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SEVEN CHARACTERISTICS DEFINING ONLINE NEWS FORMATS

Towards a typology of online news and live blogs

Einar Thorsen  and Daniel Jackson 

Whilst live blogs have become an established part of the news media ecology, corresponding research is still in its infancy, especially that which examines the crucial question of sourcing practices. Focussing on three UK news organisations – BBC News, the Guardian and the Telegraph – in this article we provide the largest and most comprehensive empirical study to date comparing sourcing practices in online news and live blogs. We analyse sourcing practices across three different genres of live blogging and corresponding online news articles, through a comparative analysis of events broadly categorised as crisis, politics and sport. Our findings suggest that there are some aspects of sourcing practices that are distinct to live blogs, such as directly embedding social media. However, when it comes to polyvocality (the diversity of who gets to speak), genre-specific journalism norms seem to account for more than the affordances of the platform itself and only in sport live blogs are demotic voices habitually included. Based on these findings, we develop a typology of live blogging and online news articles that documents the nuances in sourcing patterns across different news formats and genres, and provide a theoretical basis for future research in this field.

KEYWORDS live blogging; news sources; episodic publics; crisis news; sports news; politics; participatory journalism

Introduction

News organisations are increasingly engaging audiences with iterative updates of news events as they unfold, courtesy of live blogs on their websites and in mobile apps. These have become a key platform for breaking news and following episodic events, or to keep audiences updated on a general subject theme. What is more, live blogs are the epitome of networked journalism (Beckett 2010) as they feed off and into the unfolding story as it happens across a range of media. But despite being established in the news industry, this purportedly “pivotal platform” for journalism practice and audience interaction (Beckett 2010; Thurman and Walters 2013) still lacks empirical grounding, with existing work often based on a narrow set of case studies or newsroom interviews. On the key question of sourcing practices – who is given authority to frame an

event – we know relatively little about whether live blogs are a disruptive platform with greater diversity of voices, or whether they perpetuate traditional sourcing patterns.

In this paper, we respond to these research gaps and provide the largest and most comprehensive empirical study of sourcing practices in live blogging to date, which also provides a direct comparison to online news articles of the events analysed. We analyse sourcing practices across three different genres of news, through a comparative analysis of events broadly categorised as crisis, politics and sport, focussing on three UK news organisations – BBC News, the *Guardian* and the *Telegraph*. Our findings suggest that there are some aspects of sourcing practices that are distinct to live blogs, such as directly embedding social media. However, when it comes to polyvocality (the diversity of who gets to speak), genre-specific journalism norms seem to account for more than the affordances of the platform itself. We argue that live blogs create distinct online spaces around news events (crisis, politics, sports) that are spectacles of material communicative spaces which connect with and reflect episodic publics that emerge in relation to these. We organise these findings in a typology of sourcing practices of live blogging that documents the distinct nuances in sourcing patterns across different news formats and genres, and can provide the theoretical basis for future research in this field.

Sourcing Online News

Journalism scholars have long been drawn towards sourcing practices in the news, as they are one way of understanding power in public life; who is afforded a public voice in the news can be a reflection of journalists' relationships to embedded power structures, or indeed can be an indication of how they may be challenged. Sourcing practices can also be a useful indicator of journalistic balance, as journalists negotiate their role as arbiters of public opinion by presenting competing perspectives of key actors in the public sphere.

Historically, the elite-centric nature of news sourcing that journalists habitually pursue has been the source of much criticism in journalism studies literature (Gans 1979; Hallin, Robert, Manoff, and Weddle 1993), but these debates are being revisited in light of the growth of digital journalism. This is firstly due to the abundance of social media and the associated culture of participation. For journalists, this has broadened the available pool of potential sources and placed both elite and non-elite sources on the same social media platforms. At the same time, members of the public are now participating in the news in unprecedented ways, from below the line comments (Graham and Wright 2015) to myriad forms of citizen journalism (Allan and Thorsen 2009). Second, digital communication has engendered new forms of journalism – including blogs, wikis, tweeting and mobile live streaming – which often depart from traditional journalistic conventions through their open narrative structure and generous use of hyperlinked sources (Bruns 2008; Myers 2010).

For some, the assumption is that these combined developments might result in journalistic cultures that are less elite-centric in their sourcing practices and more open to the use of diverse and alternative sources (Hermida 2013; Poell and Borra 2012). So far, however, the balance of evidence suggests that this expectation has yet to come to fruition. Without question, the availability of online sources and social media has

shaped recent sourcing practices. Search engines and social media have become part of a journalist's daily newsgathering routine, where Twitter is a key platform for both triggering stories, and finding reactions to breaking news (Broersma and Graham 2013; Paulussen and Harder 2014). However, based on a comprehensive review of 22 empirical studies, Lecheler and Kruikemaier (2016) conclude that online sources complement rather than replace traditional sourcing practices and newsgathering techniques. Not only that, most empirical studies to date have *not* found digital news to have instigated a democratisation of voices in the news, as journalists continue to gravitate towards elite sources (e.g. Knight 2012; Van Leuven, Deprez, and Raeymaeckers 2014). However, the vast majority of digital news sourcing studies have been applied to online news articles that follow a conventional narrative structure familiar from print news. This potentially overlooks an emergent yet significant news format – the live blog – that at least in principle offers greater potential for alternative and demotic voices to prosper.

