Social Media, Information and Political Activism in Japan’s 3.11 Crisis

David H. Slater, Nishimura Keiko, Love Kindstrand

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This paper is an expanded and updated version of "Social Media in Disaster Japan," in Jeff Kingston, ed., Natural Disaster and Nuclear Crisis in Japan: Response and Recovery after Japan's 3/11 (Nissan Institute/Routledge Japanese Studies).


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Introduction

At 2:26 p.m. on March 11, 2011, a magnitude 9.0 earthquake hit Japan. A few minutes later, wave after wave of a massive tsunami struck the entire Pacific coast. As if the natural disaster alone was not enough, at 3:35 p.m., the waters from the tsunami - 15 meters high - damaged the Fukushima Daiichi Reactor, spreading rumors and fear of mass nuclear contamination (Ito, 2012, pp. 34-35). Almost everything we know now, and especially what we knew of the quake and tsunami in the hours and even days after the events, was significantly shaped by social media. In fact, the generation of information and images occurred at such a fast pace that social media not only represented, but also directly mediated, our experience of the disaster more than in any other event to date. If Vietnam was the first war fully experienced through television (Anderegg, 1991), 3.11 was the first "natural" disaster so fully experienced through social media.¹ This is the result of a number of factors, some a function of the way that technology use has developed in Japan, especially the fact of mobility of hand-held media, others due to the particular ways that networks of people reacted in the time of crisis. But social media was also much more than a source of information; it was also a tool of social and political action.

13 days into the crisis, when Sakurai Katsunobu, the Mayor of Minami-Souma, uploaded a video on Youtube appealing for help, food and supplies (here (http://www.youtube.com/watch?v=70ZHQ--cK40&feature=related)) to save his town, he was doing what hundreds of thousands have done since: using social media to secure survival in the face of crisis.
Mayor Sakurai’s Youtube plea.

He chose an alternative route of communication because, as he clearly stated, official channels had failed. He sought to compensate for the state’s neglect by reaching out across boundaries, appealing to strangers to help, creating new paths of association to provide life-and-death help, and in some cases, of political mobilization. Social media provided an alternative, not just an alternative to standard media outlets, but alternative spaces and routes for information not otherwise available; alternative sites where that information could be engaged and debated; and platforms where new goals and strategies could be collectively formulated. To some extent, every alternative contains a politics, at minimum, a politics that challenges official versions of events, a politics that offers individuals new ways to associate and collaborate, and in some cases, a way for individuals to mobilize and form larger collectives capable of mounting coordinated actions. In the months since the start of the disaster, we have witnessed probably the most powerful example of the potential of social media in Japan to date.

This paper documents a number of these alternatives, from the most intimate levels of personal connection to public efforts to link up through more open sites engaged in relief. At times, we see the end product of these alternative trajectories in demonstrations, the most overt and identifiable signs of social action. The fervor, organization and momentum that culminated in the events that occurred up to and around the September 19, 2011 march of 60,000 people in Tokyo, the largest such gathering since the 1970s AMPO campaign against the Japan-U.S. Security Treaty, were seen by many of us as examples of the unexpected power of social media to provide alternative narratives that could give rise to significant political action.


But there is more to social media than that. Reviewing the role of social media, we point to the need for recognition of a continuity of networked practices over time. This allows us to see the past year within the context of previous information technology, digital networks and patterns of use, in both earlier social movements as well as a general rise in social networking. But more than that, especially where social media is concerned, we see a media that runs through the individual in ways that mainstream media does not, and we ask if the truly distinctive feature of this new media is best measured not in the public performatives of demonstrations, but instead in
intimate and personal connections, in engagement and shaping of the affects and desires of individuals and smaller groups online and offline.

In the months and weeks leading up to September, the range of emotional responses to injustice and exploitation included outrage, indignation, and anger. These are the emotional responses we imagine are required to generate and sustain political activity and engagement. Yet social media also opens the way to a wider range of patterns of association, participation and engagement including the mixed feelings of anxiety and malaise, of uncertainty, isolation, and fear, and often a reassertion of the feelings of destabilization in the face of larger patterns of precarity. These are sometimes created and often shaped by social media, and sometimes combated by the same social media. Sometimes they lead to organized action, but more often, they do not. Yet the temporary, intense engagement with social media leaves no individual untouched, unaffected. After demonstrating some of the ways that social media facilitated a crossing of institutional and ideological divisions, divisions that have stymied the left for much of the postwar period, we point to two types of "politics" associated with and facilitated by, social media: the instrumental use of social media to mount public events, and the constitutive use of social media as a platform for the more private development of a politics of association and connection.

Themes

This paper charts chronologically the different phases since 3.11, showing how social media became involved in each. During the first crucial moments after disaster, individuals texting and tweeting information, and uploading videos, generated huge amounts of first-hand information, from the size and epicenter of the quake to the arrival of the oncoming waters; the identification of dangerous and safe places, routes and contacts; those lost and alive, and those looking for them. What we see here is not only the nearly unprecedented act of appealing to strangers for help, but also the revealing of emotions that rarely if ever is shared in public discourse. Asking for help from strangers is a significant act of trust, maybe even more unusual in Japan than in other societies; offering help is a way to return that trust. In this way, one of the issues that this paper points to is the way that social media as deployed during and after 3.11 has made us rethink the nature and efficacy of the civic sphere in Japan.

As events unfolded, the social media focus shifted to what we have called consolidator sites (blogs and social networking platforms) where much of this dispersed information was brought together in ways that made it useful, actionable, and in some cases, political. The matching of available supplies and need; the location of open communication and travel networks to transport these supplies; the rise of various "people finders," and, the first reports of radiation leakage to be "crowd-sourced." Here, we see not only the forging of digital links, but also how these links are manifest in action, in the engagement of personal resources to support, help and find common cause with others—which is perhaps the first political act. In the next phase, we see dynamically generated "mashups" of web technologies-microblogs, databases and interactive maps-becoming central to the generation of support through donations and the recruitment of volunteers as the relief efforts began. It is important to remember that social media has not displaced mass media. They developed together, as images and information generated from individual users often provided the primary content on network print and TV media, and contributed to alternative flows of non-official information being disseminated.
In the second part of the paper, we chart how the alternatives provided by social media take on an explicitly political face, allowing national and international anti-nuclear networks to mobilize some of the largest protests to take place in Tokyo in decades. The recruitment of otherwise disenfranchised individuals, the linkage of them to alternative sources of information and opinion, and the organization of on-the-ground events, were all centrally facilitated by social media. In short, social media link both to the mainstream media and to the individual. It is equally important to note that through the links made herein, what were once considered the personal, private, even intimate domains of micro-sociality became engaged in an alternative politics that reached others around the world. The final section of this paper reviews the role that social media played in the events leading up to the September anti-nuclear power march of 60,000 people, and the six months since.

Thematically, this paper lays out some of the ways that social media has affected our understanding of and participation in the 3.11 disaster. But we also keep in mind the converse: How the compound disasters have affected social media, and more generally, the mobilization of networks of people in new ways. Because social media rests on the initiative of the many (rather than the few, as in mass media), from solo texters and casual tweeters to alpha-bloggers and web engineers, part of our story is their new and different types of involvement in something we might call the "digital public sphere". While these linkages did not always channel aid and relief to the people who needed them most (and this failure is part of the story as well), they did create links among different state and non-state actors within Tōhoku, as well as between the people of Tōhoku and the rest of Japan, as well as with the rest of the world. These were new sorts of agentive connections among individuals, especially the young, which developed through social networks applied to disaster relief. Especially in the case of radiation and anti-nuke protests, these same networks have become politicized as effective forms of civil engagement.

