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Live blogs, sources, and objectivity: The contradictions of real-time online reporting

Neil Thurman and Aljosha Karim Schapals

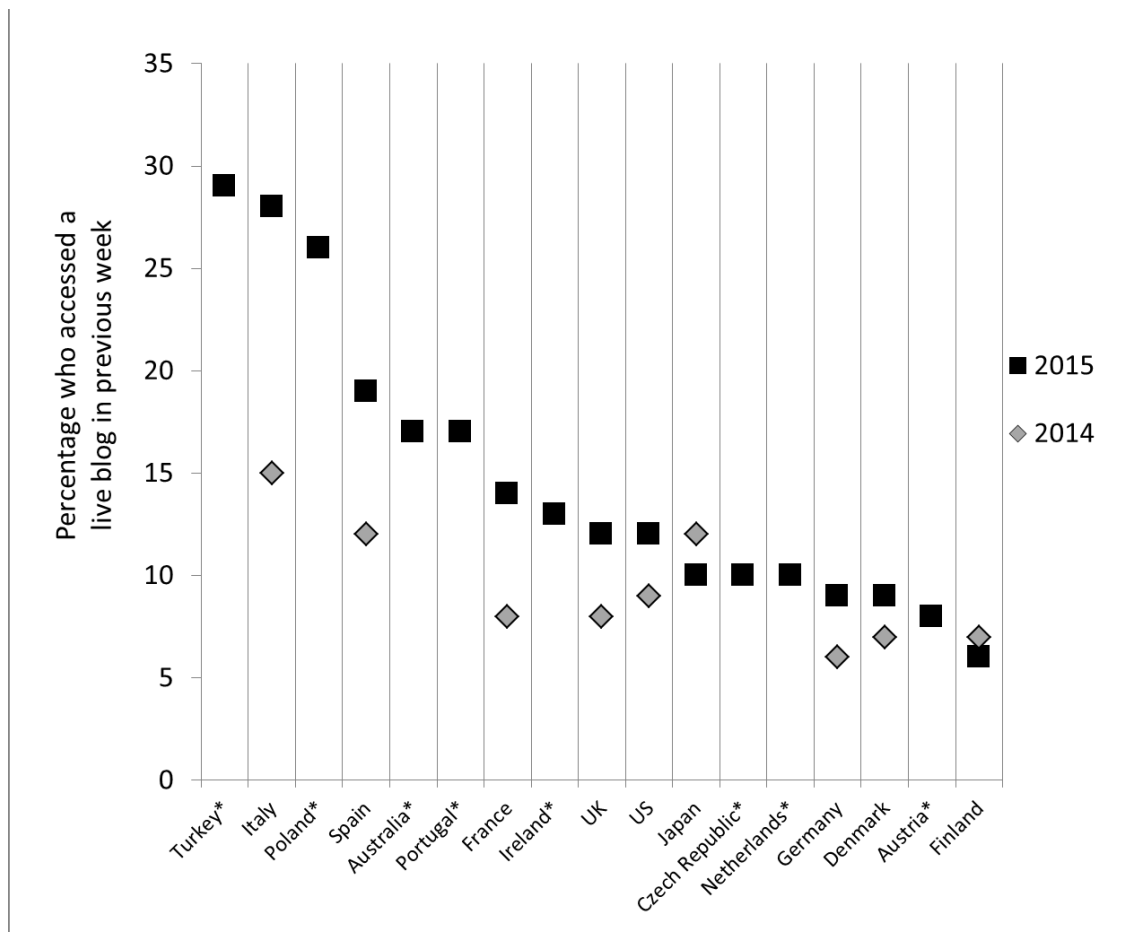
Introduction

On any given day online news sites around the world are using live news pages or “live blogs” to give their readers almost minute-by-minute updates on stories. The format is especially conspicuous during major breaking news events but is also used to cover sports matches, ongoing news topics, and scheduled news events such as elections or the Oscars. Live blogs make generous use of links; they mix facts with interpretation; and they are often informal in tone, involving conversations between reporters and between reporters and their readers. The format is a crucible for many of the contemporary developments in digital journalism practice. Indeed a BBC World News journalist interviewed for this chapter says that live blogs have “transformed the way we think about news, our sourcing, and everything” (personal communication, 16 September 2014). Are such transformations to be welcomed, how widespread are they, and just how different are live blogs from the more traditional news formats both on- and off-line? These are some of the questions we hope to address in our contribution to this handbook.