Live Blogs

Live blogs are now an established part of the news ecology, representing a format that is native to the web with their reverse chronological posting, participatory features and prodigious use of multimedia and hyperlinking. Live blogs are distinguished from other online news by a number of characteristics. The first is *temporal*: they are a type of news specifically designed for live and unfolding events and their format needs to reflect this liveness. Accordingly, the live blog is characterised by a series of time-stamped, short updates that represent the latest development of the live event or emerging story. In most cases, these short updates convey the fluid, incomplete and unpredictable nature of the story (McDougall 2011; Tereszkievicz 2014), drawing parallels with the dynamics of live television or radio news reporting who had historically held a monopoly over live event coverage. These features represent a particular discourse of live news that is open structure, contrasting with closed structure news formats typified by fixed timing, tight framing, parsimony and summative character (Montgomery 2007). The second distinguishing feature of live blogs is their *tone of voice*, which is often playful, light, personal and informal (Tereszkiewicz 2014). Live bloggers typically position themselves as curating a conversation, acknowledging the presence of readers as participants, and the tone of the live blog can reflect this. This links to a third feature: *interactivity*. As they cover unfolding events, live bloggers often reach out to their audiences for eyewitness reports (during crisis events) or reactions to the latest news as in real time. Finally, live blogs are notable for their *intertextuality* and *polyvocality* (Tereszkiewicz 2014). Whilst the presence of input materials is not a feature unique to live blogs, Tereszkievicz (2014) argues that the frequency, volume and form of the materials they draw upon distinguish them from other news structures. Thurman and Schapals (2017, 286) similarly found that live blogs “contain about 15 times more multimedia elements than print articles and nearly five and a half times more than traditional online articles”, though within the context of being approximately 12 times longer than standard online reports. Aside from multimedia, live blogs are furnished with other external materials such as direct and indirect versions of official announcements, elite quotes, reports and eyewitness accounts with the result that they “become a thing of many voices” (Montgomery 2007, 147).

News organisations typically set up live blogs to cover scheduled mediated events such as sports or entertainment (popular TV shows or award shows such as the Oscars) where episodic (Habermas 2006) or issue publics (Bruns and Highfield 2016) emerge to experience the event collectively. Live blogs also follow breaking live news events such as political crises, extreme weather events or terror attacks, or are themed around a series or broadly defined subject area (e.g. daily politics live blogs). Because they are following live and unfolding events with regular updates, live blogs meet a number of news values; hence, their popularity with both newsrooms and audiences (Thurman and Newman 2014).

The increase in popularity of live blogs in the newsroom has not been matched by scholarly attention on the topic. Existent research can be mapped onto four main strands: *audience* use of and engagement with live blogs, live blogging in the *newsroom*, *content* analyses and *sourcing* practices. Surveys of *audiences*, alongside user data accessed from news organisations have revealed news readers' use of, participation with, and attitudes to live blogs largely influenced by a uses and gratifications approach (Thurman and Newman 2014; Thurman and Walters 2013). Typically based on interviews with journalists, *newsroom* studies offer some valuable insights on the sourcing practices of live bloggers. Triangulating with the audience data, these studies confirm the demand for audience interaction with live blogs, though they also document the various filters that audience material must go through before being published. High on this list is verification. Here, whilst some have found rather looser cultures of corroboration in live blogging (McEnnis 2016; Thurman and Walters 2013), most newsroom studies find – at least when it comes to crisis events – that verifying audience contributions is a major obstacle to including more diverse voices in the news (Loke and Grimm 2017; Marty, Pignard-Cheynel, and Sebbah 2017). This, of course, is a finding that spans beyond live blogs to many forms of news (e.g. Lecheler and Kruikemaier 2016). A smaller number of studies have examined the *content* of live blogs. Here, research has revealed for example how audience and journalistic frames interact and compete in live blogs, wherein a space of potential co-production, journalists still reframe amateur contributions by appending their own frames onto them (Marty, Pignard-Cheynel, and Sebbah 2017). And in a longitudinal analysis of live blogs covering terror events, Wilczek and Blangetti (2018) document how competition between news organisations not only determines whether they run a live blog, but also influences editorial strategies towards the event itself.

Whilst newsroom studies, in particular, have many valuable insights on the *process* of sourcing practices in live blogging, they still do not give us a quantifiable picture of actual *practices* that occur on the news pages themselves. For this, we need *sourcing* analysis studies of live blogs. To date, the handful of studies to examine this have typically taken a case study approach of analysing a particular crisis or terror attack (Thorsen 2014, 2016). Though evidence is sometimes contradictory: comparing four crisis events in *The Guardian*, Thurman and Rodgers (2014) find that live blogs seem to be “increasing the proportion of user-generated content that is appearing in the mainstream media” whereas Thurman and Schapals' (2017) study of the 2011 Egypt uprising finds a far more traditional pattern of sourcing practices.

As well as underlining the general scarcity of research into sourcing practices in live blogs, such findings point to the likelihood that the type of event in question can

determine the range and frequency of sourcing types. This would support some of the findings from newsroom studies of live blogging that suggest even within a single news genre such as sport, individual sports or disciplines necessitate different forms of sourcing practices (McEnnis 2016). But we need more comparative work to examine this question in detail, particularly *across* a range of news genres typically covered by live blogs (such as crisis, politics and sport) and *within* these genres, a range of different types of events. To date, we also have very little understanding of how online news sourcing practices differ by news brand. This is important when we consider the question of whether common live blogging practices are emerging that transcend individual newsrooms, alongside whether ideological leanings can influence sourcing practices.

At the same time, we also still have a relatively rudimentary understanding of how sources flow from their various origins (e.g. a presidential press conference or an eyewitness video) through social and other media and into the mainstream digital news; and how they are then treated once selected (Lecheler and Kruikeimaier 2016). Here, studies of remediation are particularly useful because they offer insights into the circumstances in which (primarily citizen) the material is picked up by mainstream media and then sourced by other media organisations; particularly, during crises events (Andersen 2012; Chouliaraki 2013; Thorsen 2016). But, to date, this type of analysis has not been applied systematically to live blogs.