**Working Definition of Social Media**

While "social media" is a contested term within a range of disciplines, we use it here to identify an inclusive category of social patterns of use of information technologies that are generally widely accessible, networked, and usually web-based. In terms of production, unlike traditional mass media, which is distributed one-to-many (such as print, radio or TV) beginning from a single centralized source, unified in organization and managed in content, social media flows many-to-many, generated through multiple paths and reproduced on multiple platforms, such as a collection of twitter feeds reposted on a blog. (See Rheingold, 2007, Sandoval & Fuchs, 2010 for fuller discussion). Content is usually generated from multiple sources by a collective process that costs very little or nothing, usually decentralized in less hierarchical networks, characterized by multiple points of production, and transmitted at speeds that are often experienced as instantaneous or replicate "real time." The information circulated is dynamic, in that its content can be modified and edited, commented upon and reposted elsewhere; it is transparent, as participants are cognizant of one another's interactions and may critique, share, or augment it; and it is persistent in the sense that, in general, it remains accessible for future reference. So, for example, a blog with continually updated information about changing needs for shelter would be an example of social media, both in terms of its information technology and social practices. Finally, individual users of social media are usually both producers and consumers of content, a dynamic captured in terms like "prosumer" (Toffler, 1989) or "produser" (Proulx et al, 2011), in ways that create interactional links, often producing strings of content and...
users, and shared communities around this information.

If we define "social media" against the one-way transmission of information that characterized "mass media," then it has a long history, even in disaster situations, even in Japan. At the time of the Kobe earthquake, only about 10% of the population had cell phone subscriptions (Tokai Bureau of Telecommunications, 2012), but we can easily see the importance of social media there. Even though the mass media infrastructure was far more intact than in post-quake Tōhoku, a primary criticism of the local and national authorities was the insufficiency and inadequacy of accurate information circulated in ways that facilitated relief (Tsuda, 2011). In response, various methods of information circulation emerged, from ad-hoc printing of fliers, sometimes called "mini-komi," or 'micro-communication," to guerilla radio stations, to other sorts of fact-to-face gathering, sometimes called "kuchi-komi" or "communication by mouth," that were specifically designed to contribute, share and consolidate information that was not available from the mass media. The coming together of citizens, often outside of the structures of local governments, produced networks of people that generated a wide range of safety organizations and memorialization sites to collect personal experiences (often hand-written and now housed in local libraries). All of these are examples of social media, albeit not in digital form. Many NPOs point to the citizens' mobilization of information and aid after Kobe as a key moment in Japan's development of civil society and the start of the NPO movement (Avenell 2009). Even today, we see this as a characteristic of much social media: its tactical rise as a way to compensate for, or move in alternative directions to, the limited, incomplete and even misleading information management by the national or local governments or by mainstream media.

In Japan, both the information technology and patterns of use of social media are distinctive in ways that affect the post-disaster response. Japan has a high penetration rate of Internet and Internet-ready mobile devices, mostly cell phones (Hashimoto, 2011). According to a government white paper, the number of Internet users reached 94.62 million by the end of 2010, with an Internet penetration rate of 78.2% (Ministry of Internal Affairs and Communications [MIC], 2011b), which means almost four in five Japanese use the Internet. Moreover, the ratio of mobile network devices is quite high: 96.3% of all Japanese households have mobile phones and 74.8% of the total Japanese population uses them, whereas computers are limited to 66.2% of the population (these figures vary by age and geography; MIC, 2010). This meant that a significant percentage of the population had, and were predisposed to use, technology in a broad range of times and places during the disaster and aftermath. The patterns of use of these information technologies are also distinctive. The primary use of mobile phones in Japan is text messaging (MIC, 2011b), a format that can be re-transmitted to a website or blog, and is thus likely to be widely circulated. And, in fact, most mobile phone users move among different types of social media, texting, posting, blogging (MIC, 2011b), and access them almost every day (MIC, 2010).

Phase 1: First responses

In the minutes and hours just after the earthquake, many local cell phone transmitters malfunctioned: the network as a whole did not collapse, but the lines for calls were so clogged that only a small fraction of attempts got through ("Eastern Japan earthquake," 2011, p.14). But the data (or "packet") connection on the same mobile phone was often operative, allowing mobile emailing to continue at a relatively uninterrupted rate. Unable to reach relatives or friends by telephone, cell phone users turned to social media. According to a study on post-quake Twitter usage, the number
of posts (tweets) on the day of the quake increased to 1.8 times the average, reaching 330 million tweets in total (NEC Biglobe, 2011).

The pink are original tweets, the green are retweets, demonstrating the huge flows of information in the immediate hours after the earthquake and tsunami (Twitter, 2011). Click here for an animated visualization of Twitter information flow: here (http://www.flickr.com/photos/twitteroffice/5884626815/in/photostream/)

Similarly, on other social networking sites such as Mixi, users' posts increased up to three times the usual (eight times more during the hour after the quake; IT Media, 2011). The biggest Japanese anonymous BBS, 2channel (http://www.2ch.net/), saw its number of page views climb by 20%. The content also shifted in predictable ways. Usually 57% of tweets are about entertainment, but on March 11th 72% of tweets were quake-related (80% if transportation information is included; NEC Biglobe, 2011).

When the first major quake hit, a high volume of tweets from regular users focused on the immediate situation: "Its shaking" (Yureteru)," and "It's an earthquake" (Jishin da). The National Research Institute for Earth Science and Disaster Prevention and the Japan Meteorological Agency also began tweeting early alerts that were widely re-circulated automatically by "bots" (automated posting scripts). At 2:47 p.m., the official NHK twitter account posted: "There is an emergency earthquake alert. Miyagi, Iwate, Fukushima, Akita, Yamagata. Very big quake. Please be careful!!!! Please be careful!!!!!!"

A post, or tweet, on the official NHK Twitter account (NHK_PR, 2011). On top is the account name starting with "@;" below the "follow" button is the actual content, and finally the number of retweets ("50+") and a list of redistributors.

Provided with information from official sources, individual users started to redistribute the alerts, and provide real-time visual reports of their own disaster experiences. In images that are now familiar to almost everyone who has followed the disaster, many individual users captured and posted the approach of the tsunami minutes before it struck. As the trains stopped in Tokyo, and millions were forced to consider other ways of reaching their homes, some of the first reports on Twitter concerned the availability of overnight shelters. A picture of the explosion at an oil refinery in Chiba prefecture triggered by the quake was similarly reposted, leading to reports that "toxic rain will fall on Tokyo" (Odyssey, 2011).

Within days of the earthquake and tsunami, 64% of blog links, 32% of Twitter news links and the top 20 YouTube videos were all related to the crisis (Guskin, 2011). Subsequently, patterns emerged in which different sorts of social media generated different sorts of information flows. While micro-blogs and bulletin boards chiefly served to circulate information among those users who do not know one another, social networking platforms were primarily used to confirm the safety of friends and relatives (Nikkei Business
Publishing, 2011). A survey shows that the perceptions of different social media platforms generated different ways of circulating different sorts of information (Beat Communication, 2011). The popular perception was that Twitter was convenient because it allowed for faster information gathering than did mass media. About one-third of those surveyed considered this necessary to compensate for the lack of reliable information provided by the mass media and/or the government. The format of social media reposts was especially useful because they were able to both circulate information and link to the source of this information (Tomioka, 2011).