Live blogs appear to be prevalent. Looking at the home page of one of the UK’s most popular news websites, BBC News Online, on a typical day – 15 May 2015 – shows that two of the three most prominent stories were covered by live blogs: a report on negotiations between the UK Prime Minister and the Scottish First Minister (BBC, 2015a) and a story on British politician Chuka Umunna (BBC, 2015b). However, as a pioneer of live blogging BBC News Online is perhaps untypical. To assess the importance of the format more broadly we can look at data from the annual digital news survey conducted by the Reuters Institute for the Study of Journalism, which tracks the use of live blogs by regular online news consumers on four continents. Data from the 2015 survey show that, across 17 countries, an average of approximately 14 per cent of respondents said they had used a live blog in the previous week. Comparing the nine countries that were polled in both 2014 and 2015 reveals that usage grew in more than three-quarters of those countries with an overall increase in use of 41 per cent year-on-year (see figure 1).

Such data appear to confirm the belief that, for a growing number of news consumers, there is an appetite for live news pages. There are a number of possible reasons why this demand exists and is growing: the availability of the format and of devices (such as smartphones and computers at work) on which it can be viewed, a desire to be kept up-to-date with developments as they happen rather than simply receiving a summary in an evening broadcast bulletin or the next day’s newspaper, and an appreciation of the format itself – its transparency, interactivity, and tone. While we do not present any new research on consumer perceptions of the format, we hope that this chapter will provide readers with a better understanding of the characteristics of live blogs and their production.

Figure 1: Popularity of live blogs with online news consumers in 17 countries, 2014–15 (source: Reuters Institute/YouGov)



Note: The survey was conducted using an online sample (2014 n=17,822; 2015 n=29,688) representative of the demographics in each country and excluding respondents who had not consumed news in the previous month (in most countries this is negligible but in the US and UK it is between 5 and 7 per cent).

* These eight countries were added to the survey in 2015.

Historical perspectives

The lack of comprehensive historical archives of online news means that it is relatively difficult to trace the history of the format. Searching the Nexis online news database reveals no occurrences of the term “live blog” until 2004, when the *St. Louis Post-Dispatch* alerted print readers to a live blog their reporter Gail Pennington would be writing during the last episode of the TV series *Friends* (*St. Louis Post-Dispatch*, 2004). In the same year the *Ottawa Citizen* was promoting a live blog to be written by their National and World Editor, Peter Robb, from the *Canadian Antiques Roadshow* (*Ottawa Citizen*, 2004), and Washingtonpost.com linked out to a live blog (on an Alabama-based online news site), recommending it as a good way for their readers to follow Hurricane Ivan as it progressed through America’s Southwest (Webb, 2004).

We do know, however, that the format was used even earlier, particularly to cover sports events. Thurman and Walters (2013: 99) mention an example from February 1999, which reported a Manchester United versus Arsenal soccer game. However, as in the US and Canada, it seems that in the UK it was not until the mid-2000s that the format started to be used more widely to cover breaking news and scheduled news events other than sports. Neil McIntosh, Guardian.com’s former Head of Editorial Development, recalled that “the London bombings of 7 July 2005 was one of the first news stories [we] covered using the Live Blog format” (ibid.: 83).

Indeed the purely textual characteristics of live blogs find echoes as far back as 1923, when the *Manchester Guardian* published an “Hour By Hour” story reporting the results of that year’s general election. Although not containing hyperlinks – for obvious reasons – the story consisted of “chronological updates marked by timestamps” and had a “brisk, conversational, informal” tone similar to contemporary live blogs (Owen, 2012).