These shortcomings of existing research are directly addressed in this paper. But for us, a study focussing solely on live blogs would not sufficiently address the broader question of if and how live blogs are changing digital news sourcing practices. By comparing the sourcing practices of live blogs with the corresponding news articles, we, therefore, have a much clearer view of how the same event is sourced across two online news genres, one with an open news discourse and the other closed. Accordingly, our research is guided by the following research questions:

RQ1: Which sources are afforded voice across and within online news *genres*, *formats* and *brands*?

RQ2: How do news sources flow from their originator into online news, and how does this differ from online news *genres*, *formats* and *brands*?

RQ3: What characterises journalistic conventions associated with sourcing practices in live blogs and online news?

Methods and Samples

Previous research concerning live blog sourcing practices has typically been confined to a single event, a single genre, or a single publisher, and typically in isolation from other types of news format (online or otherwise). Our research significantly broadens the comparative dimensions of existing knowledge by analysing a cross-section of events from three distinct *genres* (crisis, politics and sports), across two *formats* (online news articles and live blogs), and three news *brands* (BBC News, the *Guardian* and the *Telegraph*).

The most popular live blogs with UK and US audiences are breaking news associated with crisis events, unfolding political stories and sports events, in that order

(Thurman and Rodgers 2014). Based on these, we followed a purposive sampling strategy to identify 15 events that reflect different types and temporality of events within each genre, in recognition that there may be distinct differences even within each individual genre. All events were from a four-month period in November 2015–February 2016 (Table 1 for exact dates), encompassing thematically recurring or serial events (for example as part of weekly or annual rituals), scheduled events, and unexpected or unscheduled events. Our sample consisted predominantly of episodic events that unfolded over a period of hours and not more than a day, though we also included some in each category that were more thematic in nature and linked to an issue that was unfolding slowly over a series of days.

Our sample of crisis events included the terrorist attacks in Paris (France) and Bamako (Mali), alongside Turkey's shooting down of a Russian jet that purportedly entered the Turkish territory when flying across Syria, and North Korea's hydrogen bomb test. Finally, we included a domestic crisis event in terms of a UK flooding in December 2015. From a journalistic sourcing point of view, the crisis events capture a range of geographical locations and source accessibility dynamics.

For politics, we included three events to represent normal UK Parliamentary business – Prime Minister's Questions (PMQs), the Parliamentary vote to approve airstrikes in Syria and Labour's reshuffling of the shadow cabinet that emerged as a consequence of challenges to Jeremy Corbyn's leadership. Finally, we chose two global political events that directly affected UK politics – the European Central Bank's decision not to offer a Eurozone stimulus package in November 2015, and the day the deal was agreed at the Paris COP21 climate change summit.

Sports news are all connected to scheduled events, but we drew from different sports to capture a range of match durations and reporting styles – including boxing (Tyson Fury defeating Wladimir Klitschko), tennis (Novak Djokovic beating Andy Murray in the Australian Open final), cricket (England defeating South Africa) and football (Southampton vs. Arsenal). We also included the football transfer deadline day as a recurring event that unfolds during the course of a day and typified by an ongoing flurry of speculation.

For the purpose of this study, we examined the presence of live blogs in all national UK news organisations across the entire spectrum of national newspapers and broadcasters. Only three news organisations regularly published live blogs across a range of news genres and events during our sample period: BBC News, the *Guardian* and the *Telegraph*. We excluded other news organisations on the basis that they did not publish news in both *formats* (online news and live blogs) for each of the events in the sample. We sampled the relevant live blogs on the day of each event and *all* associated news articles up to 5:00 am the next morning. The morning cut-off was to coincide with when journalists would have filed copy for the morning's news, and to avoid sampling news articles from the following day's news events. This was done to enable a direct comparison between the two formats and the sourcing strategies employed by the different journalists based on the same time period.

Overall, the sample included 45 live blogs and 473 news articles, as outlined in Table 1. For online news articles, we included everything published on the news website that was related to the event within the given timeframe – traditional news reports accounted for 48% of the news articles, video-only stories for 24%, journalists' analysis

TABLE 1
Prevalence of live blogs, articles and sources against each event in sample

Genre	Event	Date	Number of articles		Number of sources		Average no sources per article		Average unique source types	
			Live blogs	News articles	Live blogs	News articles	Live blogs	News articles	Live blogs	News articles
Crisis	C1 - Paris Attack	13/Nov/2015	3	14	432	102	144.0	7.3	20.0	2.0
Crisis	C2 - Mali Attack	20/Nov/2015	3	33	404	256	134.7	7.8	17.0	4.0
Crisis	C3 - Russian Jet Shootdown	24/Nov/2015	3	41	309	231	103.0	5.6	19.0	3.1
Crisis	C4 - UK Flooding	29/Dec/2015	3	50	300	244	100.0	4.9	18.0	2.5
Crisis	C5 - North Korea Hydrogen Bomb	6/Jan/2016	3	40	352	333	117.3	8.3	19.0	4.1
Crisis Total			15	178	1797	1166	119.8	6.6	18.6	3.2
Politics	P1 - ECB Decision	25/Nov/2015	3	11	186	78	62.0	7.1	7.3	3.9
Politics	P2 - Syria Vote	2/Dec/2015	3	85	1046	497	348.7	5.8	14.0	2.7
Politics	P3 - Paris COP21	12/Dec/2015	3	39	343	207	114.3	5.3	15.3	3.2
Politics	P4 - Labour Reshuffle	5/Jan/2016	3	20	614	138	204.7	6.9	13.7	2.8
Politics	P5 - PMQ's	27/Jan/2016	3	29	240	295	80.0	10.2	11.3	4.1
Politics Total			15	184	2429	1215	161.9	6.6	12.3	3.1
Sports	S1 - Tyson Fury	13/Nov/2015	3	10	221	89	73.7	8.9	6.0	3.2
Sports	S2 - Tennis Australian Open	29/Jan/2016	3	20	221	117	73.7	5.9	6.3	2.5
Sports	S3 - Boxing Day Football	26/Dec/2015	3	7	129	36	43.0	5.1	6.0	2.0
Sports	S4 - Test Match	16/Jan/2016	3	15	348	88	116.0	5.9	7.3	2.1
Sports	S5 - Transfer Deadline	1/Feb/2016	3	59	852	332	284.0	5.6	12.3	2.8
Sports Total			15	111	1771	662	118	6	7.6	2.6
			45	473	5997	3043	133	6	12.8	3.0