Nevertheless, this did not happen in many stricken areas. The hardest-hit prefectures had the lowest mobile phone penetration rates (MIC, 2010). Tokyo leads the rate of mobile phone subscription, (133.9%, since many use more than one phone), highest mobile Internet penetration rate (63.3%), and second highest Internet penetration rate (71.9%). In addition, the percentage of elderly in the Tōhoku region is larger than in other areas, and the rate of use of mobile phones among those over 70 years of age is 31.5 % (MIC, 2011b). Thus, geography and demographics limited the participation of those who were most adversely affected. For example, many youth in Ishinomaki, who were likely to have smart phone technology, were able to monitor the situation as it unfolded in the hours after the earthquake. Nevertheless, they were not able to communicate this information effectively due to their lack of inclusion in the chaotic decision-making process of the moment (Slater, forthcoming). Still, people with mobile phones in Tōhoku where Internet service was still available were dependent on social media, especially in areas with no working TV due to power outages. In addition, in some of the disaster stricken areas, Internet access had been restored faster than electricity and in such cases social media proved its significance as an alternative source of information (Tsuda, 2011, p.235)

Social media became not only the hub for different kinds of information, but also a space to share emotions and anxieties. People waited for their friends (and people they followed on Twitter), even those they had never met offline before, to post that they were safe. Some explicitly posted how relieved they were to know that others were safe. (For example: "I am glad to hear that you're safe! I was worried because I didn't see you in my timeline. The situation is not settled, but I'm relieved anyway" Akira, 1978, 2011). Especially in more intimate communities, where people exchange tweets extensively every day, anxious messages were posted about aftershocks on the first night of the disaster. They utilized language to mimic physical action textually, virtually hugging (gyu gyu) and patting one another (nade nade). (For example: "I can’t sleep... I'm scared! gyu gyu gyu [as if clinging to someone]," to which the response was "nade nade [as if patting the friend's head] It's ok. I know you're scared, but you also need to rest. Sleep while you can, ok?") For those who lived alone and spent that first anxious night tossing and turning in their beds - literally, given the force of the aftershocks - social media provided a community of similarly frightened people who cheered one another up. Contact, the virtual warm embrace of a friend, was an important way to combat anxiety and fear in a crisis situation.

The early responses represented a number of distinctive features. First was the engagement of a wider range of people in the production and dissemination of information vital to the survival of many. Second, the mutual penetration of mainstream and social media, even a blurring of these distinctions was seen. Third, the multiple linkages between different information technologies and user practices facilitated the spread of information. Fourth, the unevenness of access and participation that often worked the other way, to prevent
information dissemination. Finally, textual performance of emotional clinging became more prevalent and seemingly important.

**Cross-platform dissemination**

While social media expands both the production and consumption of information, increasing the types of content and the number of networks through which it moves, it still functions largely within the broad media environment dominated by newspapers, radio, and especially, broadcast TV. In fact, in times of crisis, people usually turn to broadcast TV for what they deem "reliable" or "legitimate" information, that is, for "the news." In the days after 3.11, Japan was no different. However, in the crisis situation, especially for information about areas remote from media hubs, network TV relied heavily on social media for content, in particular, user-generated footage and even reports about the events.

In those first few hours, network stations repeatedly combined their own content with user-generated information. Particularly notable was a shot from the top of a tower or building showing the tsunami approaching the coast and sweeping onshore with great destructive power (See here [http://www.youtube.com/watch?v=3sjft3BGzM](http://www.youtube.com/watch?v=3sjft3BGzM)). Once the narrative potential of this scene was exhausted, it was often used as a background scene-unexplained or even uncommented on, just run on an endless loop during the newscast. When another clip was received, it would also move through that same cycle. A very narrow range of images were played repeatedly as announcers passed on a wide variety of information-scientific measurements, damage reports, international reactions, etc., until the TV stations were able to send reporters to get their own footage. But this took quite a while and even once they had their own images, they often relied upon user-generated materials, not only because of their vividness, but also precisely because they were user-generated, a label which once held connotations of "amateur" and thus unreliable, but in this case, took on very different meanings. Precisely because "ordinary" people were generating material while actually experiencing the events themselves, this material commanded a certain visceral veracity. Two news announcers, both wearing
earthquake helmets in the studio as they read the news, commented that it was remarkable that so many people thought to document this moment of sudden panic, and how lucky we are to have this authentic material. We suggest that this is indicative of the shift to personal media that is so much part of the contemporary Japanese media-scape.

An example of the hashtag #j_j_helpme, this one with a picture (3281suzume, 2011). A twitter user (@3281suzume) copied and reposted the tweet by another user (@_mego), adding the hashtag #j_j_helpme. Translation: "#j_j_helpme RT @_mego: Right after the tsunami struck. Taken from the second floor of my house. We are stranded in the middle of water! Please save us!! Arahama area in Wataricho, Watari-gun, Miyagi prefecture! link (http://twitpic.com/48fzhv)" The picture was attached by the author of the original tweet. Retweeted by 41 users.

As others have noted (Rebillard and Touboul, 2010, quoted in Murthy, 2011), interpenetration of platforms usually goes the other way: social media circulating links to mainstream media reports, or taking whole stories and reposting them. On Twitter, especially, a 140-character limit imposed on every message makes it impossible to include longer stories or even quotes, and thus encourages linking to content from other sources and platforms. This is the creation of a media circuit from social media to mass media and back again, illustrating how users become the medium of information because information can only be passed through the conscious actions of individual users, forcing them also to play an editorial function in the selection of what constitutes important communication.

One example familiar to many abroad during those first few weeks was the streaming of mainstream news programs through web applications like Ustream or Nico Nico Dōga. NHK and other stations allowed Nico Nico Dōga to re-broadcast NHK reports so as to reach a wider audience (Tsuda, 2011), but individual users also regularly redistributed mass media content, including TV broadcasts, using the same platforms. Nico Nico Dōga re-broadcasts also enable any viewer to submit anonymous commentary scrolling from right to left across most of the video screen like subtitles. These on-screen commentaries thus run simultaneously with the NHK broadcast, and could be anything from "Those poor people" to "Tepco is lying...again," but are a component part of any viewer's viewing of the same video feed. This makes for a significantly different degree of collective media experience than a Youtube comment in a separate comment box that is quickly pushed off the top screen as new comments are posted. (See here (http://live.nicovideo.jp/watch/lv43120232)) This sort of "mash-up" of content flows through different information technologies and
distribution platforms in ways that blur the lines between social and mainstream media, repositions individual users beyond the passive consumer position into a "curating" one, selecting content from mainstream media for retransmissions and even editorializing about what counts as "news."

**Phase 2: Consolidation and use of information**

The characteristics of social media-its diverse sources of information production, its wide range of flows, extensive distribution and differentiation of forms-enables it to play a particularly important role in early notifications about earthquakes and tsunami, in some ways surpassing mainstream media. And yet, these very characteristics are also those that limit the utility of the information generated by social media in providing a full picture of the scope and dimensions of a disaster, and subsequently, in the coordination of relief efforts until these flows of information are brought together, consolidated, ordered and then made available to those who need them. In effect, the very diversity that was so important at the start of the disaster proves to be a liability as time goes on. In the days after 3.11, to a greater extent than in other recent disasters and crisis situations (such as Hurricane Katrina in 2005 and the 2010 Haiti Earthquake; See Meier and Munro, 2010; Palen, 2008.), we see a second phase emerge with various efforts to bring diverse sources of information generated from social media together in accessible, even searchable forms. Not surprisingly, these efforts were largely from within the technology platforms and social networks that were active in the creation of information.

An example of an aggregation site, Jishinhelp.com. Jishinhelp.com is a search engine that lists tweets tagged #j_j_helpme (request for help), #anpi (safety information), and #hinan (evacuation information) (Screenshot of jishinhelp [http://jishinhelp.com/], 2011). In this way, the different messages with the relevant hashtags were consolidated into some searchable database.

The most common examples of aggregation sites are those based on social networking sites (Facebook, Mixi, etc). Often, these focus on a particular theme: radiation, foreign press, housing, etc. These are mostly clearing houses for information-repostings of newspaper stories or links to TV rebroadcasts, but also places to post personal accounts of earthquake and tsunami experiences. Many groups or pages were formed as action-oriented sites related to relief efforts around particular issues (such as saving pets or focusing on children) or geographically based ("Help Miyagi") or by a particular group of donors ("Shibuya High School Relief Page"). These provide information leading to the exchange of needs and relief, ranging from the very small scale ("I have some clothes to donate-is anyone going up north who can bring them?" or "We need interpreters who can speak Chinese to help local workers") to the larger ("Second Harvest Japan is packing 5 trucks to go up North and needs help unloading."). Because they are embedded in the same social networks that individuals use for their personal sites, the lines are often blurred.
between these different functions. Sometimes, this leads to greater integration of relief efforts into people’s online and offline presence.