If we broaden the historical antecedents even further we can see the similarities between live blogging and live news broadcasting, not only in their shared concept of “liveness” – with its “coincidence of three dimensions: spatial, temporal, and broadcast proximity” (Tereszkiewicz, 2014: 301) – but also in their shared tone, characterized, according to Tereszkieicz, “by a loose frame and lack of fixed script [and an] ... interpersonal, multi-voiced character” (301). These shared characteristics are indicative of how live blogs are an archetypical example of media convergence. Powered by the fusion of video, telecoms, and computing, they are a place where textual forms and cultural practices are coming together in new ways.

Although he was writing before the emergence of live blogs, Roger Silverstone (1995) worried about such textual convergence, which he called “dangerous” (11). One of his concerns was that “fact and fantasy [would] lose their distinctiveness ... [as] previously discrete categories of media content and function blend in an electronic hybridity” (11). Such concerns persist, including in the context of live blogs, and are discussed later in this chapter.

Definitions and characteristics

There is no universally agreed name for the phenomenon under discussion here. We, and some other authors (for example Sheller, 2015 and Tereszkieicz, 2014), use the term “live blog,” echoing the usage found at news outlets including the *Wall Street Journal* (WSJ, 2011) and NBC (2011). However, other news organizations use different terminology. “Live pages” is a popular designation

at BBC News (Yolande Knell, personal communication, 29 September 2014) who also title their live blogs “As It Happened” (BBC, 2013). Telegraph.co.uk (Hough et al., 2011) and Guardian.com also use the “As It Happened” moniker (Clark et al., 2014) or, sometimes, just “Live” (Weaver et al., 2015). ScribbleLive, one of the major suppliers of live blogging software, talk about “real time publishing” (ScribbleLive, 2015a) and “live content” (ScribbleLive, 2015b).

There is probably more consensus about the characteristics of the format. Thurman and Walters (2013) characterize live blogs as one of the “few web-native news artefacts” (87), in which “time-stamped content [on a specific topic] is progressively added for a finite period” (83). They go on to describe how live blogs include multimedia content and embedded material (for example tweets), how third-party content is usually clearly signposted (as are corrections), how the tone is informal and hyperlinks common, and how summary headlines are often used at the top of the story.

Anna Tereszkievicz (2014) has built on Thurman and Walters’ typology, producing what is, at the time of writing, probably the most complete attempt to define the format – based on an analysis of 56 live blogs published by two UK “quality” news websites. Tereszkievicz (2014: 302) says that live blogs typically have a macrostructure consisting of three main parts:

- “Introduction – general headline; background and context forming lead;
- Main body – episodes, up-dates on the event in question;
- Conclusion – summary of the report.”

Like regular blogs, the episodic micro-reports are initially presented in reverse chronological order with “each block constituting an independent structure” which is “part of the larger whole” (302). The blocks vary widely in the content they contain. After text, Tereszkievicz found that full size and thumbnail images were most prevalent, about ten times more so than videos or audio clips (303).

Whereas Tereszkievicz looked only at the internal characteristics of live blogs, we have compared the occurrence of multimedia elements across live blogs, traditional online news articles, *and* print articles. As table 1 shows, live blogs – even with thumbnail images excluded – contain about 15 times more multimedia elements than print articles and nearly five and a half times more than traditional online articles. It should be noted, however, that live blogs are considerably – about 12 times – longer than the other article types, which means they have more space in which to accommodate non-textual elements. If we take these large variations in length into account we see that live blogs have just 27 per cent more multimedia elements per word than print articles and 55 per cent *fewer* than traditional online articles.

Table 1: Comparison (relative to articles' length and/or in absolute terms) of the number of external links and/or multimedia elements associated with quoted sources, number of quoted sources, and proportion of direct quotes appearing in the main body of live blogs, online articles, and print articles covering the Egyptian revolution in six* UK national news publishers, 25 Jan–11 Feb 2011

	Live blogs (n=75)	Online news articles (n=842)	Print articles (n=148)
Average length (words)	7,241	593	618
Average number of external hyperlinks associated with quoted sources	22.39	0.456	n/a
Average length / Average number of links	323	1,300	n/a
Average number of multimedia elements (photos, videos, and illustrations)	18.1	3.3	1.2
Average length / Average number of multimedia elements	400	180	515
Average number of sources quoted	96	6.44	8.2
Average length / Average number of sources quoted	75	92	75
Proportion of direct quotes (%)	68	57	54

Note: Thumbnail images were not counted in the analysis.