or commentary for 15%, explainer articles for 5%, with all other articles accounting for 9% (this includes image galleries, analysis by external commentators and so forth). At a top level, BBC News live blogs cited the most amount of sources (186 on average), with the *Guardian* and the *Telegraph* much closer in frequency (112 and 101 sources on average, respectively, for each live blog, or 46% difference between highest and lowest). News articles were much more closely aligned, with the *Telegraph* the highest (7.2 sources on average), followed by BBC News (6.2) and the *Guardian* (6.1) – only a 15% difference between the highest and lowest.

We conducted a detailed content analysis of source usage in all news articles and live blogs in the sample, including videos and images. Previous research into online news sources or live blogs has been concerned with either the *type* of content or the *originator* of the content, and rarely combining these. Our coding manual included both of these and sought to differentiate further, by including the *origin* of the source for the journalist (as indicated by attribution), to provide a more detailed understanding of the sourcing process. In total, our coding manual contained 107 codes and subcodes, though for the purpose of this article, we focus only on three categories and associated subcodes:

- A. Type of content (e.g. text, audio, video, image, social media)
- B. Origin of the source for the journalist (e.g. professional media, wire service, news conference, press release)
- C. The originator of content (e.g. authorities, expert, industry, political, public, sports)

This three-layered coding approach was designed to enable a more granular analysis of sourcing practices and how content is remediated in this process. By having three categories, we were able to identify sourcing flows such as: an image (a) the journalist pulled from a wire service (b) that was taken by an eyewitness (c); or a direct quote (a) from a news conference (b) of a politician making a statement (c).

Two research assistants coded all news articles and live blogs in MaxQDA. Our unit of analysis was each distinct source reference (i.e. a direct quote, paraphrase or inferred attribution), with a new code for every change in the source. Videos were also coded, with the unit of analysis here being each distinct source referenced within the video. We repeated inter-coder reliability tests and refined the coding manual until the inter-coder agreement reached Cohen's Kappa 0.90 on live blogs and 0.83 on news articles for the three categories mentioned above (a,b,c), with a minimum 70% overlap threshold between coded segments. The overlap threshold refers to the accuracy of coders highlighting the same segment in MaxQDA when applying a given code, which if not perfectly matched complicates the calculation of inter-coder reliability coefficients (Hubwieser et al. 2011). This was particularly an issue when coding paraphrases or visual material – both with latent content boundaries – which required additional adjustment and training to reconcile before we achieved the Cohen's Kappa stated above.

By comparing the sourcing practice of two distinct online news formats in detail across three genres we argue it is possible to discern certain traits that are characteristic for each, that if placed in a typology provide us with a new degree of analytical specificity. The following section presents empirical findings that supports our theoretical

conceptualisation in the discussion. This involves firstly a brief overview of the type of content cited, followed by a detailed analysis of source origins, before we evaluate sourcing dynamics found in the published content.

Findings

Our analysis enabled us to examine the type of content used when attributing information to a source. Here, we found that most live blogs and news articles conformed to a fairly conventional storytelling mode, with text either as a direct quote (35%) or paraphrase (17%) and images (20%) the three most common content types (Table 2). Findings show that the use of social media as a type of content within online news was *format*-dependant, not *genre*-dependant. That is, social media was used frequently across all live blogs, but infrequently or not at all in news articles. We also found that social media containing an image was more likely to be used than those containing video, but text-only messages trumped both. The logic was reversed for videos, which were also *format*-dependant, but used more frequently in news articles compared with live blogs irrespective of the genre. This pattern was also broadly consistent when cross-tabulated against each news *brand* as a proportion of its own coverage.

How Source Prevalence Defines Genre and Format

When examining the origin of sources used within online news (RQ1), we find clear patterns differentiating both *format* and *genre* (Table 3). Some sources are naturally more prevalent within certain genres with episodic events defined by the activities of those sources – e.g. political news is overwhelmingly dominated by elite political sources (55% of sources in political live blogs and 58% in news articles), whilst a quarter of sources in sports news are from elite sources such as athletes, coaches and so forth (21% in live blogs and 36% in news articles).

Similarly, in crisis news, we find elite sources like authorities such as police, ministries and agencies (18% in live blogs and 10% in news articles), and non-elite sources like eyewitnesses (6% in live blogs and 9% in news articles) that are all largely absent from other genres. Crisis news was also defined by the marginalisation of opposition political (only 2% in both live blogs and news articles) and expert sources (4% in live blogs and 6% in news articles). When we examine each individual event, we find only the UK flooding (C4) event bucks this trend with the opposition and Government politicians almost balanced. This pattern suggests a dramatic limiting of sources to the sphere of consensus (Hallin 1986) when faced with an external threat from a foreign state or terrorist organisation, whilst legitimate controversy or even deviance is accepted when the threat is based on natural disaster and the Government's response to this.

