Backpacking, Social Media, and Crises:
A Discussion of Online Social Convergence

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Abstract

The use of social media during a disaster or crisis event has become a topic of interest among scholars from various disciplines, including recent studies in tourism. The purpose of this paper is to explore how backpackers travelling in the midst of the crisis have used social media and how friends and family seeking information about the travellers have used this emerging media. The discussion is situated within a conceptual framework based on the concepts of 'collective intelligence', 'Digital Social Convergence', and 'Hyperawareness'. Two main case studies of backpackers caught in a crisis are presented: a natural disaster (the Chilean earthquake in 2010) and political violence (the violence surrounding the protests in Bangkok in 2010).

Keywords: Disasters; Independent Travel; Social Media; Case Study

1   Introduction

The use of social media during a disaster or crisis event has become a topic of interest among scholars from various disciplines, including recent studies in tourism. This paper seeks to contribute to this growing body of research by focusing on the use of social media during a crisis event by one particular segment of tourists, backpackers, through the examination of two case studies. The backpacker tourism market is particularly resilient, as compared to other tourism niches. Between 2002 and 2007, backpackers' spending increased by almost 40%, a much higher rate of growth than the overall international travel market. The backpacking and youth tourism sectors have had continued growth during the past decade in spite of global crises, such as 9/11, SARS, the Avian Flu, and the recent economic crisis (WYSE Travel Confederation, 2010). Additionally, the global distribution and independent travel tendencies of backpackers often place them at an amplified risk of being caught in a natural and man-made crisis or other dangerous situations.

The use of social media and mobile devices has become an ubiquitous part of the backpacker experience (Paris, 2012). Recent innovations in information and communication technologies have provided a perceived 'safety-net' for backpackers, as they can maintain contact and share their experiences with friends and family.

While instantaneous communication with people anywhere in the world can reduce the perception of risk of independent travel, things do go wrong. Social media can provide a means for friends and family to seek out news and help when crises do occur. Previously, the ability to get news updates and mobilize searches was nearly impossible. With contact only through occasional letters and postcards, family and friends back home could never really know the location of backpackers. Instant, global contact mediated by social media now provides friends and family a better starting point from which to begin when the worst occurs.

The purpose of this paper is to explore how social media have been used by backpackers travelling in the midst of the crisis and how it has been used by friends and family seeking information about the travellers. The discussion is situated within a conceptual framework based on the concepts of 'collective intelligence', 'Digital Social Convergence', and 'Hyperawareness.' Two main case studies of backpackers caught in a crisis are presented: a natural disaster (the Chilean earthquake in 2010) and political violence (the violence surrounding the protests in Bangkok in 2010).

2 Literature Review

The channels used for communicating information during crises or disasters have often utilized a top-down approach. Meaning, information is gathered by authorities and government officials and is then dispersed to the public (Sutton, Hansard & Hewett, 2011). Thanks to the widespread use of Twitter, Facebook, and other forms of social media, however, the direction of information is shifting. Since the inception of these social media platforms, researchers have tried to study their usage during crisis events. Social media and crisis have been the topic of several recent tourism studies, however, most focus on the management of crises (e.g., Palen, Anderson, Mark, Martin, Sicker, Palmer & Grunwald, 2010; Pennington-Gray, London, Cahyanto & Klages, 2011; Sutton, Hansard & Hewett, 2011). There have been only a few studies focused on the tourist perspective and the use of social media during a crisis event (e.g., Pennington-Gray, Kaplanidou & Schroeder, 2012), even though some researchers acknowledge that tourists may be more vulnerable during disasters (Palen et al., 2010).