Consolidation was much aided by an important feature of Twitter. Tweets can be linked to others of a similar theme through "hashtags" (Huang et al, 2010) or labels that users put on their own tweets to associate information with certain keywords. One early 3.11 hashtag was 

"#j_j_helpme" (cf. Kobayashi, 2011; MIC, 2011a)—where the # marks the string as a hashtag, the first "j" is for Japan and the second one for "jishin," meaning "earthquake" in Japanese—a label that captures a representative neologism of language and symbolic codes that characterize much of social media, especially in Japan. This hashtag spread among users and enabled them to mark messages of distress or disaster information, and to allow others involved in the relief effort to identify needs.

Another example of a more elaborate consolidation site. Anpi (safety) Report (See here (http://anpi.tv/)) lists individuals whose safety has not been confirmed, collected from Twitter’s public stream of tweets marked with the hashtag 

"#Anpi." On the left is the list of names and addresses of missing people; on the right, the Twitter users who posted the original tweet and submitted the information. The site is now closed (Screenshot of anpi report, n.d.).

And here is another example which included a picture that could then also be re-tweeted.

Included were many of the above-mentioned Tweets marked with the hashtag 

"#j_j_helpme." These texts were coordinated with reports on the conditions of roads and other relevant logistical information within the platform of a visual map of the disaster area. This allowed everyone to quickly identify areas of real need.

It also allowed NPOs delivering food, blankets or other aid to check supply chains and to help them to coordinate with other relief providers.

The complexity and thus the utility of these sites increased with time to include mapping functions (linking need and resources to geographical locations), real-time blogs and links to other information, as well as various ways to get in contact with individuals.

Consolidation occurs at higher levels as well, where different sources of information and types of data are compiled into a new presentation with new or adapted functionality. This is most often called a "mashup." Ushahidi, meaning "testimony" in Swahili, was developed as a crisis-mapping platform in the aftermath of the post-election riots in Kenya in 2008 and was subsequently used in Haiti after the earthquake in 2010. It brings together simple texts such as "A scho

ol in Sōma is running out food" or "There is a new shelter opening up; contact X for a place."

Screenshot of aggregator site sinsai.info, showing user-aggregated reports and relief requests projected on free mapping service Open Street Map (See here (http://www.openstreetmap.org/)) (Screenshot of shinsai.info
Probably the single most used consolidator site was Google's Person Finder (here [http://google.org/personfinder/global/home.html]). While there were other, more local efforts, Google has the distinct advantage of offering a substantial preexisting database structure. In fact, Google Japan allocated substantial technical resources and human resources to manage the immediate disaster information effort.) In a characteristically simple interface, there was one button to upload the name of any displaced person found and another to enter information for the person you are searching for. So for example, someone could enter into the database: "I am looking for Shimada Keiko from Ishinomaki." Keiko might find this note and reply, "I am Shimada Keiko and am ok in Kessennuma. Here are the names of the others here with me...". Google's ubiquity, in multiple languages, meant that they were making information available and useful to millions of people in real time, far beyond the scope of any government efforts, local or national. On the first anniversary of 3/11, Google experimentally opened the renewed People Finder website for users to test the function in preparation for another disaster ("Google opens the renewed person finder," 2012).

In addition to these large-scale, commercially-based efforts, there were many smaller local efforts, based on the same sorts of platforms, that were generated by and through communities. One in Tōhoku called "311help (http://311help.com/)" worked through a local school that was relatively less affected by the disasters. The students entered local shelters, documented the needs of evacuees by going person to person, and then entered this information into their own database. This information was posted so that people would be able to ascertain needs and match them with items that they either had at home or could purchase. Once someone committed to providing an item, they would mark it (to avoid duplication) and then send or drop it off at a local distribution site. Different groups, such as PTA groups at Tokyo schools, adopted this site, allowing them to organize their own relief efforts in a way that they knew would be effective. This example points to the social role of social media—the ways that information technology was used on both ends (those in need and those who provided relief) to address the disaster effort through collective efforts in ways that actually contributed to community building in this time of distress. (See Tsuda 2011 for more examples of this dynamic.)

Google Person Finder. The interface offers two functions: "look for a person" or "provide information". The database contains 615,300 entries. (Screenshot of google person finder, 2011)

Ironically, the efficacy of social media in the relief effort was, if not made possible, at least facilitated by the lack of existing local governmental or technological infrastructure in the disaster-affected areas. Especially in the early days and

weeks, individual citizens' groups and NPOs were able to establish reliable flows of information that led directly to highly effective, decentralized distribution of goods and services. Once local governmental offices resumed functioning and official relief efforts were ramped up, they attempted to reclaim their status as gatekeepers for distribution, sometimes with mixed results due to disorganization and the unprecedented scale of the problems confronting officials who were overstretched and in some cases unprepared for the relief efforts.
Here we see the near seamless integration of information, charity and advertising under the single banner of 'corporate social responsibility.'

As of July 1, 2011, many households had still not accessed regular governmental relief channels. There were some instances where NPO relief organizations gathered information about needs and the goods to meet them, but were not allowed by government to deliver them. Some NPOs were stymied, their information flows rendered useless, their supplies wasted. Others continued to deliver goods and services directly to locals in the area, outside of any governmental channels, using the information they had already collected. Interestingly, even 18 months later many of the most effective NPOs working in Tōhoku do so outside of any direct supervision, and often without permission of local government. The scores of informal and often ad hoc representatives of temporary housing units often deal directly with organizations, both non-profit and even profit, as they attempt to secure supplies for their communities. Their most important network is the one on their cell phone directory. In almost all cases, local city offices are aware of these flows, but rarely do they officially intervene. In one sense, this is a viable work-around enabled by information collected by social media, a routinization of the exceptional strategies that developed in times of crisis. On the other hand, it could also be seen as a relegation by the state of its duty to provide for its citizens, a sort of marketization of the distribution of necessary relief.6

Rallying support

Here is the page of a group of mud diggers in Ishinomaki who include a number of these functions (volunteer organization, fundraising, information dissemination, and personal reflections, all linked to Twitter, Facebook, Youtube, etc.) link (http://itsnotjustmud.com/)

The consolidation of information into key sites also proved important in the spread of images and information that was central to raising donations and recruiting volunteers. The value of Social media has long been recognized in raising funds for relief.7 Often-cited examples are the Red Cross using commercial slots during the Superbowl that allowed viewers to text in donations during half-time (Red Cross, 2010). In Japan, the use of social media by the business community is not as developed, although some of the information technologies do exist. The Japanese Red Cross, as of 28 April, 2011, had raised JPY 166 billion (approximately USD 2 billion), but much of this was generated through purchase of very expensive TV slots (By March 2012, it had
raised almost USD 5 billion; Prois, 2012). In ways that are now taken for granted, the first step to donating is almost always to stop on a website that gives fuller information, links to the related projects, provides easy ways to donate, and significantly, offers numerous visual illustration of need. In addition, major corporations such as Unilever (http://www.unilever-sabd.jp/) set up so-called one-click donations, offering to donate a certain amount of money in return for social media promotion. Users were encouraged to add a personal comment (some of them a direct message such as "stay strong"; many others integrated into more quotidian conversations) thereby encouraging their followers to participate as well.

Due to their low cost and user-to-user facility, social media also allows more complex efforts by a wider range of players. While social media increases the total amount of money gathered, especially by the larger relief agencies, it has also generated a huge influx of smaller organizations – often with nothing more than a Twitter account or a simple website – to appeal for help and to gather volunteers on an event basis (a fund-raising party, a weekend relief group, etc.). Often their sites employ mash-ups of static content and social networking functions through which more elaborate dialogues can occur, Twitter feeds to give up to the minute information to active members and news feeds linking to national and international media, in addition to conventional email and donation functions. The majority of sites encourage and facilitate the redistribution of content, thus the promotion of causes, fundraising or recruitment of volunteers can be infinitely redistributed, going "virtual" "ustreamed" or "tweetcasted," transcribed and commented upon in "real time". Thus the flows of information become wide and deep, far more complex than what mass media can offer.