* The *Daily Telegraph*, *The Guardian*, *The Times*, BBC News, Channel 4 News, Reuters News.

Live blogs' divergence from traditional styles of news reporting may, then, be stronger in other ways, for example in their use of links. Tereszkieicz (2014: 308) found an average of 20.6 links per live blog, comparable with Thurman and Walters' (2013: 91) equivalent figure of 16.25. By comparison the average number of links in traditional online articles has been in the low single figures (see, for example, Stray, 2010). However, as we have already established, live blogs are more verbose than traditional online articles, providing more space for such links. So is their apparent tendency to link out more frequently simply a function of their length? Our research indicates not. The 75 live blogs we analysed added external links to sources they quoted an average of 22 times per live blog. This compares with an average of just 0.46 links we found in "traditional" online articles covering the same story. And even when the difference in word length is factored in, live blogs still linked out four times more frequently than traditional online articles (see table 1).

In analysing the sources of the quotations and the destinations of the links contained in live blogs, Tereszkieicz's research (2014: 308) suggests that journalists and other media and news agencies are quoted most frequently, followed closely by governmental and political sources. According to Tereszkieicz (308) live blogs' frequent quoting of other media sources "may be interpreted positively as a strategy aimed at providing readers with as complete a picture of an event as possible, together with various interpretations of the event." There are, however, other, less positive, explanations for such reliance on secondary sources, which include an increasing pressure to publish fast and frequently, and dwindling newsroom resources which keep journalists desk-bound and less able to cultivate specialist knowledge and independent sources.

Critical issues

The assessment of live blogs' potential to increase the quality, plurality, and transparency of news coverage is a key critical issue in any study of the format. Thurman and Newman (2014) found, in a survey of UK online news consumers, that those who agreed that live blogs were "more balanced" outnumbered those who didn't by almost four to one. It has been suggested that this favourable reaction is, in part, due to live blogs' "provision of 'supporting evidence' and 'conflicting possibilities' from a relatively wide range of sources, and their transparent attribution practices" (Thurman and Walters, 2013: 98). There has, however, been no research that we are aware of that has tested this hypothesis by analysing to what extent – if at all – live blogs actually quote original sources more frequently compared to other news formats.

A second critical issue relating to live blogs is the extent to which the material they publish has been verified. Angela Min-Chia Lee (2014) has shown that US journalists believe speed-driven news formats like live blogs harm news credibility, as they demand journalists post "the newest information possible" (47) even if that information has not been verified. Thurman and Walters (2013: 94) wrote about live blogs' "looser culture of corroboration" based on their interviews with live blogging journalists at Guardian.co.uk in 2011. There remains, however, very little work looking at live blogging journalists' working practices and the extent to which they are upholding established professional standards such as the UK Editors' Code of Practice which sets the "benchmark" that members of the press shall not "publish inaccurate, misleading or distorted information, including pictures" (IPSO, n.d.). We present new research on this topic in the next section.

Current contributions and research

Our recent, and previously unpublished, interviews with journalists confirm Thurman and Walters' (2013: 94) assertion that live blogging has a relatively "loose culture of corroboration." A BBC World News journalist we interviewed told us that on live blogs there is "less onus" to be "close to 100 percent sure" about the accuracy of statements than there is on "proper stories," adding that it is more acceptable to use anonymous sources and to put out single, uncorroborated quotes. In the context of live blogging and using social media as a source, the two-source rule has become "a bit more exploded," they said (personal communication, 16 September 2014).

Yolande Knell, a BBC Middle East correspondent, also made the distinction between the demands of writing for definitive bulletins, like the BBC's ten o'clock bulletin, and live tweeting or live blogging where – albeit with context – it is more acceptable to not be "fully accurate or give the full picture," because you are telling it as you see it at a particular moment, with the knowledge that the facts may not "stand the test of time" (personal communication, 29 September 2014). Laura Roberts, at the time a journalist with the *Daily Telegraph*, agreed that live blogs could carry unverified information as long as a caveat was given (personal communication, 2 October 2014).