While individuals affected by disasters and crises are increasingly using these forms of communication, there is a lack of scholarly research on the topic of tourists and disaster situations (e.g., Hughes & Palen, 2009; Hughes, Palen, Sutton, Liu & Vieweg, 2008; Schroeder, Pennington-Gray, Donohoe, Kiousis & Mandala, 2012). For instance, Hughes & Palen (2009) examined the use of Twitter during four events in a narrow time frame to compare the behaviours of Twitter users. Their goal was to gather this information for comparison to future events in order to demonstrate the social effects of Twitter. Hughes et al. (2008) delved deeper into the communications and activities during disasters by examining different actors involved and their behaviours. While both of these studies are early investigations into social media behaviours during crises and disasters, they do not explicitly discuss how tourists are affected; even though tourists are obviously present during the disasters examined in these studies. For many tourists, social media is the easiest and most accessible form of communication (Schroeder et al., 2012) and when they find themselves in the

middle of a natural or man-made disaster, they often turn to social media to communicate their status to others and notify emergency response personnel of the disaster's severity.

Traditionally, during a crisis or disaster, government authorities have had the responsibility of disseminating vital information to first responders and the concerned public. Due to recent innovations in "new media" technologies (Pennington-Gray, Kaplanidou & Schroeder, 2012), such as Facebook, Twitter, and other crowdsourcing platforms, the public is now able to assist authorities and the public during disasters in the form of real-time information and post-crisis support. This shift in information delivery has been the focus of several articles that discuss the legitimacy of public information and the overall management of disasters, natural or man-made (e.g., Heinzelman & Waters, 2010; Sutton, Hansard & Hewett, 2011; Vieweg, Palen, Liu, Hughes & Sutton, 2008).

Real-time updates from the ground are important for travellers, local victims, and emergency responders. Emergency response teams often rely on internal sources to coordinate rescue and relief efforts in the past. While this has been advantageous in most instances, problems have surfaced in regards to community needs. During the January 2010 earthquake disaster in Haiti, United Nations authorities halted relief efforts in the community of Logane because internal sources revealed the area was not safe for emergency teams (Heinzelman & Waters, 2010). Community leaders were confused by the UN's decision and tried to voice their concern "yet the international response system was simply not structured in a way to utilize these inputs, creating a communication disconnect between Haitians and emergency response organizations" (Heinzelman & Waters, 2010, p. 3). For the Haitian disaster, standard emergency relief protocol did not allow community leaders to participate in decision-making discussions, which resulted in a lack of communication and support for communities in need. Similarly, failures in crisis management can be seen in tourism destinations as well. Peters & Pikkemaat (2005) discuss the response to an avalanche disaster in Galtuer, Austria. One conclusion illustrated the lack of media coverage and cooperation during the avalanche; citing that fragmented information and misplaced blame lead to the disaster (Peters & Pikkemaat, 2005). To facilitate the accuracy of information dissemination in future disasters, Peters & Pikkemaat (2005) mentioned an Internet-based system was put in place to aid in communication. These systems are at the front of the agenda for academics and practitioners in the crisis and disasters field, and several key conferences have address the topic including the 2011 Dubai International Humanitarian Aid and Development conference.

Several recent studies have explored the digital social convergence that occurs during and after crisis events. The internet and social media in particular, have supported the convergence of individuals both at the physical site of a crisis and those converging in virtual spaces. Physical social convergence is a term that describes the diversity of people that descend on an area or region after a crisis or disaster (Hughes, Palen, Sutton, Liu & Vieweg, 2008). The social convergence of individuals to physical sites of disasters has been examined by sociologists dating back to the 1950s (Fritz & Mathewson, 1957). With respect to physical social convergence after a disaster,

tourists are often present. For example, helpers and supporters can be seen as volunteer tourists whom assist in the rebuilding of communities after natural disasters such as, Hurricane Katrina.

Kendra & Wachtendorf (2003) classified seven behavioural groups of individuals that digitally converge in the midst of a crisis: the anxious, the returnees, the curious, the helpers, the exploiters, the mourners, and the supporters. The Anxious are those who seek out information about loved ones. The Returnees consist of people that return to the site to assess damages and often document and share what they see and experience. The Curious often do not have direct connection to the crisis or victims; however they digitally converge in the aftermath of a crisis out of curiosity. Obviously, the helpers and supporters arrive with altruistic intentions to aid those affected by a crisis event. Helpers often converge to offer assistance in anyway possible and often provide valuable information for the anxious. Similarly, Supporters converge to show gratitude to responders to a crisis. Mourners, whether family of the victims, friends, or others affected by the disaster, converge to pay their respects. Lastly, the Exploiters often use the disaster to further personal or political agendas.