Negative effects

While the distribution of information can be a hugely meaningful activity in and of itself, it was often used as a substitute for other sorts of more concrete forms of contribution (of money, volunteering time, etc.) Reposting images of others shoveling mud in Ishinomaki is not the same as shoveling mud yourself. These patterns are at least partially consistent with broader critiques of digital participation in politics as not necessarily leading to offline activism (Cf. Morozov, 2011; and Gladwell, 2010.). It is difficult, however, to measure these effects-how often did individuals engage in digital participation in ways that prevented them from other forms of engagement?

The same characteristics of social media that made it such a hugely effective set of technologies, networks, and practices for the generation, distribution, and consolidation of information also create effects counterproductive to the dissemination of accurate information about relief efforts. One problematic feature is the sheer volume of information being circulated at high speeds. When each individual becomes a node in the network through which some part of this information passes, in times of crisis the normally manageable flow of information quickly threatens to lead to personal and emotional overload.

This sort of participation can also produce psychological effects. With countless pieces of information flowing through a single user each day, the effects can be disorienting. As sociologist Ito Manabu observed, social media transmits affect through often dramatized narrations by individuals, including one's enthusiasm, emotion, belief and so on, more directly than mass media. This may trigger emotional responses (Ito, 2012, p. 239). Social media-savvy psychiatrist Kayama Rika warned her followers that the onslaught of information overload can trigger amplified feelings of excitement and exhaustion, and ultimately a sort of "compassion fatigue," which could
further lead to secondary trauma or post-traumatic stress disorder (Kayama, 2011, pp. 108-115). Panic, emotional shutdown, and erratic behavior are recognized and the effects of media on users became a popular topic of blogs and tweets. Many commented on the excitement of the shared experience of the earthquake, and how it spread throughout social media networks. Calls to social media users to withdraw from the media, or to monitor, limit and even censor their own consumption and participation were widely circulated. Social media evangelists like Sasaki Toshinao urged their Twitter followers to stay away from television and the Internet in order to stay calm (Sasaki Toshinao, 2011). But this is hard to do in a mediated context where individual users are expected to read, select, repost, comment-respond in some way to the information that flows from their peers and friends as a way to maintain their place within that network. The pressure brings them into the center of a chaotic flux, compounding the disorienting effects of a crisis situation. On the other hand, the diversity of channels and interpersonal aspects of social media led to more posts about raising awareness, with admonitions to "stay calm" and encouragement to "live a regular life if you can." (Tntb01, 2011)

This self-censorship and self-monitoring put social media users in a stressful situation, which affected their information consumption patterns.

Screenshot of Togetter, a service that gathers and stores tweets. This is a collection of tweets gathered by mamononews (mamononews, 2011), starting from one by Twitter user @itkz, who falsely tweeted that he is at server room, being squashed by a collapsed shelf, and various reactions to his tweet. Some worried and encouraged others to retweet with address (which was false), others found out that this was actually a false rumor (his coworker soon after tweeted that he is fine and whatever he is tweeting is just a joke), and accused him, also warning others to be cautious about this kind of information. Togetter. Retrieved on June 5, 2012, from this source.

Social media users choose who they will and will not follow according to their own criteria, such as the topics of a person’s tweets and retweets, number of tweets per day, who they
follow, reply to and mention, and so on. However, during the disastrous events of 3/11 and in their aftermath, users’ timelines were dominated by disaster-related topics: earthquake, tsunami, disaster area evacuation, nuclear power, electricity, volunteering, and so on (NEC Biglobe, 2011). Social media users, no longer able to maintain their regular criteria for consuming and reproducing information, exhibited new patterns through following, unfollowing, and/or blocking users according to their public response to the situation. (One Twitter user, for example, stated, “(I) unfollowed all public figures who decry and question the safety of the nuclear power plant. Do it later” Szkopti, 2011) This was especially prominent in cases where many people sought "true" answers to urgent questions (Furuichi, 2011, p. 212) at a time when people were polarized in their opinions about relative safety and danger, symptomatic of a psychological splitting (Kayama, 2011) Thus, people tended to filter out opposing views that they did not believe or want to hear and instead stuck with peers. Under the stress of being bombarded by bifurcated information, often relayed by extremely frightened and emotional people, affect played a significant role in the consumption of information and knowledge. So much so that one person even commented on the dangers of blindly believing what one's friends tweet and retweet. (The person wrote: "First of all, the believing or disbelieving of information shouldn't be based on like or dislike. Just because a retweet comes from a close friend doesn't necessarily mean that it's right;" Ceno_sougou, 2011) The reliability of information was likely to be judged more on the affective or intimate relationships among users, and less on the empirical validity of claims, which remain, even now, hard to prove. This affectively charged, in-group consumption pattern impacted how information was received in multiple ways.

It is not just the pure volume or pattern of media consumption that is problematic. Social media enables infinite parallel channels of information that are often conflicting, inflated or simply incorrect. The unregulated nature of social media may allow false information to spread faster and wider than print media, especially among the increasing number of those who use it as their primary source of information. This is true of any crisis in ways that lead to mistakes or poor judgment, but when a medium is structured around the expectation of instantaneous diffusion, this danger seems compounded. Acar & Muraki (2011) found that enthusiastic and uncritical redistribution and arbitrary use of hashtags exacerbate the diffusion of erroneous information. While the consensus among users is that they are critical evaluators of the validity of different types of information, in the process of reposting, this information is often de- and re-contextualized in ways that obscures its source, a necessary criterion in how it is evaluated and interpreted. For example, when incomplete or inaccurate reports of available shelter locations were re-circulated, evidently without confirmation, complaints from users were immediately posted. These complaints did generate a sort of internal critique, and even disciplined moments of critical reflection on the characteristics of the communication tools and their use, prompting many to look for ways to find more responsible ways of utilizing the technology.

However, places where, unlike Twitter and Facebook, people can post anonymously, became a hotbed for slanders, especially racial. 2channel threads stated that, "Chinese are plundering the evacuation centers! Their houses are high up in the mountains and they still have a place to sleep. But they are coming to the evacuation center and getting blankets, stealing food from other victims who left the center for a short while when having meal. They are doing this when everyone is helping each other, sharing scarce resources. They even take watches and jewels from dead bodies!" Such unconfirmed reports provoked
reactions ranging from "Those Chinese again" to "This is just another false rumor." Nevertheless, similar stories targeted Koreans as well. 2channel is known as a place where verbal abuse, especially against ethnic minorities, is more tolerated than elsewhere (Kitada, 2005). This tendency was magnified during and after the disaster.

One question raised by such tendencies is: what do we do with the indeterminacy of information? In a move with larger implications, the Ministry of Public Management, Home Affairs, Posts and Telecommunications issued takedown requests to a number of Internet service providers and media companies, with the brief explanation that the information could not be confirmed and might lead to misunderstanding. (On April 1, 2011 an amendment to the penal code was proposed in the Diet that would allow for much increased control over Internet content. It was passed on June 17. Cf. Sakuta, 2011.) Within various social media groups, this was seen immediately as a clear case of unjustified censorship of certain information, most often aimed at stifling anything that was critical of the state's effort to deal with the situation and control the information dissemination about these efforts. At this point, the issue of misinformation becomes political, in a wider sense. The definition and control of information as accurate and/or suitable for public consumption was one of the first cases that was recognized as part of the emerging politicization of crisis, a struggle that often played out through social media.

