Filtering fact from fiction in social media

The photo spoke volumes about the human cost of war. It showed neat rows of shrouded bodies, as a child jumped over one of the rows. The picture was published by the BBC News website on its report of the killing of at least 90 people, 32 of them children under the age of 10, in the Syrian region of Houla in May 2012 (BBC 2012). Supposedly, it was a visceral record of the barbarity of the Syrian conflict. But it wasn't. A Getty photographer had taken the photo in Iraq almost a decade earlier.

"I went home at 3am and I opened the BBC page which had a front page story about what happened in Syria and I almost felt off from my chair," photographer Marco di Lauro told the UK newspaper, *The Telegraph*. The BBC took down the image within 90 minutes of publication and later admitted it had been a mistake. "Efforts were made to track down the original source and, having obtained some information pointing to its veracity, the picture was published, with a disclaimer saying it could not be independently verified," explained the BBC's social media editor, Chris Hamilton (2012). "However, on this occasion, the extent of the checks and the consideration of whether to publish should have been better."

Publishing a powerful image without certainty highlights the challenges for journalists faced with the widespread proliferation of raw information related to the news produced and disseminated by the public. Over the past decade some of the most dramatic images have come from people witnessing the news, from shaky video of the London bombings in 2005 to the photo of a plane in the Hudson River in 2009 to the video of a bloodied suspect in the Woolwich killing of 2013. Journalists who once could claim a monopoly on the supply of everyday public information are contending with publics that are sharing eyewitness accounts, commenting on the news or evaluating information on social media. Navigating streams of public information requires journalists to draw on tried and tested methods, but also presents opportunities to develop new techniques and tools.

How verification comes to matter

The ease by which a rumour can take hold and spread on social media has given greater urgency to the need for sources of accurate and reliable information. Journalists have traditionally filled such a role. Verification is at the core of the journalist's contention to objectively parse reality. It enables the profession to claim a special kind of authority and status, distinguishing what they do from other forms of public communication. In their seminal 2001 work, *The Elements of Journalism*, Kovach and Rosenstiel declared the discipline of verification as "the essence of journalism" (2001 71).

A commitment to accuracy is deeply embedded in the journalism profession. The Pew Research Journalism Project lists an obligation to the truth as the first of its nine Principles of Journalism. Journalists strive for the truth through "the professional discipline of assembling and verifying facts," as "accuracy is the foundation upon which everything else is built," (Pew). The pursuit of truth is inextricably tied to journalism's purpose "to provide citizens with the information they need to be free and self-governing," (Kovach and Rosenstiel 2007, 12). The democratic purpose ascribed to journalism goes back to Walter Lippmann, who argued in 1920 "there can

be no liberty for a community which lacks the information by which to detect lies," (2008, 38). The practice of verification not only confers journalistic communication with a unique status, it also validates journalism as a profession.

Journalists have always had to balance the need to be accurate with the pressure of deadlines. Getting things wrong pre-dates the Internet. In a study of US newspapers in the 1980s, Philip Meyer found that three out of five stories contained at least one error (2009, 87). As Meyer noted, "a newspaper with a zero level of factual errors is a newspaper that is missing deadlines, taking too few risks, or both," (2009, 89). The explosion in material from the public, coupled with the speed and reach of digital platforms such as Twitter, has placed additional strains on verification practices.

An early indication of the need for new skills and practices came during the London bombings of 2005. More than 1,000 photographs, 20 videos, 4,000 texts and 20,000 e-mails were sent to the BBC within six hours of the attacks. National TV news bulletins led with grainy mobile phone video. "By day's end, the BBC's newsgathering had crossed a Rubicon. The quantity and quality of the public's contributions moved them beyond novelty, tokenism or the exceptional," wrote Richard Sambrook at the time, when he was director of the BBC's World Service and Global News division (2005). Since then, the BBC and other news organisations have either expanded or created units dedicated to sift through material from the public.

Slip-ups are more prevalent and more significant at times of breaking news, when reports are confused, contradictory and changeable. Politicians or celebrities are prematurely declared dead or suspects in terrorist acts are misidentified. These are the times when reliable providers of information are most valuable, given the surfeit of speculation, rumour and opinion on social media. Figuring out what is fact from fiction requires a mix of old-school journalistic skills, new technologies and an understanding of how news flows in always-on, media systems.