Digital social convergence is the collective activities and interpretations of people in response to a disaster. They are channelled through on-line media sources, such as websites, blogs, and social media (Hughes, Palen, Sutton, Liu & Vieweg, 2008). While actors at a disaster site often have first-hand observations and information, digital social convergence allows for information dissemination from sources that may not be as reliable, leading to rumours and misinformation (Mendoza, Poblete & Castillo, 2010). Not all social media information about a disaster is false, however, the majority is small bits of information that is often taken out of context (Hughes et al., 2008). All of these bits of information can now be gathered collectively and corroborated. The result of many of the digital social convergent activities in the midst of a crisis event results in a collective intelligence about the event that was not possible before.

Recent tragedies and disasters related to backpackers illustrate the displays of online social convergence activities. In 2007, a solo female backpacker disappeared while travelling from West Africa to Turkey via the Middle East. Using a blog on LiveJournal. The blog was submitted to Digg, which brought in many new volunteers. Hundreds of individuals mobilized to help find her. They helped by translating documents between English/Arabic, interviewing witnesses on the ground, searching hotels, and even tracing IP numbers to actual physical addresses allowing for the location of her last email located near the Syria/Lebanon border (Andrews, 2007). The search continues today with volunteer detectives piecing together new details and searching social media and the Internet for the person of interest. Facebook has been used in a similar way by a father during his search of his daughter who went missing during a backpacking trip in Croatia (Dobbin, 2008).

The recent escalation of on-line social convergence has lead to new forms of interaction between different actors that respond to disasters. While government authorities are still considered the most reliable sources of information during a crisis,

many are increasingly turning to on-line chatter for up-to-date information on the victims (Palen, Vieweg, Liu & Hughes, 2009). For example, during the 2007 Virginia Tech shooting crisis, information regarding the status of victims was broadcasted via social media sites to the concerned public (Vieweg, Palen, Liu, Hughes & Sutton, 2008). The convergence of small bits of information on a digital level was shown to contribute to the collective intelligence of the shooting as it unfolded. This "real-time" information from observers on the campus was used by emergency response personnel to assess the crisis and make decisions about future actions. Clearly, digital social convergence is helpful during times of disaster, even if some information is not accurate. The information set as a whole is useful to paint a picture of a disaster situation; providing problem-solving intelligence for emergency personnel, people involved in the crisis, or loved ones. For instance, in the aftermath of a 2010 earthquake in Chile, Hawaii was hit by a tsunami. Sutton, Handard & Hewett (2011) examined the communication efforts of Hawaii during this time and found that although existing governmental networks worked well to inform the population of the impending tsunami, social media was a large contributor of information dissemination. In 2010, a devastating earthquake in Haiti forced the relocation of many and provoked questions about emergency communications. Heinzelman & Waters (2010) examined this disaster and found that most communication was between emergency teams and the government, turning the rest of the population toward social media to gather information. According to Starbird, Palen, Hughes & Vieweg (2010), social media and blogging were a major avenue of communication during a flood in the Red River Valley of the US and Canada.

Social media has provided tourists with a certain hyperawareness when traveling. Hyperawareness is the social awareness that individuals share with one another by continually staying in touch across different locations (Farnham & Keyani, 2006). Today, tourists are continuously connected to family, friends, and news outlets through on-line media, which can contribute to a sense of security (Pennington-Gray, Kaplanidou & Schroeder, 2012). Social media and mobile devices allow individuals to monitor events as they are occurring and can help increase the level of situational awareness, particularly important during crisis events. Being able to tap into the collective intelligence facilitated by the digital social convergences during and after a crisis can provide the necessary information for heightened levels of hyperawareness of individuals caught in a crisis.

The grassroots efforts of individuals using social media to disseminate information during a crisis will become more commonplace in the future (Vieweg et al., 2008). The assistance social convergence and collective intelligences provides to authorities is invaluable. Especially with tourists, where social media is often the most widely used form of communication, on-line collaboration and problem solving has the potential to become a vital source for organizing a response to disasters. The two case studies presented later in this paper clearly illustrate this.