**Phase 3: Politicization of/by social media**

We come back to the question this article began with: At what point does engagement in alternative forms of communication become a political act itself? Social media as a collaborative process of information dissemination carries with it a political potential that mass media does not. But more than that, it is integrated into a set of social networks that by their very nature venture into alternative public spheres; alternatives that are politicized in a variety of ways and by a wide range of social actors in post-3/11 Japan. In times of crisis, there is often a de-politicizing effect, a move towards retrenchment, to pull together in 'sacrifice for the nation,' sometimes at the behest of the state, what Agamben called a "state of exception." As seen above, one way that this is being exercised today is through the attempt to limit social media and people's rights to the information that it carries and communities it creates. We saw this in ways that were not state-sponsored and in fact supported by social media-the rapid proliferation of "Pray for Japan" or "Ganbare Nippon" (Stay strong Japan) slogans, adopted as "badges" of allegiance attached to personal profile images on social networks. But an equally important current ran in the opposite direction: the coalescence of a movement critical of the state, embedded in a diffuse mobilization of information, resources and people with the goal of autonomous earthquake and tsunami relief.

Sometimes these efforts are the result of small groups of individuals and communities looking out for their own welfare when they think the state is not taking sufficient measures to support and protect them. One example that can be directly attributed to the distrust of official information is the collection of radiation readings through "crowdsourcing;" the collection and consolidation of information through a "crowd" of many diffuse sources. In response to bureaucratic reluctance to publicize radiation monitoring results, members of a Tokyo hacker collective <link> built Internet-connected Geiger counters and drove along the outer perimeters of the evacuation zone, plotting their findings to a free map service (and documenting the process on Youtube <link>(https://www.youtube.com/watch?v=pRyYijbTKig>). Local citizens' groups also procured
Geiger counters to take their own measurements to be posted on shared sites.

A personal Geiger counter and analog map crowd-sources from linking different communities of radiation measurements <link>

The combined efforts of these and similar initiatives revealed that radiation had spread in uneven patterns, and beyond the circular 20 km evacuation zone. Here, grassroots initiatives via social media quickly reached mainstream public discourse, for example when Diet members from the Japan Communist Party confronted Prime Minister Kan with independently gathered radiation readings (Japanese Communist Party, 2011).

A screen shot from japan.failedrobot (http://japan.failedrobot.com/) of Geiger counter readings from June 2012.

At other times, social media initiatives are more obviously acts of critique and protest. Perhaps the most high profile actor, at least in the early stages of the politicization of crisis, was Sakurai Katsunobu, Mayor of Minami-sōma City, located close to Fukushima's nuclear plants. Thirteen days after the disaster, he appeared in a Youtube video that went "viral" with more than 400,000 views in the first month, making a direct appeal for aid to his city, which he claimed had not received sufficient relief from the Japanese government to even feed his citizens. The decision to make a direct appeal for aid and post it on the Internet is a remarkable step for any mayor, in Japan or out. But Sakurai went out of his way to point out the inadequacy of information from Tepco and the government: "it's worse outside the 30 km [evacuation] zone," stated Sakurai in one interview, effectively declaring the government's evacuation strategy ineffectual (McNeill, 2011). While Sakurai's decision to broadcast via Youtube is significant, his critique also explicitly targeted traditional media outlets, whose reporters "[simply] gather information over the phone. If they do not step in this area and get direct information, they could not know or tell what is really the situation with these people." Sakurai's hunched, overall-clad figure, dourly staring into the camera (not at all the image of the tech-
savy blogger) became a symbol of the local effort to struggle with the ineptitude of national government relief measures and a supine, coopted media. Not without irony, Sakurai was quickly named one of the 100 most influential people in the world by Time Magazine, one of the highest profile instruments of mass media.\(^{11}\)

In both of the above examples, the political potential of alternative routes to gather and disseminate information were most often represented as attempts by a threatened community to survive, at least that is how the radiation measurer and Sakurai portrayed themselves. This sort of survival politics is quite powerful, offering the self-evident need to act as a sort of "cover" for its agents. Once the struggle over information and its control is taken out of the context of community survival, the underlying politics of such alternatives is fully revealed. While we have discussed many examples of everyday engagement through social media, there are also some high-profile social leaders who politicized this information, taking advantage of the linkages and quick flow of information networks and practices of social media to exert more influence than mass media spokespersons in shaping perceptions and framing stories. Alpha-bloggers with millions of followers, such as Softbank CEO Son Masayoshi, made an explicit critique of the government response (Masason, 2011). Perhaps even more important were a handful of emboldened journalists challenging the information monopoly of exclusionary and co-opted "journalist clubs"\(^{12}\) as well as mainstream media's default policy to quote verbatim from corporate and governmental press releases (including Tepco's; Ito, 2012, p. 196). Such efforts were instrumental in confronting and exposing secretive mass media practices and sharing the results with large online readershps. Uesugi Takashi (Uesugi, 2011; Hadfield, 2011) and Iwakami Yasumi <link> and others have brought about a substantial shift in Japanese political journalism, in part by positioning themselves as spokespersons, even evangelists of a politically engaged social media praxis. For Iwakami, who was not only in constant conversation with online readers, but insisted on broadcasting press conferences on Ustream (http://iwj.co.jp/channels/main/), social media was completely integrated into the workflow from the very beginning. They have pointed to the relevance and efficacy of free and open journalism beyond corporate or government control, as opposed to the secluded breed of government-media journalism epitomized by the government-orchestrated censorship enacted by sycophantic scientists (or "goyō-gakusha") that is so often the norm in Japan.\(^{13}\)
Iwakuni's news blog, again a mash-up of difference platforms, patterns of participation and information.

Social media also facilitated the flow of information internationally. Accounts of foreign experts and relief workers that challenged official narratives were collaboratively translated and distributed online. They sometimes found their way into mainstream media. On March 22, France's nuclear safety institute started to release online bulletins in Japanese (Institut de Radioprotection et de Sécurité Nucléaire, 2011). There is some evidence that the social media activities of rogue journalists/translators emboldened and empowered other reporters to pose more challenging questions to Tepco and Nuclear and Industrial Safety Agency officials, but the overwhelming majority of the mainstream Japanese media remained passive, reflecting longstanding patterns of deference and reticence on controversial issues, especially when powerful institutions are involved. Of course, the revealing of data through social media sources, some of which was directly related to safety information, could be seen as a public service. Much of the initial leakage of stories on radiation dangers appeared on social media, or it was social media sites that brought together a range of revealing data, some of which was then picked up by the mainstream mass media. But these efforts were also significant for stoking citizen’s growing skepticism of both the state and official media outlets, seen to be either unwilling to share relevant information or incompetent in gathering and analyzing it (Ito, 2012).

Emerging alternative publics through protest

The articulation and mobilization of antinuclear sentiment that led directly to the organization of protest is a next step in the shift in social media usage patterns in post-3/11 Japan. Social media in Japan has grown and evolved largely as sites of communication and expression that went outside of more established institutions, especially work. In Japan, as in many other countries, labor unions have formed an important foundation for oppositional politics. With the deterioration of labor unions as a potent political force, this has changed. Most of these sites are more associated with social networking, the personal networks that were often considered peripheral to the mainstream of society. After 3/11, the fast deployment of these new networks for very different purposes—the generation, evaluation, curation (Evans, 2012, p. 17) and distribution of information about the disaster-contributed to recovery and relief efforts in important ways. This shift re-positioned these sites, indeed, the whole sphere of social media, closer to the mainstream of society, according a certain respectability to information networks, the patterns of use, and the users themselves. Had these networks not already been made wide and dense through these earlier stages, it is difficult to imagine them subsequently serving as productive platforms for the politics of protest.