We did, however, find evidence of discomfort with the developing culture around live blogging: "one tweet isn't a trusted news source," Krishnan Guru-Murthy of Channel 4 News told us, advocating that journalists should "always cross-reference with other sources" (personal communication, 21 September 2014). Indeed a BBC World News journalist thought that for live blogging journalists trying to reconcile the need for speed with the requirement to be accurate, the pendulum had started to swing back towards accuracy. Compared with "five years ago," they said, there is more acceptance that journalists can take an extra few minutes to "make sure this is factually right" (personal communication, 16 September 2014).

The pressure on journalists to report increasingly quickly was a major reason our interviewees gave for the looser culture of corroboration around live blogs. A BBC World News journalist (*ibid.*) recalled rivalry with other news outlets – such as Sky News – about who could publish first, with "competitions" sometimes decided by "fractions of seconds." Another reason was rolling news' incessant appetite for information. "You can't fill this hole on [live] news pages just through official sources, just through the old media – you have to look at social media," the journalist believed. Laura Roberts agreed, although she did not think the problem was unique to live blogs, drawing a parallel with 24-hour rolling TV news. "If you've got airtime to fill ... you end up ... elaborating on things that you shouldn't really be elaborating on ... the focus on speed versus accuracy within journalism is a huge challenge," she said (personal communication, 2 October 2014).

The need to keep live blogs replete with regular updates is not only resulting, some evidence suggests, in a partial disintegration of previously established practices of verification but may also be increasing reliance on previously published media reports. Laura Roberts told us that when she was live blogging for *Telegraph.co.uk* she was using "Al Jazeera, Sky, and the BBC" as sources in order to be able to provide the live blog with what it needed as quickly as possible. In fact her impression was that live bloggers across a range of news providers were "looking at each other[s work]" for the same reasons (*ibid.*). Anne Alexander, an expert on the Middle East and occasional journalist for UK and Egyptian media, feels an important contributing factor is the "political economy of news production and the massive cull of journalistic jobs and the amount of work that journalists are

expected to do without ever leaving the office, which tends to push towards using online sources.” Part of the problem, she added, was that more generalists were covering international stories such as the Egyptian revolution. Generalists without “any specific connections with the country concerned are,” she said, “probably more likely to fall back on mainstream sources” (personal communication, 16 September 2014).

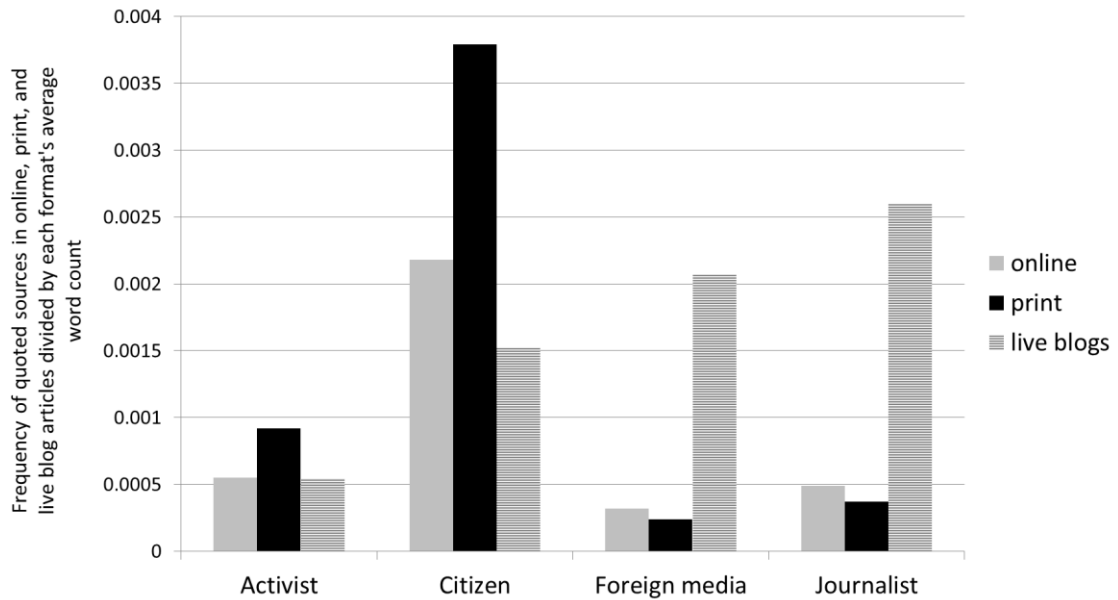
This said, many of our interviewees still emphasized the value of “being there.” Lindsey Hilsum, International Editor of Channel 4 News, recognizes the value of social media both in opening up “places that would otherwise be 100 percent dark” and in the provision of “tip-offs” but maintains that she continues to do what she has always done: “Go somewhere. Talk to people. And watch. That is what journalism is” (personal communication, 15 September 2014). Krishnan Guru-Murthy (personal communication, 21 September 2014) agreed that the “best journalistic accounts are from the scene,” as did *The Times*’ Deputy Foreign Editor, Suzy Jagger, who worried about younger journalists thinking “Twitter is it ... a replacement for actually going out and meeting people” (personal communication, 1 October 2014).