Best practices for verification

Bearing witness to events and documenting them for the public has been at the core of journalistic activity. News outlets will send a reporter to the scene of a breaking story, but at least one person back in the newsroom will be scouring the web for eyewitness accounts, photos or videos. Social media can serve as an early warning system for events that merit further investigation. The information on social media is often closer to a news tip than a fact.

At the time of the shootings at the Los Angeles International Airport on November 1, 2013, one of the first reports came from a host of the TV show, Mythbusters. "Something just happened at #LAX. TSA and police running everywhere," wrote Grant Imahara in a tweet (@grantimahara 2013). Simply because a piece of information is circulating online doesn't mean that it is true. It needs to be checked. It seems an obvious thing to say but it is worth stressing. During the LAX shootings, Canada's *Globe and Mail* published a story about the alleged death of the ex-NSA chief, Michael Hayden. The source was a hoax account called @HeadlineNews [sic], fashioned to look like the reputable @BreakingNews account. The online story then incorrectly ran with a combined Associated Press and Reuters by-line. Even though a

reporter, members of the editorial web team, a homepage editor and a senior editor saw the hoax tweet, no one checked the information or its source (Kirkland 2013).

With any piece of information, journalists need to ask basic questions. How does this person know what they purport to know? Did they witness it or hear it from a friend? How would they have access to such information? Who are they connected to? Keith Urbahn was viewed as a reliable source when he tweeted, "So I'm told by a reputable person they have killed Osama Bin Laden. Hot damn," as he had been the chief of staff for the former defense secretary Donald Rumsfeld (Hermida 2011, 671). Urbahn would have the network to be in the know.

The quest for accuracy is central to modern journalism and the essential fact-checking skills used for the past 100 years are the starting point. Journalists have three basic methods at their disposal - observation, interviews and documents. With digital data, there is one further layer. Every piece of information published on the Internet leaves a digital trail that can help assess its veracity. No single approach works for everything. Adopting several layers of analysis and triangulating the information can help to avoid unfortunate missteps.

Message-based analysis

The third baseman from the Toronto Blue Jays, Brett Lawrie, made headlines in 2012 but not for his performance on the field. He was caught up in a shooting at the Eaton Centre in downtown Toronto on June 2 in which two people were killed. His first tweet read, "Pretty sure someone just let off a round bullets in eaton center mall .. Wow just sprinted out of the mall ... Through traffic ..." (Lawrie 2013a)). A minute later, he sent out another tweet: "People sprinting up the stairs right from where we just were ... Wow wow wow," (Lawrie 2013b)

Lawrie's quick-fire messages from the scene meant he was one of the first people to report the shooting on social media. His tweets were how many first heard of the tragedy. One of the reasons he was considered a credible source was the language used in the tweets. They were not the well-crafted news alerts that are sent out by professional news organisations. The poor grammar and punctuation lent an air of authenticity to the posts. The same errors in a story in the newspaper would undermine its credibility. The words and phrases used in a post are message-based clues to the veracity of the information. People in the middle of a dramatic breaking news situation tend to focus on specific details of what they are seeing and experiencing. Does a message read like it was written in the heat of the moment?

In such situations, the use of swear words are an additional indicator of credibility. Expressions of shock and surprise are usually accompanied by a swear word. When Mike Wilson (@2drinksbehind) survived a Boeing 737 crash in Denver in December 2008, the first words of his tweet were "Holy fucking shit," (quoted in Buttry 2013). Most people are unlikely to write in journalese, mimicking the media by using terms such as "breaking" or "confirmed." Similarly credible messages do not tend to use multiple exclamation marks to try to grab attention. It doesn't mean the information should be discounted, but rather treated with a degree of extra caution.

The same degree of attention needs to be paid to photos and videos. When Hurricane Sandy made its way across New York and the Eastern seaboard in October 2012, social media was inundated with photos of the natural disaster. There were images of sharks in waterlogged streets, a tidal wave striking the Statue of Liberty and a scuba diver in a flooded Times Square station. They were all fake, chronicled by journalist Alexis Madrigal on the website of *The Atlantic* (Madrigal 2012).

Fakes like these can be easy to spot. Harder are those that look real but may be from another time or place. A good starting point is to compare the location of the content against existing photos and maps. Distinctive buildings or geographic features can help to determine that a photo or video was taken at a specific place. Once the location is confirmed, the weather conditions can be checked against weather reports on the day for the area. Shadows in the content and the position of the sun can help to point to the time of day. The language and accents on a video can serve as another indicator of authenticity. During the Arab Spring of 2011, BBC journalists turned to their colleagues in BBC Arabic and BBC Monitoring to advise on local accents.