For politics news, however, the logic from crisis news is reversed: opposition politicians were the largest source of elite politicians in both live blogs (27%) and news articles (26%). This is almost exclusively down to two events: the Labour reshuffle story (P4) was naturally dominated by opposition politicians, though it was unexpected to find the Syria vote (P2) also feature more opposition politicians. Examining the

TABLE 2
Type of content as percentage of each format within each genre

Category A Type of content	Crisis			Politics			Sports			Grand Total
	Live	News	Total	Live	News	Total	Live	News	Total	
A: Text – direct quote	30.4%	33.2%	31.5%	34.0%	38.2%	35.4%	39.9%	33.2%	38.1%	35%
A: Image – from event reported upon	14.1%	21.2%	16.9%	16.6%	14.8%	16.0%	25.9%	37.2%	28.9%	20%
A: Text – paraphrase or inferred attribution	25.5%	20.7%	23.6%	17.5%	23.6%	19.5%	5.7%	10.4%	7.0%	17%
A: Social Media – Text	14.0%	1.7%	9.2%	22.1%	2.2%	15.5%	14.1%	3.3%	11.2%	12%
A: Video	2.9%	14.8%	7.6%	2.1%	13.5%	5.9%	2.0%	11.9%	4.7%	6%
A: Social Media – Image (and text)	7.3%	1.0%	4.9%	4.7%	0.2%	3.2%	9.5%	0.6%	7.1%	5%
A: Image – stock image or illustration	3.8%	6.9%	5.1%	1.4%	7.3%	3.4%	2.7%	3.2%	2.8%	4%
A: Social Media – Video (and text)	1.4%	0.3%	1.0%	1.0%	0.1%	0.7%	0.2%	0.2%	0.2%	1%
A: Audio	0.1%	0.3%	0.2%	0.5%	0.3%	0.3%	0.2%	0.2%	0.0%	0%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Grand Total (n=)	1797	1166	2963	2429	1215	3644	1771	662	2433	9040

TABLE 3
Originator of content attributed to sources (showing top-level categories only)

Category C Originator of content	Crisis			Politics			Sports			Grand total
	Live	News	Total	Live	News	Total	Live	News	Total	
C: Authorities\TOTAL	18%	10%	15%	1%	3%	2%	0%	0%	0%	5%
C: Celebrity\TOTAL	1%	0%	1%	0%	0%	0%	0%	0%	0%	0%
C: Expert\TOTAL	4%	6%	5%	2%	4%	2%	10%	6%	9%	5%
C: Industry\TOTAL	3%	2%	3%	2%	4%	3%	0%	1%	0%	2%
C: Lobby\TOTAL	1%	1%	1%	4%	5%	4%	0%	0%	0%	2%
C: Media\TOTAL	23%	16%	20%	24%	8%	18%	21%	18%	20%	19%
C: Political\TOTAL	27%	30%	28%	55%	58%	56%	0%	0%	0%	32%
C: Public\TOTAL	8%	14%	11%	5%	1%	4%	22%	1%	16%	9%
C: Sports\TOTAL	0%	0%	0%	0%	0%	0%	21%	36%	25%	7%
C: Wire service\TOTAL	12%	16%	13%	6%	14%	9%	21%	22%	22%	14%
C: Other\TOTAL (inc. Unknown)	3%	4%	3%	1%	3%	2%	4%	14%	7%	4%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Grand Total (n=)	1797	1166	2963	2429	1215	3644	1771	662	2433	9040
Number of source types used	44	36	44	34	29	36	17	16	21	48

qualitative data, we find the significant use of opposition sources was due to the Labour party being split on the issue – with a large group of rebels voting against the leadership to support the Government’s call for airstrikes – which became part of the story. In all other cases and genres Conservative party sources exceeded those of Labour.

Sports news also feature a significant proportion of pundits (10% in live blogs and 6% in news articles) that is absent from the other two genres analysed. Sports live blogs are distinct from all other genres and formats, with a narrative constructed around a conversational vernacular that also uniquely includes a large proportion of audience contributions as commentary within the main text (21% of live blog sources compared with 1% in news articles). In other genres, audience commentary in the main text only accounts for 3% of sources used.

It was also possible to discern some news brand differences, with the majority of pundit sources used within BBC’s sport live blog (88% of total) and news articles (85% of total). This can be explained in part by their cross-referencing of pundits featuring in their TV and radio broadcast coverage. The BBC was also more likely to draw on audiences for public commentary within their live blogs (78% of total, with the *Guardian* on 14% and the *Telegraph* on 7%), though the balance was almost even for the same source category within news articles (BBC with 39%, the *Guardian* with 30% and the *Telegraph* with 31%). However, this dominance from the BBC in audience commentary during sports events did *not* equate to a greater use of other forms of audience material. During crisis events, e.g. the *Telegraph* was most likely to use eyewitness sources in live blogs (49% of total, followed by the *Guardian* with 33% of total and BBC News with 19%), whilst the *Guardian* was most likely to use eyewitness sources in news articles (47% of total, with the other two on 25–27% each). This is despite the BBC’s prominent User-Generated Content Hub and long track record of soliciting and verifying audience material. Put together, these findings demonstrate how political economic factors can interact with specific institutional cultures and policies within news organisations to produce brand-specific dynamics of live blogging practice.