In the decade prior to the quake and tsunami, Japan’s anti-nuclear power movement was peripheral at best, but as the deeply ingrained illusion of nuclear power as “safe” unraveled,
fear of, and opposition to, nuclear energy increased exponentially. The urgency felt around the nuclear situation in particular provoked spontaneous mobilization in new and constantly changing network configurations. The thousands marching against nuclear power in Tokyo on April 10 <link>, May 7 <link> and June 11, 2011 <link> should therefore be seen not only as a result of mobilization through already existing networks, but also driven by myriad micro-interactions of the sort described above. The organizers were a loose collective of activists in Western Tokyo known as Shirōto no Ran (The Amateur's Riot) <link> (http://www.shirouto.org/) whose Twitter accounts, event-specific hashtags and dynamic mashups of social media content were instrumental in disseminating information and gathering large-scale support for these events. The latter event coincided with PM Kan's sudden declaration that Japan must overcome its reliance on nuclear power (The fabled press conference was also broadcast on Nico Nico Dōga: <link> and culminated in the "No Nukes Square" mass occupation of Shinjuku's Alta-mae plaza <link>. Here, multiple mass protests, simultaneously mobilizing, documenting and coordinating their marches through the city's commercial districts using social media, coalesced in what is one of Japan's most "public" places.


These hyper-mediated events were in turn interpreted as beacons of hope that fed the growing momentum of Japan's suddenly reinvigorated anti-nuclear power movement.

A newspaper spoof by the June 11 No Nukes Square organizers, comparing the demonstration to simultaneous events in Cairo's Tahrir Square. (Nantoka shinbun, n.d.) Retrieved on September 12, 2011, from this (http://irregular.sanpal.co.jp/tokyonantoka/nantoka-news.pdf) source.

The politicized use of digital information and communications technologies (ICTs) in Japan certainly has roots prior to 3.11. Preparations for the 2008 counter-summit against the G8 at Lake Toya, Hokkaido integrated blogs, listservs and video sharing technologies to great effect. Post-3.11 events and demonstrations employed technologies and strategies from more recent movements, as well: organizational experience of long-time anti-war activists, mobilizing resistance to US military bases in...
Japan through a combination of aggressive ICT usage and occupations of urban public space, fed into tactical discussions and decisions of more hastily assembled anti-nuclear constituencies. While the activist left had already integrated information technology into its own efforts, these instances were likely the first time in Japan that platforms for expressing dissent and organizing protest developed so fully within the domain of social media.

Social media enabled collaboration between a wide range of individuals, groups and communities, giving them effective tools to disseminate their agenda and mobilize support, in at least two ways. First, in ways seen from the first few days after the disaster, social media, with its deep integration in the personal social networks of a wide range of individuals, provided a powerful recruitment mechanism, bringing thousands of individuals into association and action around explicitly oppositional and political causes. Many of these were from relatively disenfranchised parts of society (as opposed to the organized labor unions, for example). For many of these individuals, it was the first time they had ever participated in any protest at all.

Second, social media was instrumental in making connections among already organized groups in common cause. The ability to "crosspost" by tagging and retagging information allowed groups with little previous connection to work together in ways that did not require intensive and potentially problematic institutional and face-to-face contact. In a country where alliances across factions (political parties, labor unions, and relief NPOs) is often problematic, especially among groups with similar ideologies, the use of social media as a platform to link these in common cause, at least around a particular event, was a significant feature in the creation of alternative political spaces.

The 3.11 disaster coincided with the outburst of a wave of democratic uprisings across the world (Cf. Mason, 2011) that made 2011 the year in which social media became a central concern for scholars of social change. While the events that have collectively come to be known as "Arab Spring" occurred in a quite different social and political context and with different goals, the ways that social media was used to mobilize and connect wide, diverse, and often disenfranchised segments of society into event-oriented practices, share many common features. In Japan, too, the embrace of social media became central not only as tools for mobilization but also for the legitimization of dissident practices considered taboo, and the negotiation of emerging political commonalities. The TwitNoNukes (http://twitnonukes.blogspot.jp/) collective, organizing their first demonstration in late April, 2011 and continuing to mount monthly protests drawing over a thousand participants, congregates in their capacity of social media users. Describing themselves as "a group of individuals gathering voluntarily on Twitter...without any specific political stance," (Twitnonukes, n.d.) their fetishization of social media practice remains central to both discourse and practice.
It would be wrong to attribute the record numbers of the September 19, 2011 demonstration in Tokyo-gathering 60,000 according to major newspapers (e.g. "Oe Kenzaburo and others," 2011)-exclusively to clever usage of social media. Clearly, the endorsement of major celebrities like Oe Kenzaburo and Sakamoto Ryuichi, and the mobilization of organized constituencies such as labor unions, were hugely important in securing such a large turnout (Arevamirapal, 2011). Yet the social media surely played a major role in bringing people out to demonstrate.

**After September, 2012**

The one-year anniversary of 3.11 did not match the level of expectations set by earlier events. The largest demonstration (in Koriyama, Fukushima Prefecture) only gathered 14,000 participants, much to the disappointment of activists. In looking at the range of once active online sites and Twitter flows, we see a falling off in almost every instance. But this is the double-edged sword of social media. The dissipation of organized movements and even more ad hoc political participation are linked to the nature of social media in March 2012, as was the rapid assemblage of huge numbers in September 2011. Social media offered unaffiliated and non-institutionalized individuals and groups the possibility to mobilize and work together, even to create a common cause, bypassing much of the painstaking organizational work characteristic of traditional social movements. The framing of participation as self-consciously diverse and open might have broken down institutional boundaries that once kept non-affiliated out, but the problem remains: how to keep these same supporters connected, committed and active over an extended period of time.

Similarly, to the extent that these events and practices did involve some organizers, the dispersed, even acephalous structures of social media users also present logistical and philosophical challenges to any continuity of leadership. In fact, the power struggles and factionalism that have plagued the left in Japan
for much of the postwar period might be even more damaging to a movement that is held together by dispersed, digital ties, than one founded within the institutionalized patterns of labor or political party. A twitter demo does not require shared work contacts, membership fees or membership at all. It does not have elected officers, or even leaders and followers in the traditional sense. While these activities have been responsive to the delicate and often precarious shifts in politics and desire (for justice, for stability, for change), the sorts of politics that was so exciting and productive in this past year, is not the politics of continuity, but the politics of possibility. It is a politics of variability and often discontinuity, an oppositional politics that appears to work against itself if we measure efficacy by the turnout at demonstrations.

But, as we have argued above, the effect of social media is not always most accurately measured by the public rituals of demonstrations, let alone party affiliation, or the like. Often the shifts have occurred in less obvious ways. But these shifts might be more enduring and significant because they point to fundamental shifts in the ways individuals relate to each other and to the politics of the everyday. This is a politics that occurs more through the channeling of desire, of isolation, of anxiety into often intimate online connections and possibly, into mobilization.

The Extension of the Digital Sphere

There are indications that this diversification extends beyond online activity. There are countless regular, even neighborhood, demonstrations that are largely organized on twitter, which have created local community ties around political issues that go beyond the shared consumption practices or the accident of physical proximity. Likewise, the monthly TwitNoNukes demonstrations in Shibuya, for which social media constitute not only the means but the very core of legitimacy for a whole social movement organization, are another example of how the weak ties of social media may manifest themselves in real-world initiatives that cut across fault lines on the traditional political spectrum. In ways that echo global political initiatives, we see the emergence of longer-term appropriations of symbolically important space, such as the "tent plaza" occupation (still continuing outside the Ministry of Economics, Trade and Industry in Kasumigaseki at the time of writing; see here (http://tentohiroba.tumblr.com/)), and have pushed digital activism into urban spaces beyond what was envisioned by the No Nukes Plaza organizers, Shiroto no Ran. During repeated eviction threats and intimidation by security police and extreme right-wing groups, the occupation's ability to, quickly leverage social media in order to mobilize hundreds of supporters at the physical site and thousands of virtual ones, proved critical to its survival.