The social media news agency, Storyful, used these techniques as part of its effort to verify one of the most powerful videos during the Egyptian uprising in January 2011 (Little 2011). It showed a clash between riot police and protestors on the Qasr al Nile bridge in Cairo. Storyful producers used Google Earth to check the location of the bridge and confirm the vantage point of Mohamed Ibrahim el Masry, who shot the footage from a hotel overlooking the bridge. Checking out who was behind the video was a key part of the process of verification. For the Storyful producers, a vital stage in the process was speaking with Mohamed Ibrahim el Masry.

User-based analysis

Getting in touch with the source of digital material is a tried and tested method widely recommended by experts in user-generated content. Eyewitnesses are often willing to share their experience with the media, though in some situations, such as the Syrian conflict, it may be next to impossible to contact the original source or it may be necessary to protect their identity. At the BBC user-generated content hub, the golden rule is to try to get hold of the person behind a photo, video or tweet, preferably on the phone.

There might be an email on a person's webpage, or a mention of their place of work. On Twitter, people can be sent a tweet, asking them to call in. Once in contact with a source, journalists can ask detailed questions about an individual's background, where they are, what they saw. They can apply established interview skills to establish the credulity of the source and the material. Storyful sought out Mohamed Ibrahim el Masry to confirm that he had shot the footage of the battle on the bridge in Cairo. Contacting a source directly also means that you can request permission to use the material. They might also have other material that hasn't been shared on social media or know of other people to contact.

Digital media also opens up a range of ways to check out a source beyond speaking to them. Every social media account comes with a raft of data that can help to provide a sense of the validity of the source. A user's profile is the first step towards figuring out who is behind the account. The bio may mention an affiliation to an organisation

and help in reaching that person directly. Often, the bio includes a link to a website that may provide additional details. At times, though, the description may not be enough to identify or verify the source. But there are other pointers that can help, such as when the account was first set up.

Be wary of an account that has just been created. It might have just been set up to take advantage of something in the news or to fool the media. In the five days following the Boston Marathon bombings in April 2013, researchers found that almost 40,000 new Twitter accounts were opened that commented on the attacks (Gupta, Lamba and Kumaraguru 2013) Two months later, 19 per cent of these accounts were deleted or suspended by Twitter. "We observe that there are a lot of malicious profiles created just after the event occurs. Such profiles and accounts aim to exploit the high volume of content and interest of users in the event to spread spam, phishing and rumors," wrote the team.

The postings on a social media account tend to signal an individual's interests and biases. Poring over past messages can help to put together a sense of the person behind the account. You are what you share, and the research proves it. Scientists at the University of Pennsylvania who analysed 75,000 Facebook accounts found they could predict gender with 92 per cent accuracy and estimate age more than half of the time (Schwartz et al. 2013). By analysing language, they could also work out of someone was more like to be an extrovert or introvert. Such analysis provides one more piece in assessing the validity of a source.

The need to investigate an account's timeline was highlighted by a Twitter account purporting to belong to the Libyan prime minister, Ali Zeidan. The account, @AliZiDanPM, looked real enough and looked like it had been verified by Twitter.. The tweets were quoted in news reports and the account was followed by high-profile figures such as the British Foreign Secretary, William Hague. But it was a hoax account. Sky News journalist Tom Rayner looked at the previous tweets and sounded the alarm. "Hmm, @guardian live blog quoting @AliZiDanPM – not convinced it's legit. Aug 16th tweet says he will make all Libyans "tree hugging hippies," (Nolan 2013). Even with the informality of Twitter, it seems highly unlikely that any prime minister would make such a statement. The account was debunked, to the embarrassment of journalists and politicians following it.

The fake account might have been exposed sooner if journalists had been able to confirm the location of the user. Twitter allows users to geo-locate their messages. A hyperlink to the place where the message came from appears on the tweet if location services are enabled. Location information is off by default and few people tend to switch it on. However, a little digging into an account's history can help narrow down someone's location. On the night of the raid on Bin Laden's compound in Pakistan, software consultant Sohaib Athar, sent out a string of messages on his @ReallyVirtual Twitter account of unusual night-time activity over the skies of Abbottabad. Messages from the past weeks mentioned power cuts and hailstorms in Abbottabad, suggesting that he was indeed in the city (Buttry 2013).