Whilst it is clear that elite centric sourcing practices were prevalent across both formats and all genres analysed, we did find evidence that the number of unique source types as an indicator of polyvocality differed considerably. Table 3 illustrates how both sports live blogs and news articles relied on a fairly low number of source types (17 and 16, respectively), with politics live blogs (29), news articles (34) and crisis news articles (36) containing nearly twice as many source types. The most heterogeneous category was crisis live blogs (44), with a very high degree of polyvocality.

While it is not possible to assert that individual source categories are always present in each genre or belong exclusively to a particular genre, their prevalence or absence helps define and differentiate between the genres. As demonstrated in the preceding text, we find clearly defined groups of characteristics – including polyvocality, the relative use of social media, and the penetration of non-elite sources – that allows us to make sense of the composition of journalistic genres when cross-referenced against the temporality of the news format (RQ3). Additional defining characteristics emerge when we analyse the communication flow of these sources, as we turn to in the discussion below.

Communicative Flow and (re-)Mediation of Sources

Whilst the type and originator of content provides us with a detailed understanding of how online news formats and genres are composed, it offers only limited insight into the origin of source material for the journalist as attributed in published news. Previous studies have examined remediation practices in online news, but this has typically been restricted to a particular content type (e.g. social media) or source type (eye-witness accounts) (Andersen 2012; Thorsen 2014). By including the origin of source for the journalist in the content analysis, this study was able to provide further detail on this dynamic by cross-tabulating three characteristics of all the sources identified to analyse how they are encountered and legitimised in the process of mediation and remediation across both genres and formats (RQ2). The resulting cross-tabulated data with multiple ways of structuring the analysis, produces more than 16,000 possible permutations or ways of examining each source instance. We focus here, therefore, only on dynamics that help further our understanding of the communicative flow of sources for the purpose of classifying each format/genre combination in our typology (RQ3).

Firstly, news organisations rely heavily on intramediatio, with one-third of sources overall originating from another media organisation or a wire service. They are also highly self-referential, with 37% of media sources being the news organisation citing itself or its own journalists (other than the byline), approximately 7% from other newspapers and 10% from other broadcasters, with other professional news websites only featuring in 2% of sources overall. Wire services featured prominently (42% of media sources in our sample) in all genres and formats, apart from politics live blogs (6%). Irrespective of the format or the genre, wire services were used almost exclusively for images from the event reported upon and a smaller proportion of stock images.

Elite political were the largest source originator across the entire sample (32% of the sources overall). The majority of these were direct from politicians, with remediation of a politician's statement as reported by another professional news organisation accounting for approximately 23% and 27% of political sources in live blogs and news articles respectively (Table 4). Direct interaction with politicians appears to have been through traditional interviews, with social media sourced direct from politicians accounting for only 3% of sources overall (or just 9% of political sources). Using politicians' social media in news reports was format- and genre-dependant, accounting for nearly 14% of political sources used in politics live blogs, compared with just over 2% in news articles. There was also a proportion of the elite political sources in live blogs that were from social media, remediated via another professional news organisation (10% of elite political sources in live blogs). Whilst these findings do indicate social media has contributed to a diversification of sourcing practices for journalists in relation to elite political sources, the effect may not be as dramatic for elite political sources as indicated by previous studies (Broersma and Graham 2013).

Authorities featured as a highly dominant source within crisis news, though a large proportion of this relied on remediation. Some 45% of authority sources in live blogs were remediated from statements published by other news organisations, with only 22% sourced directly (12% direct from social media). This is format-dependant, however, with remediation of authority sources accounting for only 20% of authorities in crisis news articles (almost exclusively direct quotes, with virtually no direct citation of social

TABLE 4
Selected news sources indicating the proportion of each that was sourced directly from social media or remediated from another news organization

Category C, originator of content Category B, source for journalist	Crisis		Politics		Sports		Live total	News Total	Grand Total
	Live	News	Live	News	Live	News			
C: Political									
C: Political n=	26.8%	30.4%	55.2%	57.9%	0.1%	0.0%	30.4%	34.8%	31.9%
Social media direct	482	354	1341	704	1	0	1824	1058	2882
Remediated from other news	10.2%	2.8%	14.2%	2.0%	100.0%	0.0%			
C: Authorities									
C: Authorities n=	35.7%	21.5%	23.2%	26.7%	0.0%	0.0%	5.7%	4.9%	5.4%
Social media direct	17.6%	9.7%	1.0%	2.8%	0.0%	0.3%	341	149	490
Remediated from other news	11.7%	0.9%	12.1%	0.0%	0.0%	49.7%			
C: Sports									
C: Sports n=	44.8%	19.5%	33.3%	8.8%	0.0%	50.0%	6.2%	7.8%	6.8%
Social media direct	0.1%	0.0%	0.1%	0.0%	20.9%	36.0%	373	238	611
Remediated from other news	1	0	2	0	370	238			
C: Public									
C: Public n=	0.0%	0.0%	100.0%	0.0%	42.7%	4.6%	10.8%	6.4%	9.3%
Social media direct	100.0%	0.0%	0.0%	0.0%	26.5%	41.2%	647	195	842
Remediated from other news	8.0%	14.5%	5.0%	1.5%	21.6%	1.2%			
Total % of C categories shown									
n= for C categories	143	169	121	18	383	8	5997	3043	9040
Social media direct	27.3%	7.1%	11.8%	1.6%	34.3%	1.7%			
Remediated from other news	45.5%	45.6%	5.0%	27.8%	0.8%	25.0%			
Total % of C categories shown									
n= for C categories	52.5%	54.5%	61.3%	62.2%	42.6%	37.5%	53.1%	53.9%	53.4%
	1797	1166	2429	1215	1771	662	5997	3043	9040

The table only shows a portion of the dataset for both category C and B, which is why columns do not add to 100%. The final row showing n= for category C is the overall total. N= values are also provided for each individual C category as a whole, which is what the B category percentage is derived from.

media). Social media as a sourcing practice was in other words again more prevalent in live blogs than news articles when journalists interacted directly with the source.