3 Methods

For this study, case study methodology was applied to two recent crisis events: the 2010 earthquake in Chile and the political protests that turned violent in central Bangkok in 2010. These two cases were chosen because they occurred in and around two major backpacking destinations. Also, one is a natural disaster and the other is a 'man-made' crisis. A variety of data sources were compiled for each of the crisis events. For the natural disaster, real time social media accounts were examined, and interviews were conducted with backpackers caught in the earthquake. For the violence in Bangkok, real-time, geographically situated (around the backpacker enclave of Khoa San Road) twitter streams were downloaded and examined. Additionally, real-time blog post and YouTube videos were also examined.

3.1 Chilean Earthquake Case Study

In the early morning hours on February 27th, 2010 one of the largest earthquakes ever recorded shook the country of Chile. This 8.8 magnitude earthquake struck off the coast, causing infrastructure damage from the aftershocks and tsunamis. Around 1.5 million people were displaced after the earthquake toppled residential buildings and ignited fires across the city of Concepcion. Effects of the Chilean earthquake, in the form of tsunamis, were felt as far as Hawaii and warnings were issued in countries as far as Australia. More than half of the country was declared a disaster area.

For this case study, a key informant interview was conducted with a backpacker in Chile during the crisis. Additionally, that individual's social media profiles were examined, including Facebook and Twitter. Additionally, Tweets during the crisis were examined for details regarding backpackers in Chile during the crisis. Several hashtags were used to do so including #Chile and #ChileanEarthquake. It was difficult, however, to distinguish the backpackers from other posts, as the majority of these tweets focused on the sharing of news stories about the earthquake. However, one case in particular focused on the use of Twitter by family members seeking missing loved ones backpacking in the area of the earthquake. Additionally, secondary sources were also examined, including news stories.

3.2 Bangkok Protests

Violence and political unrest between two opposing parties has been stirring in Bangkok, Thailand since 2006 when a military coup ousted former Prime Minister Thaksin Shinawatra and forced him into exile. One party, the red-shirted populists, was protesting for equal opportunity for the overworked poor with hopes of new elections and the democratic representation of the country. The nationalist yellow-shirts were fighting to keep the current government in place and consisted mostly of the urban middle class. From 2007-2010, several protests took place that upset the tourist industry directly, such as the sit-in that shut down the airport and stranded travellers. In 2010, the red-shirt protest turned violent leaving many expatriates and tourists to fend for themselves on the streets of Bangkok. These violent clashes in 2010 included road blocks, small arms fire, several large fires, and even the use of grenades. One particular clash between the two groups that occurred on April 10, 2010 was the focus of this case study because the clash took place in the streets

directly adjacent and connected to the historical backpacker enclave of Khoa San Road.

For this case study, hashtag searches for #ksr and #KhoaSanRoad were used to find Tweets posted during and directly after the clashes that focused on the geographical area of Khoa San Road. In total, 186 tweets were downloaded. The first was posted at the outset of the clashes and the last was six hours after. Additionally, photos, blog posts, Youtube videos and news stories that linked to the Tweets provided additional insights into the use of social media during this crisis.

4 Results and Discussion

The purpose of this paper was to provide an exploratory glimpse into the social media behaviour of backpackers during and after two crisis events. The behaviours during these events provide illustrations of the different types of actors present, as well as insights into the tourists' perspectives of these two crises. Several selected illustrative examples are presented and discussed.