The fact that prominent figures followed @AliZiDanPM lent a veneer of authority to the account. It highlights how the network of connections can serve as an indicator of the authority of a user account. Who does that person follow and who follows them

on Twitter? A person's social circle conveys a sense of that individual. Reliable sources tend to be individuals who are prolific sharers with a well-developed network of connections. Additional clues lie in the interactions with others. This can be tracked on Twitter through retweets and mentions. These interactions can offer pointers as to the reliability of a source. The exchanges form part of a wider conversation that can help reporters assess the authenticity of content from the public.

Topic-based analysis

Whenever there is a major event such as a natural disaster or tragedy such as a school shooting, there is a surge in chatter on social media. Individuals who are engaged with the topic come together to talk about the story. Some will have witnessed the news. Others will be filtering information, adding context and background. Some will be expressing support and sympathy. A loose and distributed community emerges through the messages shared on networks like Twitter. Analysing these signals can help towards establishing the truth of the reports swirling online.

For journalists, this means not simply focusing on individual messages that may be outliers and instead considering the aggregate of posts. How many other people are talking about the same topic on social media? How many of the messages have the same links or the same word to tag the content? Are others questioning the information? During the London riots of August 2011, politicians, police and the press blamed social media for helping to incite people to violence. While there were some such messages, they were the exception, rather than the rule. An analysis of 2.6 million tweets related to the riots found that the network was used to quickly knock down rumours circulating on social media (Bell and Lewis 2011).

Taking a birds-eye view of overall activity of social media can provide a more reliable indicator of the truth than cherry-picking single messages. The public functions as a collaborative filter that can help journalists make sense of a fluid and fast-moving situation. Lies and deceptions on social media tend to be contested far more than credible reports. A study of tweets following the 2010 Chilean earthquake found that messages coming out of the area tended to confirm reports that were true and question those that later turned out to be false (Mendoza, Poblete and Castillo 2010). In one case, for every false warning of a tsunami in Valparaiso, there were more than 10 updates denying it. A significant number of people questioning a particular report should raise the alarm in newsrooms.

The main difficulty for journalists seeking to detect the truthful signals in the noise is twofold. First is the sheer volume of material at times of major news events and the trend is upwards. There were 3,000 tweets per minute at the time of the Boston Marathon bombings in 2013, compared to 800 tweets per minute during the U.S. tornadoes in 2010 (Starbird 2013). Second is the tendency of misinformation to spread much faster and wider than subsequent corrections. For example, there were thousands of tweets erroneously reporting the death of a young girl running in the marathon, compared to hundreds correcting the information. Similarly tweets mis-identifying a bombing suspect far outnumbered corrections (Starbird 2013). Information scientists are working to develop tools to automatically assess the credibility of social media content, detect fake messages and amplify corrections to reduce the spread of misinformation.

Propagation-based analysis

The way information spreads on social media provides additional signals to help assess the validity of information. Computer scientists more commonly employ these techniques of network analysis than journalists. One such group, at Indiana University, is working on a project called Truthy that examines how information propagates through social networks, blogs and social media. Truthy churns through thousands of messages on Twitter looking for patterns that might help it discern fact from fiction. "There's a timescale at which things are propagating in social media that's so short," Filippo Menczer, one of the lead investigators on the project, told the *Columbia Journalism Review* (Silverman 2011). "We're talking seconds and minutes rather than hours and days."

But there are some giveaways that can be spotted by analysing the data, as scientists found when they pored over close to 8 million tweets posted by 3.7 million users between April 15 and 19 2013 about the Boston Marathon bombings (Gupta, Lamba and Kumaraguru 2013). Accurate information tended to be spread at a steady pace from the start, as the messages usually came from users with significant numbers of followers. Fake messages were usually started by people with small numbers of followers. These messages spread far slower initially, until being retweeted by users with greater influence.

Similarly, suspicious social media accounts tend to be active within a short time of each other, sending and retweeting messages with very similar phrasing. At the time of the Senate race in Massachusetts in January 2010, the Democratic contender Martha Coakley was on the receiving end of a concerted dirty tricks campaign on Twitter. Computer scientists crunched the data and found that nine fake Twitter accounts, created within 13 minutes of each other, were behind the 929 tweets sent in 138 minutes promoting an anti-Coakley website (Metaxas and Mustafaraj 2010).