Within sports live blogs, elite sports sources accounted for 21% of sources and almost half of these sources were directly from the person's social media account (43% compared to 6.5% via interviews). This drops significantly in news articles (only 4.6% of elite sports sources were direct from their social media accounts). Remediation from another news organisation was also prevalent in the sports genre, though uniquely as a greater proportion of elite sports sources in news articles (41%) than sports live blogs (27%). This ran contrary to what we expected, since live blogs overall rely more on other media organisations as a source (23% of all live blog sources and 13% of sources in news articles). Live blogs are prone to using sources of information from other news media as the story unfolds, which are then replaced by the news organisation's own source once the news article is written up. However, our evidence shows that this reliance on other media sources for facts in live blogs, *does not* translate to a similar dominance of remediation of elite political or elite sports sources in the same format – with live blogs instead sourcing directly from social media. It is of course also plausible that this is due to live bloggers not attributing where they initially spotted the social media message (e.g. rather than remediating a social media message from a competing news organisation, they may have simply embedded the message directly).

We have already established that public as sources did not figure prominently in the sample overall. Whilst these non-elite sources accounted for 9% overall, their prevalence was highly format and genre-dependant. This is reinforced further when we cross-tabulate these results against the type of content and where the journalist appears to have sourced it from. Sports live blogs were the only ones to feature audience commentary prominently, and our analysis shows that these are sourced primarily from the news organisation's own comment field or "Have Your Say" section (42% of public sources in sports live blogs). While this is a potentially rich source for journalists to tap into audience sentiment about a particular story, no other format or genre combination made use of these. Audience emails were also fairly marginal in terms of overall frequency, but prominent as a proportion of the public sources in sports live blogs (5% of public sources) and politics live blogs (40% of public sources). Sourcing audience material directly from social media was also not significant as an overall sourcing practice, featuring in only 0.8% of all news articles and 3.8% of all live blogs. However, it was significant as a proportion of the audience material itself and this dynamic was highly format-specific, with audience sources direct from social media accounting for 7% of sources in sports live blogs (or 34% of public sources), but only 2.5% in politics live blogs (or 12% of public sources) and 2.2% in crisis live blogs (or 27% of public sources). The latter is noteworthy given the prevalence of eyewitness reports in crisis live blogs and news articles as discussed above. Rather than sourcing eyewitness direct, we find news organisations relied on remediation of eyewitness sources as reported by other news organisations – accounting for 3% of sources in live blogs (or 38% of public sources), and 6.4% in news articles (or 44% of public sources). Moreover, when eyewitnesses were remediated in news articles, this was predominantly as video (3.3%) or image (1.1%) – in other words more than 70% of remediated eyewitness sources in news articles were audio-visual. This is in stark contrast to live blogs, where only 18% of the remediated eyewitness material was an image or video. The dynamic here is two-fold, in that audience material is only given epistemic authority

when it contains some form of visual material, *and* when this material is remediated from another professional source. The latter may be due to the availability of the content, though is also likely a method for journalists to determine what audience material has been verified and can be trusted.

What emerges in relation to audience material goes beyond prevalence of non-elite sources and is, we argue, a final defining characteristic of online news – relating specifically to how it includes or represents episodic publics within news narratives (RQ3). Again our evidence shows the unfolding and transparent narrative dynamic of live blogs to be a determining factor for including public voices, though the different genres engender communicative spaces that reflect episodic publics in highly distinctive ways. We analyse this further in our conclusion, alongside the other determining characteristics of our typology and their broader significance.

Discussion and Conclusions

Debates concerning digital news sourcing are characterised by an expectation that a combination of emerging digital news formats alongside the greater access that citizens and/or traditionally marginalised groups have to social media may have a flattening effect on news sourcing patterns that were historically narrow and elite centred (Lecheler and Kruikemaier 2016). This expectation has not been widely supported by the evidence to date (Lecheler and Kruikemaier 2016), but we argue there are sufficient distinguishing features of live blogs to warrant further investigation to ascertain how they compare to more conventional online news formats across different genres. By comparing the sourcing practice of two distinct online news formats in detail across three genres, we identify characteristics that form the basis of a new typology, designed to account for the complex dynamics of digital sourcing practices and aid analytical specificity in future research.

Previous literature has documented in detail how live blogs incrementally report events as they unfold, and offer greater transparency compared with the summative and closed narrative structure of more conventional online news articles. In our typology, we term this the *narrative dynamic* of online news, which is entirely format-dependant (Figure 1). The *temporality* meanwhile, we argue is both format- and genre-dependant – primarily linked to the unexpectedness of an event, with some allowance provided for serial reporting (e.g. a general politics live blog).

Our study found that at a base level, live blogs have a greater degree of *polyvocality* as a whole than their corresponding online news articles. However, this *polyvocality* is not distributed evenly (Figure 1), and there are distinct differences between the types of sources used across different genres and the way they are integrated into the narrative. *Remediation* of news sources follows a similar pattern to *polyvocality*, and this too reflects an elite-centric sourcing pattern – that is, a higher degree of remediation *did not* necessarily mean a higher degree of *non-elite penetration*. With respect to *non-elite penetration* in the news, our study found public voices were typically marginalised in all but sports live blogs and crisis news articles.