The recent earthquake in Chile provides a good context of how social media can be used in the midst of crisis. Twitter was used extensively in the aftermath of the earthquake. One example is that of a missing British couple, who went missing after the quake in the surfing destination of Pichilemu. Shortly after, the sister of one of the missing started a Twitter account to try to find her missing brother. A review of the tweets and re-tweets on her account indicated that she interacted a lot with the Twitter accounts of one of the surfer resorts and Pichilemu.com, as well as individuals from all around the world; providing a good example of digital convergence. These virtual interactions clearly illustrate how powerful a tool that Twitter is. A group of geographically dispersed individuals digitally converged in the aftermath of the crisis. The loved ones, who could not get in contact with the missing backpackers, created their Twitter account specifically to locate the couple. Their behaviour is representative of the Anxious (i.e., Kendra & Wachtendorf, 2003. The other individuals, some located in the disaster zone, and others located around the world, converged as Helpers to assist the search and add to the collective intelligence as the event unfolded. Many of these individuals were complete strangers. The missing couple was found shortly after the search began, unharmed. In addition to Twitter, Facebook, Google Person Finder (a platform designed specifically for finding missing people during a crisis), and Couchsurfing.org were all used to mobilize the search for the missing couple. Through each of these platforms the group of helpers each added a piece of information to the collective intelligence regarding the missing couple's travel itinerary leading up to the disaster and their eventual location.

One particular backpacker, 'Chris', was interviewed one week after the earthquake. Chris provided a first-hand account of the Chilean earthquake and shared a similar experience to that of the missing couple: "Following the Chilean earthquake last week, we found dozens of comments on Facebook and Twitter asking where we were, if we were OK, and if we needed help. People were asking the Twitter community if anyone had heard from us and by the time I answer emails and logged into Twitter to say we were safe, people I had emailed had posted on twitter and Facebook that we

were safe. It was nearly instantaneous and this wide group of virtual friends we've never met were rallying around to look for us."

These two examples of the digital social convergence in the aftermath of the Chilean earthquake illustrate the altruistic behaviour of individuals. While the limited scope of this case study did not result in clear expressions of the other digital social convergent behaviours, the Bangkok protest case study did. Additionally, while the Chilean earthquake illustrated the behaviour of individuals globally, many of the examples during the Bangkok protests illustrate how social media was used by the tourists in Bangkok. During 2010, political tension was on the rise in Bangkok, and eventually violence broke out between anti-government protesters and authorities. The speed in which the violence broke out and the location next to the popular backpacking enclave caught many tourists off-guard and forced them to ride out the violence. For these tourists, the use of social media to communicate was more accessible and easier (i.e., Schroeder et al., 2012) than relying on local authorities that were more focused on quelling the violence. During this crisis, Twitter provided a type of "life line" for tourists and expatriates trying to navigate the city; posting comments about which streets were safe from the violence.

Many of the posts to Twitter during the protests and violence around Khoa San Road were focused on providing information updates for other tourists and backpackers in the area. For example posts by the backpacker with the Twitter name Eloren provided updates on the status of shops, police blockades, and safety during a 4 hours period.

> Eloren Many shops closed on **KSR** today, they all have signs mentioning : "Closed from 11-15". I guess they're early because of the events about 4 hours ago
>
> Eloren Police blocks **ksr**. Fire started near burger king. Gun shots about 3 hours ago
>
> Eloren All bars shops closed on **ksr**. Police blocking street. Fire & gunshots in background about 3 hours ago
>
> Eloren Tourists and locals around **KSR** should all be alert and cautious! #Thailand about 3 hours ago
>
> Eloren Police injured at head. Backing down **ksr** about 2 hours ago
>
> nomadicmatt @eloren what's going on up there? is **KSR** still shut down? where are the tourists? about 1 hour ago
>
> Eloren Tourists back on **ksr** but everything closed. All the attention seems to be on kok wa intersection. Reds still massively there

In addition to status updates, situational updates were directly sought such as in the exchange:

> inspirability @Patee122 Thank you kaa' she wanna go to **KhoaSan** for Songkran mhh is it safe in Bkk?about 1 hour ago
>
> Patee122 RT @inspirability:Thank you kaa' she wanna go to**Khoa San** for Songkran mhh is it safe in Bkk?: No it isn't .about 1 hour ago

A tweet by another individual also gave thanks to an individual for information while also showing support for the cause of the protestors. This is an interesting illustration of supportive behavior:

JuanMedin @nomadicmatt Thanks for tweeting from **KSR**. Is it advisable to go there? I feel sympathy for the red cause. about 6 hours ago .