Such anecdotal evidence on the sourcing and reporting practices of live blogging journalists has not, to our knowledge, been triangulated qualitatively. We have attempted to do that, and present some of the results here. Our method involved a content analysis of 75 live blogs, 842 online articles, and 148 print articles covering the Egyptian revolution of 2011 and published across six UK national news publishers. We found a total of 12,475 quotes that could be attributed to a source of some description. Given their length, it is no surprise that, on average, live blogs included 12 times more sourced quotes than print articles, and 15 times more than traditional online news articles. However, when the differences between the average lengths of the formats are taken into account we observe that live blogs cited sources no more frequently than print articles (see table 1). There were, however, differences in the proportion of direct quotes (as opposed to indirect quotes) between the three formats. Quotes in live blogs were “direct” 68 per cent of the time, compared with 57 per cent for traditional online news articles and 54 per cent for print articles (see table 1).

Each source quoted in each article was assigned to one of 18 categories (e.g. “Citizen,” “NGO,” “Foreign politician,” etc.) determined via a deductive explanatory approach. Because of the differences between both the number of articles we analysed for each format and – as previously mentioned – the average length of each format, the results of this part of our content analysis are presented in a manner that allows for more direct comparison. Our method was as follows: separately for each format we determined the frequency with which each source category was quoted and then divided that number by the average word count of each format.

The results reveal major differences between live blogs, online articles, and print articles, with journalists “on the ground” and (foreign) media far more frequently found as sources in live blogs. Furthermore, live blogs – despite allowing the relatively easy integration of social media, such as tweets – actually quote citizen and activist sources less frequently (on a per word basis) than both traditional online articles and print articles (see figure 2).

Figure 2: Frequency of quoted source divided by average word count in the main body of online, print, and live blog articles covering the Egyptian revolution in six UK national news publishers,* 25 Jan–11 Feb 2011 (n=1,065)



Note: This graph shows results for four of the 18 source categories identified in the content analysis. The other sources were: Analyst/expert/academic, Anonymous source, Consultancy, Enterprise, EU official, Foreign government official, Lawyer, Leaked document, Military, National government official, National government opponent, National government supporter, Non-governmental organization, and State media organization.

* The *Daily Telegraph*, *The Guardian*, *The Times*, BBC News, Channel 4 News, Reuters News.

Conclusions

The growing popularity of live blogs prompts questions about their appeal to digital news consumers as well as about how they are made and the extent to which they differ from established journalistic story formats. The new empirical data presented in this chapter – albeit in the particular context of a breaking international news story – suggest that live blogs differ materially not in their use of multimedia or even the frequency with which they quote sources but rather in their generous use of links and the first-hand nature of their reporting. Journalists “on the ground” are their most common source. This may explain part of their attraction, because the links and first-handness give the format a transparency and directness that is likely to appeal to contemporary tastes. Furthermore, these qualities act as a counterbalance to live blogs’ “looser culture of corroboration” as described by Thurman and Walters (2013: 94) and further confirmed here.