The use of such sophisticated techniques to manipulate information and fool the public exposes the limitations of a simply human approach to verification. A temporal spike in social media can create the impression of a groundswell of public opinion for or against a particular issue. The same information coming from multiple sources may increase its perceived veracity. Systems that can take apart the chatter on social media and watch out for patterns of propaganda would be invaluable in the pursuit of the truth.

Crowdsourcing verification

The approaches to verification so far have focused on the use of social media for newsgathering, trawling it for photos, videos or eyewitness accounts. Such material is often blended into an unfolding narrative through live update pages or live blogs (see Thurman chapter). An emerging practice is the notion of social media platforms as the newsroom, where journalists work with the audience to identify, evaluate and highlight relevant information (Hermida 2012). Digital media systems as newsrooms means the process through which the truth is established takes place openly in collaboration with the public as facts, rumour, and speculation are authenticated or denied in a recurrent cycle.

At the time of writing, the most prominent illustration of a media professional operating in such a "social newsroom" was the National Public Radio social media strategist, Andy Carvin. He has been described as the "master at crowdsourcing verification," (Buttry 2013). How he worked with his network to debunk reports of the use of Israeli weapons doing the Libyan conflict is a case study in collaborative verification.

In March 2011, reports were circulating on social media about a munitions shell used during the Libya conflict. A photo on the Facebook page of Al Manara, a Libyan expat news service based in the UK, triggered speculation that the mortar shell came from Israel. The shell had what looked like a Star of David on it, underneath a crescent-like shape, leading Al Manara to declare in the headline on its post, "Israeli industry against the Libyan people." News that Gaddafi was using weapons made in Israel against his own people would have enflamed the region. Carvin turned to his network on Twitter and outlined the process on the Storify website (Carvin 2011).

"The whole thing struck me as very odd, so I asked my Twitter followers to help me investigate it," recalled Carvin. He maintained a back and forth with his followers, steering the investigation, such as asking them to look for similar images on the web. They found Indian, British and French shells that used comparable icons. Twitter user Amin El Shelhi solved the mystery by finding a NATO manual on the labelling of munitions. The star symbol identified it as an illumination round, used to light up a battlefield at night, while the crescent shape was the symbol for a parachute. Carvin tweeted out the link to the NATO manual, debunking the original claim by Al Manara. "A rumor perpetuated by several news sources was easily debunked by a group of people on Twitter who don't know each other and likely will never meet each other in person," wrote Carvin (2011).

What made this different from the work of the user-generated content hubs at BBC or CNN is that Carvin viewed his network as his editors, researchers and fact-checkers. "It's where I'm trying to separate fact from fiction, interacting with people. That's a newsroom," he said (quoted in Ingram, 2012). He has described his Twitter followers as "smart, curious, and sceptical" people who are "generous in sharing their time and skills to help me out when I need it," (2011). This is a very different type of newsroom from traditional enclosed spaces populated by professionals. On Twitter, the newsroom is open and distributed. The process of journalism – sourcing, filtering, contesting and confirming information – takes place through exchanges in public on the network.

Developing an active, engaged and diverse community online requires an investment of time and energy. Much as a journalist develops a range of sources in a physical community or around a topic, Carvin developed a variety of sources on Twitter. He started with people he knew and trusted, and then looked at their connections. On his network, Carvin would seek independent verification from a range of sources. Often, details about the veracity of a photo or video would come from people who didn't know each other. By cross-checking the information, he was able to piece together the fragments to reveal the whole picture.

There are risks with an approach that does not follow the standard mantra of verify then publish. Journalists have to be aware of how a retweet of an unconfirmed report may be interpreted by others. Even simply saying, "we are looking into" may be seen as lending credence to questionable reports, especially if it comes from an institutional media account, rather than a journalist's account. In Carvin's case, he gained a reputation for sharing images and video, mediating discussions and reaching out to his followers to help him translate and verify information about events in the Middle East. Regular followers would know this is how he operates, but it leaves room for misinterpretation by those less familiar with his approach.

Treating Twitter as a newsroom requires journalists to be far more open and transparent about what they know and don't know in their interactions with the public. Journalists tend to be reticent about admitting ignorance. They also tend to fear tipping off the competition that they are looking into a story. The phrasing of an appeal for help is important to avoid being alarmist and to contextualise the reasons for reporting unconfirmed details. When Carvin retweeted a link to the photo on Al Manara's Facebook page, he prefaced it with: "They ID it as Israeli. Maybe, maybe not. Need help to ID it. Anyone?" He was candid about not knowing whether the report was true but suggesting it was worth investigating.