While there was no completely "exploitive" behavior observed, one individual's posts were a bit more sensational. This particular individual is a reporter for Reuters, and thus could be seen as exploiting the crisis with a bit of shock and awe writing to get noticed among media outlets. A summary of his tweets was picked up on several news sites: "Barricades going up at Khoa San. Reds preparing for soldiers' return. Several pools of blood on road....Don't listen to bland Thai govt reassurances. Khoa San is a dangerous place. I've seen 2 tourists with injuries...Khoa San is shuttered up, red shirts everywhere. It looks like a warzone...Pitched battles in streets around Khoa San. Tourists ducking for cover. A red shirt with an AK47. Scenes of chaos at Khoa San. Tourists tell me they saw horrific injuries, an old man with an eye hanging out."

The overall collective first-person insights provided through Twitter during the crisis were used to create and organize an on-line crisis map in the wake of 2010 protests in Bangkok that facilitated the mobility of tourists through the violence in the streets. This map was populated with information from people, including tourists, caught in the violence as opposed to emergency response teams. This collective behaviour illustrated the speed that information was shared through social media and the importance of digital social convergence (i.e., Kendra & Wachtendorf, 2003) in crisis problem-solving and facilitating hyperawareness (i.e., Farnham & Keyani, 2006) for individuals during the crisis.

One particular back and forth conversation highlighted the use of Twitter as the crisis ended and 'returned' back to normal. While this conversation took place between two individuals, it did so in public in the twittersphere. Both of these individuals have thousands of followers who likely noted the updates and re-tweeted (RT) the play by play. The conversation also notes how the excitement of the crisis abated and how the normal KSR came back to life. The crisis took place just a day before the popular SongKran festival that includes a large street water fight in which locals and tourists are eager participants.

nomadicmatt looks like my plan to go meet people on **KSR** is not going to happen41 minutes ago
Eloren Bars opening slowly in **ksr** again. 35 minutes ago
nomadicmatt My Songkran on **KSR** is most likely ruined now lol. I guess I shouldnt have gone up there to reserve my room today lol 31 minutes ago
Eloren @nomadicmatt road probably open but seems over on**ksr**. Music is back. Kok wa however still packed30 minutes ago
Eloren Ok I guess **ksr** is back to "normal" again. I'm heading back to my room .29 minutes ago
nomadicmatt RT @eloran road probably open but seems over on**ksr**. Music is back. <---only in Thailand would a riot the block over not stop the party 27 minutes ago

The conversation between these two individuals is also in stark contrast to the earlier tweets during the crisis that vividly described the violence that broke out. The speed

at which the crisis returned back to normal, and the seeming ambivalence of some tourists were also noted in commentary by some individuals.

> richardbarrow RT: BobThailand: So, how many backpackers you think will be throwing water in the next couple of days on **KSR** for Songkran? (I think 1000's)2 minutes ago

> Thai faq Considering the violence tonight I was amazed to see so many tourist. Some were actually posing for pictures as the army was shooting.

In the days after Khoa San road was full of people enjoying the water fights, but there were some photos uploaded that showed makeshift memorials of people injured or killed during the violence.

5 Conclusions

In this exploratory study two case studies were used to illustrate the digital social convergence behaviours of backpackers and other geographically dispersed individuals during and after crisis. While these two case studies only provide an initial glimpse into this behaviour, it does so from the backpackers' first person experiences. This study can provide a basis for future research into the use of social media by individuals during crisis. Future studies should focus on examining the behaviours at a larger scale, during other types of crisis events, and how other types of ICTs mediate the experience of tourists during crisis. This study was limited by the lack of complexity and technical ability of the researchers for the data collection, as most data was gathered from publically and conveniently located sources. More complex research designs can further build upon the findings of this study. While this study is quite basic in nature, it does provide an initial glimpse into the potential of the decentralized and highly distributed problem-solving that can take place through these technologies. While this was highlighted in the behaviour of backpacker tourists during crisis in this paper, it could also include other incarnations of this emerging phenomenon such as community based tourism planning, collaborative marketing, or responsible tourism campaigning.

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