Perhaps our most original contributions are on the extent to which live blogs rely on the media as a source and the relative absence in live blogs of first-hand, unofficial sources (such as citizens and activists). This is a reminder of how, as Pablo Boczkowski (2010) has so brilliantly identified, even in an age of information abundance the media tend towards imitation and mimicry to the disservice of plurality. It is also a reminder of how convergence is a “contested and unpredictable” process (Jenkins, 2006). In the context of an exemplary example of media convergence – the live blog – we see only limited evidence that, as Jenkins and Deuze (2008: 6) and others hoped, there has been “a broadening of opportunities for individuals and grassroots communities to tell stories ... to present arguments ... to share information.”

This analysis of a prevalent, influential, and increasingly popular news format has revealed some of what Murdock and Golding (2002: 111) call the “contradictions of communications convergence.” Firstly, we see how, through real-time online reporting, journalism may be becoming more transparent yet also more speculative. Secondly, live news pages may be giving us a journalism that relies more on both journalists’ first-hand accounts and on previously published media reports. We should, therefore, continue to monitor and analyse developments in journalism’s forms and production and to debate how those developments are changing assessments and even definitions of media plurality and journalistic objectivity.

Further reading

There is no more comprehensive analysis of the structural conventions and discourse of live blogs than Anna Tereszkievicz’s “‘I’m Not Sure What That Means Yet, But We’ll Soon Find Out’ – The Discourse of Newspaper Live Blogs” (2014). Angela Min-Chia Lee’s Ph.D. thesis, “How Fast Is Too Fast? Examining the Impact of Speed-Driven Journalism on News Production and Audience Reception” (2014), provided useful new context on the perceptual disconnect between what journalists and their readers think about speed-driven news practices, including live blogs. Finally, the key practical and ethical issues facing live blogging journalists are comprehensively covered in Neil Thurman’s “Real-Time Online Reporting: Best Practices for Live Blogging” (2014).

References

- BBC (2013) "As It Happened: Algeria Hostage Crisis," BBC News Online, 19 January.
<http://www.bbc.co.uk/news/world-africa-21073655>, accessed 16 August 2015.
- BBC (2015a) "Live Coverage: Cameron and Sturgeon Meeting," BBC News Online, 15 May.
<http://www.bbc.co.uk/news/live/uk-scotland-32747728>, accessed 15 May 2015.
- BBC (2015b) "Live: Reaction As Umunna Withdraws Bid," BBC News Online, 15 May.
<http://www.bbc.co.uk/news/live/uk-politics-32726516>, accessed 15 May 2015.
- Boczkowski, Pablo (2010) *News at Work: Imitation in an Age of Information Abundance*, Chicago: University of Chicago Press.
- Clark, Stuart, Kingsland, James, Randerson, James and Yuhas, Alan (2014) "Rosetta Mission: Esa Weighs Options for Moving Philae Lander – As It Happened," Guardian.com, 13 November.
<http://www.theguardian.com/science/across-the-universe/live/2014/nov/13/rosetta-mission-philae-lander-live-coverage-comet-esa>, accessed 15 May 2015.
- Hough, A., Chivers, T. and Bloxham, A. (2011) "Japan Earthquake and Tsunami: As It Happened March 11," Telegraph.co.uk, 11 March.
<http://www.telegraph.co.uk/news/worldnews/asia/japan/8377742/Japanearthquake-and-tsunami-as-it-happened-March-11.html>, accessed 16 August 2015.
- IPSO (n.d.) "Editors' Code of Practice," Independent Press Standards Organisation, online,
<https://www.ipso.co.uk/IPSO/cop.html>, accessed 15 May 2015.
- Jenkins, Henry (2006) *Convergence Culture*, New York: New York University Press.
- Jenkins, Henry and Deuze, Mark (2008) "Editorial: Convergence Culture," *Convergence: The International Journal of Research into New Media Technologies*, 14 (1), 5–12.
- Lee, A.M. (2014) "How Fast Is Too Fast? Examining the Impact of Speed-Driven Journalism on News Production and Audience Reception," Ph.D., University of Texas at Austin.
- Murdock, G. and Golding, P. (2002) "Digital Possibilities, Market Realities: The Contradictions of Communications Convergence," *Socialist Register*, 38, 111–29.
- NBC (2011) "Live Blog: Huge Tsunami Hits Japan After 8.9 Quake," World Blog, NBCnews.com, 11 March. http://worldblog.nbcnews.com/_news/2011/03/11/6243734-live-blog-huge-tsunamihits-japan-after-89-quake?lite, accessed 16 August 2015.
- Ottawa Citizen (2004) "Peter and His Paddle," News Section, A2, 14 May, retrieved from Nexis online database, 24 April 2015.
- Owen, Paul (2012) "When Was the First Live Blog? 1923, It Seems," Guardian.com, 28 October.
<http://www.theguardian.com/media/shortcuts/2012/oct/28/when-first-live-blog-1923>, accessed 24 April 2015.

