud of them.107

In many aspects, the U.S. government’s and military’s activities go unnoticed by the American public when they are working abroad. This is particularly relevant to humanitarian relief missions, which almost always take place abroad. Social media substantially increase the government’s and military’s abilities to reach out to the American people, and show them what they are doing.

So far, the government and military have been doing this primarily through Twitter and Flickr. All branches of the U.S. military, as well as the White House, the Joint Staff, and many other government divisions have Twitter pages, which allow them to disseminate news and ideas. These pages allow the U.S. government and military to share with the public what they are doing, encouraging a more transparent view of their administrations. Twitter users can interact with this information by rebroadcasting it with comments, or by replying directly. Additionally,

U.S. government and military branches both have Flickr photostreams, which allow web users to view pictures of these organizations’ daily activities. For example, the White House and U.S. Army have extremely popular Flickr photostreams: web users are able to view photos of President Obama’s various diplomatic trips as they unfold, as well as the Army’s daily tasks, including both combat operations and humanitarian aid missions. These social media tools enable the U.S. government and military to more effectively engage the American public, presenting a more accurate and transparent picture of the various activities in which they engage.

Improving the U.S. government’s and military’s abilities to be seen performing their humanitarian relief missions is extremely important: it increases goodwill between civilians and the military, and it promotes a positive image of the U.S. government among its own populations as well as the international community. As Lieutenant Commander C. Spencer Abbot, the Department of Defense Representative for Latin America at USAID, said about humanitarian relief missions, “This is among the most important things the U.S. government is doing in foreign policy, this middle ground between defense and development.” Yet the government and military are not always effective at portraying some of their most admirable functions. By mastering—or at the very least improving—their abilities to leverage social media they will likely be able to increase their visibility when performing disaster relief missions. An increase in visibility would benefit disaster-affected individuals and the international relief effort as a whole, as well as the government’s and the military’s prestige—when they are doing their jobs well.

110 Abbot.
Through these innovative approaches, social media are beginning to prove successful in effecting positive changes in the U.S. military and government by enhancing their flexibility, transparency, and channels of collaboration. These ideals are vital to organizations that participate in disaster relief efforts; as the military and government continue to become more flexible, transparent, and collaborative, their capacities to carry out disaster relief initiatives will likely increase. However, social media in themselves are not, for the time being, any sort of major revolution in government or military affairs. When allocated to the administrative tasks for which they are best suited—such as training, recruiting, and public engagement, rather than, for instance, security operations—social media technologies will substantially benefit U.S. government and military capabilities, without risking security breaches or decreases in effectiveness. They will also continue to prove highly important to disaster relief efforts, if not by providing a new form of disaster relief altogether (for now, at least), but instead by building upon current non-social media technologies and expanding avenues for contribution, collaboration, and coordination.
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