The initial profusion of information flows, publics and initiatives has obviously stabilized, with certain platforms regaining some degree of semi-transparency while others were marginalized and the majority gone with few traces. This was an expected outcome in the entrepreneurial practice by which innovative social media startups in particular, and the world wide web in general, continues to exist. Claims regarding the transience of much social media are belied by the general acceptance and even institutionalization of certain practices into the taken-for-granted imperative of post 3.11 society, from the collaborative curation of online content through re-posting and re-tagging, to the widespread prominence of micro-bloggers such as Uesugi Takashi and Azuma Hiroki, to the spread of crowd-sourced radiation measurements all over Japan.

Conclusion

We have shown that the diffuse and mobile information technology of social media provided immediate and vivid images of the
worst disaster in the postwar period to the rest of Japan and the world. The consolidation of this information was used in important ways by the relief effort to identify need and match it to available resources, as well as generate new resources through donations and volunteer efforts. There has been a source of information flows independent of those dominated by the state and mass media. More generally, the topography of Japanese social media landscape changed considerably in the immediate aftermath of the disaster, as new users flocked to social media platforms such as Twitter and Facebook with new sites engaged and new goals articulated. That is, 3.11 introduced new user strata that learned to participate in online praxis and netiquette not through casual discourse in Balkanized otaku archipelagos, but in critical, aggressive and sometimes painfully honest pursuit and dissemination of accurate information-concerning relief locations, survivors, and increasingly, the spread of radioactive material. Patterns of social network formation, after the initial explosion in connection, congealed around key initiatives, issues and alpha-bloggers, providing this new generation of users with some guidance and intellectual leadership.

Participation in the post-3/11 social media has engaged a generation of young people who were often represented as disaffected and politically apathetic in a political process that is at once at the heart of a national recovery effort and part of a critically engaged participatory politics that few would have considered before. Through the networks that have been developed amid this crisis, movements alternative to the political mainstream are emerging and gaining ground in ways that have allowed both radiation, and thus the larger issues of nuclear energy, to become a cutting edge issue, a rallying cry for a larger and more developed social and political critique. This is a social media experience that is inherently political; one that appears central to recent attempts to conceptualize political engagement and practice among global youth. To what extent this influx of critical users can manage to counterbalance or offset dominant patterns of social media usage remains to be seen. It is clear, however, in the months and now years since the disaster, that a new generation of social media users has emerged whose online methodologies continue to evolve and diversify.

We have outlined some of what we see as the most serious challenges to sustainability of the emerging movements and practices, some of which come from the information technologies and patterns of use inherent to social media itself. We have also argued that these questions must be addressed not only through the head counts at public rituals such as political demonstrations, but also through the shifts in online engagement, affective engagement, that social media has generated and/or structured. While mindful not to conflate the virtual talk of politics with political action itself, we also have pointed out a number of different ways, both online and beyond, that social media has provided a platform for especially young people to be exposed to and engage with political ideas and actions. We have shown that social media can also provide useful tools for linking already established groups in some common cause, at least around particular events. We have shown that social media has provided networks for the dissemination of alternative information, as sites where political ideas can be discussed, debated and developed, and in some cases, linked to other forms of political action. Just as the information technologies and patterns of use we have seen deployed in this past year rested upon earlier efforts (the rise of social networking, the NPO use of social media, etc.), the full effect of social media during the course of this post-3.11 crisis cannot be fully measured yet. It cannot be truly evaluated until we see how it does (or does not) serve as a foundation for future forms of engagement, future social movements and future manifestations of the
political and social in daily life.

David H. Slater is an Associate Professor of Cultural Anthropology at Sophia University, Tokyo, whose work involves youth culture, social class and urban space. He is the co-editor with Ishida Hiroshi of Social Class in Contemporary Japan: Structures, Sorting and Strategies (http://www.amazon.com/Social-Class-Contemporary-Japan-Structures/dp/0415474752). Links to previous Japan Focus work include The "Making of Japan's New Working Class (https://apjjf.org/-David_H_Slater/3279)" and a research note, "Fukushima women against nuclear power: finding a voice from Tohoku (https://apjjf.org/events/view/117)," (https://apjjf.org/events/view/117). Since 3/11, he has been doing the ethnography of disaster and relief in Tohoku, and was the Guest Editor of Hot Spots: 3.11 Politics in Disaster Japan: Fear and Anger, Possibility and Hope, in Cultural Anthropology (2010) <link>

Keiko Nishimura is a graduate from the MA in Japanese Studies from the Program in Global Studies at Sophia University. Her work focuses on female fandom and digital participatory media culture, and she is particularly interested in those spaces where new technologies meet cultural practices. Her article, "On Exhaustion, self-censorship and affective community," came out in Hot Spots: 3.11 Politics in Disaster Japan (http://www.culanth.org/?q=node/415). Keiko is currently a research associate at Duke University.

A graduate student in Japanese studies/anthropology at Sophia University, Love Kindstrand studies emerging expressions of political subjectivity and struggles for representational space in Tokyo and Japan. His research interests also include youth cultures and alternative or marginalized readings of the city. His article, "The Politicization of Precarity: Anti-Nuke Protests in Japan since the Great Tohoku Earthquake" came out in Hot Spots: 3.11 Politics in Disaster Japan (http://www.culanth.org/?q=node/421) (http://www.culanth.org/?q=node/421). Love will begin his PhD at the Department of Anthropology, University of Chicago in fall 2012.

This paper is an expanded and updated version of "Social Media in Disaster Japan," in Jeff Kingston, ed., Natural Disaster and Nuclear Crisis in Japan: Response and Recovery after Japan's 3/11 (Nissan Institute/Routledge Japanese Studies). link

We would like to thank Mizukoshi Shin, Joo-Young Jung and Jonathan Lewis for their stimulating discussion of these issues during the Social Media in Disaster Japan study group. Great thanks also go to Jeff Kingston for his editorial direction on the earlier version of this article for inclusion in Natural Disaster and Nuclear Crisis. Mark Selden very much helped us push the arguments from our earlier drafts further. All mistakes or misrepresentations remain our own.


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Notes

1 Sociologist Endo Kaoru (2011) calls 3.11 a "theater-type disaster (gekijo gata saigai)" in areas not directly stricken by the earthquake or tsunami (p. 274).

2 FMYY radio is one enduring example of how local efforts to compensate for governmental failure to provide sufficient information in disaster situations adapt and develop (Negi, 2010).

3 Of course, this is not limited to Japan. See Bertot et al, 2010.

4 As seen in the example of NHK, some mass media stations already incorporated social media as part of public relations even before 3.11. In the first phase, they used their networks to mobilize people, directly sending officially confirmed information.

5 Here (http://www.youtube.com/watch?v=WWAHaM9z66M) and here (http://www.youtube.com/watch?v=3sjft3BGzLM) (Individual recorded and broadcasted on TV)

6 Oguma (2011, p. 1) outlines the neo-liberal assumptions "being accepted by many as traditional reconstruction methods, centered on public projects controlled by government agencies, that are being criticized for their inefficiency and anti-democratic approach in discussions on reconstruction efforts following the Great East Japan Earthquake."

7 See Newmark 2011 for a recent study on social media usage by major charities.

8 2channel conversation threads are often curated by other websites, so-called "matome (summary) sites;" and this is retrieved from one of them ("Chinese residents in Japan," n.d.)

9 Retrieved from another third-party matome site ("Evacuation centers looted," n.d.)

10 According to Shibukawa (2007), 2channel has a culture of "leave the flamers (arashi wa houchi)" and "don't be friendly (nareai kinshi)," which support the tendency of unfriendly, sometimes abusive communication.
Sometimes called "kisha clubs;" see Freeman, 2000.

For a detailed discussion of independent journalism after 3.11, see Liscutin, 2011.


The "G8 Action Network". (2008) and a short-lived Japanese iteration of Indymedia were central in this campaign. See also this interview by Scottish activists as an example of how transnational activist networks transverse the boundary between online and offline worlds.

In times of confusion, young leaders initially sought the counsel and practical experience of seasoned activists for their monthly protests in Shibuya. But Twitter demo organizers later moved to purge those very same elements from their ranks—a spectacle that in large part was played out transparently through social media.