St. Louis Post-Dispatch (2004) "Online Today," News Section, A2, 6 May, retrieved from Nexis online database, 24 April 2015.

ScribbleLive (2015a) "Create and Publish Engaging Stories As They Unfold," ScribbleLive.com. <http://www.scribblelive.com/book-demo-media/>, accessed 22 April 2015.

ScribbleLive (2015b) "ScribbleU," ScribbleLive.com. <http://www.scribblelive.com/scribbleu/>, accessed 22 April 2015.

Sheller, M. (2015) "News Now: Interface, Ambience, Flow, and the Disruptive Spatio-Temporalities of Mobile News Media," *Journalism Studies*, 16 (1), 12–26.

Silverstone, R. (1995) "Convergence Is a Dangerous Word," *Convergence: The International Journal of Research into New Media Technologies*, 1 (1), 11–13.

Stray, J. (2010) "Linking By the Numbers: How News Organizations Are Using Links (Or Not)," Nieman Lab, 10 June. <http://www.niemanlab.org/2010/06/linking-by-the-numbers-how-news-organizations-are-using-links-or-not>, accessed 8 June 2015.

Tereszkiewicz, A. (2014) "'I'm Not Sure What That Means Yet, But We'll Soon Find Out' – The Discourse of Newspaper Live Blogs," *Studia Linguistica Universitatis Iagellonicae Cracoviensis*, 131 (3), 299–319.

Thurman, N. (2014) "Real-Time Online Reporting: Best Practices for Live Blogging," in L. Zion and D.A. Craig (eds.) *Ethics for Digital Journalists: Emerging Best Practices*, New York: Routledge, 103–14.

Thurman, N. and Newman, N. (2014) "The Future of Breaking News Online? A Study of Live Blogs Through Surveys of Their Consumption, and of Readers' Attitudes and Participation," *Journalism Studies*, 15 (5), 655–67.

Thurman, N. and Walters, A. (2013) "Live Blogging – Digital Journalism's Pivotal Platform? A Case Study of the Production, Consumption, and Form of Live Blogs at Guardian.co.uk," *Digital Journalism*, 1 (1), 82–101.

Weaver, Matthew, Gayle, Damien, Elgot, Jessica, and Glenza, Jessica (2015) "Nepal Earthquake: US Helicopter Reported Missing As Dozens Reported Dead – Live," Guardian.com, 12 May. <http://www.theguardian.com/world/live/2015/may/12/nepal-earthquake-74-tremor-hits-near-mount-everest-live-updates>, accessed 15 May 2015.

Webb, Cynthia L. (2004) "Digital Eye on Ivan," Washingtonpost.com, 16 September, retrieved from Nexis online database, 24 April 2015.

WSJ (2011) "Live Blog: Japan Earthquake," Japan Real Time, WSJ.com, 11 March. <http://blogs.wsj.com/japanrealtime/2011/03/11/live-blog-japan-earthquake>, accessed 16 August 2015.