As part of the process of being transparent, journalists need to be ready to admit mistakes quickly and address erroneous information. The truth in journalism emerges over time, as more is known about an event. Social media has contributed to accelerating news cycles, putting additional pressure on the need to be both fast and accurate. In fluid situations where reliable information is scarce, such as during the Libyan uprising, news is messy and chaotic. It is important, then, for journalists to be prepared to acknowledge how things may have changed and be upfront with audiences about corrections.

Conclusion: The limits of verification

Journalists are continually checking what they know as accuracy is a universal ideal. Verification is built into the everyday routines of reporters to the extent that it has become a "strategic ritual" (Shapiro et al. 2013, 669). But there is not one consistent standard applied across the board and not all facts are equal. Instead there is a "spectrum of facts" (Shapiro et al. 2013, 663). Names, places and potentially defamatory statements are subjected to far more rigour than characterisations and explanations. Journalists have to evaluate the consequences of getting something wrong.

At times of breaking news, they will rush to find out what happened, get updates from the police and search social media for more. The process of assembling the facts often now takes place through constant updates with the latest morsel. But there are times when the consequences of getting it wrong far outweigh any advantage gained from being first. The reputation of major news organisations, including the BBC, CNN and NPR, took a significant hit in January 2011 when they mistakenly reported the death of US Congresswoman Gabrielle Giffords after being shot in the head.

Journalists should never forget their responsibility to the people they are reporting on. Getting something wrong can be devastating for the audiences served by the media.

When Giffords' husband heard on the TV the reports of his wife's death, he "just walked into the bathroom and broke down," (quoted in @brianstelter 2011). Journalists make judgement calls all the time about what to publish and what to hold back. Part of the process of parsing information is assessing the human cost of getting a crucial fact wrong. At times, restraint is the best policy.

Case Study: Boston Marathon Bombings

Rumours, misinformation and reporting errors flowed on news outlets and social media in the hours and days following the Boston Marathon bombings on April 15, 2013. The media struggled to make sense of the confusing information swirling about the attack and hunt for the perpetrators (Coddington 2013). CNN and other news organisations reported an arrest when there was none, while *The New York Post* mistakenly identified two men in a front page photo it said were wanted by law enforcement.

Twitter and Reddit came under fire for fanning the flames of speculation. There was false chatter on social media of a possible device at the JFK Library and speculation that it was the work of right-wing supremacists and of Muslim terrorists. One study found that rumours and fake reports accounted for 29% of tweets during this period, with only 20% relaying accurate information. The bulk of tweets, 51%, were people commenting on the attacks (Gupta, Lamba and Kumaraguru 2013).

In breaking news situations, events are in constant motion, facts are in flux and reporting is messy. In a digital media system, gathering, verifying and reporting the news is done in public. Journalists are one of the many voices, sharing the media space with official sources such as law enforcement and emergency services, witnesses to the event and those across the world responding and reacting to the news.

It amounts to a profound shift as verification moves out of the private space of the newsroom and into the public arena of the Internet. Among the best practices:

- Be precise in your reporting. Some of the worst errors come from reporters making assumptions and jumping to conclusions. Some of the early confusion in the hunt for the marathon bombers resulted from some news outlets talking both of a suspect in custody while others talked about an arrest.

- Be clear about what you know but also about what you don't know. In the stream of constant updates, consider adding notes of caution given the rapidly changing situation.

- Be careful to place new information in context, acknowledging the source and its reliability. In the rush to be first, mistakes will happen. Acknowledge and correct the error quickly and openly.

- Be aware that people will want to talk about the news, share what they know and want to help. Rather than dismissing the chatter on social media, engage with it and seek to channel the conversation unfolding online.

- Be mindful that exchanges on social media are not the equivalent of publication. It is information in flux. During the marathon bombings, conversations on community news site Reddit were ongoing discussions where the community collectively tried to figure out what happened and who was responsible. In the rush to find someone to blame, some posters on Reddit misidentified a missing student as a suspect. But at the same time, many others urged caution about speculating on the identity of the bombers.

- Be conscious of the emotional impact of an event. During tragic events such as the marathon bombings, there will be an outpouring of shock, sadness and anger, much of it through social media. The information spread by the media shapes the public mood, reinforcing the duty of journalists to provide responsible and trustworthy reporting.

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