What these findings suggest, then, is that online sourcing practices are dependent on the genre and nature of the news events, and not solely the affordances of the news platform. Here, beyond the overwhelming dominance of elite sources across all

	Crisis		Politics		Sports	
	Live	News	Live	News	Live	News
Narrative dynamic	Unfolding, transparent	Summative, closed	Unfolding, transparent	Summative, closed	Unfolding, transparent	Summative, closed
Temporality	Unexpected	Unexpected	Scheduled + serial	Scheduled + serial	Scheduled	Scheduled
Polyvocality	High	Medium	Medium	Medium	Low	Low
Remediation	High	Medium	Medium	Medium	Low	Low
Social Media	Medium	Low	High	Low	Medium	Low
Non-elite penetration	Low	Medium	Low	Low	Medium/High	Low
Episodic publics	Victim-spectacle	Victim-spectacle	Spectator-exclusive	Passive	Spectator-inclusive	Passive

FIGURE 1

Typology of online news and live blogs

genres and formats, and the genre-specific sourcing practices that are to be expected (e.g. the exclusive prevalence of sports pundits in sports news), there were still genre-defining patterns of source usage. This is especially the case if we focus on the prevalence of social media and use of demotic voices in the news; a preoccupation of much recent journalism studies literature.

One assumption from previous research is that *social media* has dramatically altered our news landscape and by extension digital news sourcing practices (Hermida 2013). Our study supported the idea that social media is disrupting sourcing practices, but we found they are *not* as dominant as a source type overall as we might expect based on previous research. Instead we found social media was highly *format*-dependant, used frequently across all live blogs (and particularly so in politics), but infrequently or not at all in online news articles (Figure 1). Overall we also found social media reinforced existing elite centric sourcing practices (83% of all social media across the entire sample), rather than facilitating a disruptive shift towards incorporating demotic voices (Turner 2010) and diversifying the balance of news sourcing.

Conventions of the live blog format, in other words, determine the prevalence of social media rather than technological affordances of online news – since both news articles and live blogs can contain embedded tweets or other forms of social media alike. This is connected to both the temporal nature of the live blog format and its role in providing a meta-narrative of events as they unfold (Thorsen 2013, 2016). Within this context, it is natural for journalists to reflect and incorporate source statements as soon as they occur – and be transparent about their origin (Thorsen 2016; Singer 2015). Online news articles meanwhile, retain many of the narrative conventions that have evolved from print journalism, and prefer to rely instead on direct citation of elite sources. This is not to suggest journalists writing news articles (as opposed to live blogs) are not utilising social media for their stories, but rather there is little evidence of this disrupting how the finished news report is presented to audiences.

Based on these characteristics, we argue that live blogs create distinct online spaces that are spectacles of material communicative spaces that connect with and reflect *episodic publics* that emerge in relation to these. This dynamic and communicative characteristic is highly *format*-dependant and almost exclusive to live blogs. For us, the concept of episodic public is productive for thinking about the audience's relationship with the news, and how different genres of news construct and reflect distinct

experiences of publics. In this study, we identified four distinct episodic publics, with different variables describing how the publics involved are conceived (e.g. victim or spectators) and their degree of involvement within the news (e.g. as a spectacle, exclusive group, inclusive group or passive audience).

Politics live blogs recreate a communicative spectacle of the lobby, with typically a specialised vernacular and *polyvocality* of elite political sources. Specialised *episodic publics* emerge in relation to these events, though they are only incorporated occasionally to create a spectacle of voice (much like a vox pop in broadcasting terms), rather than being a genuine part of the discussion – the narrative is still very much elite-centric and reflecting the exclusivity of the lobby. The episodic public, here, is also a spectator of sorts as we find in sports, though excluded from participation. We therefore term the episodic public this live blog reflects as “spectator-exclusion”.

Crisis live blogs recreate the chaotic spectacle and uncertain information landscape that emerges when an unexpected event unfolds. The *episodic publics* here are either victims who are incorporated as eyewitnesses (again as a spectacle) or concerned/affected publics (who are rarely incorporated). In crisis news, for example, citizens were given *some* voice, but primarily as eyewitnesses and even here a relatively small number of remediated eyewitness accounts were given prominence across various news media. We term this episodic public as “victim-spectacle”, though there was also some traces of “spectator-exclusion” within some crisis live blogs. Given the raw, unfolding nature of live blogs, one expectation was that they would give rise to more “unconfirmed” or “unverified” eyewitness reports (Thurman and Rodgers 2014). But if anything we found the opposite: crisis live blogs are more reliant on various official sources (frequently remediated), with eyewitnesses emerging more in the news articles, often as a discreet news package. Evidence from newsroom studies would point to verification processes as an explanation here (Loke and Grimm 2017; Thurman and Walters 2013). With the advantage of time, the journalist writing the summative report of an event may have access to a greater number of verified and authoritative sources than the live blogger. But there are likely wider political economies of the newsroom at play too. As Thurman and Schapals (2017) document, live bloggers covering crisis events are invariably deskbound generalists, who lack access to sources on the ground. As a result, they are drawn to mainstream sources and are following rival live blogs for sourcing material.

In sports journalism, these restrictions do not apply in the same way, which may provide some explanation for why sport was the *one* genre where demotic voices were allowed into live blogs as commentators and (amateur) pundits, allowing *some* citizens the ability to offer normative frames to the unfolding events. Sports blogs recreate a distinctive spectator experience, and incorporates episodic publics into this space. In doing so it seeks to replicate the type of vernacular interaction audiences would experience when attending a sporting event (including build-up banter, anticipation, commentary of the event, and emotive post-event analysis). We define this episodic public as “spectator-inclusion”, which has a highly community-driven component. The difference between the below-the-line comment on online news articles and those associated with live blogs that are “spectator-inclusion”, is that those comments are incorporated/included into the story, rather than below the line. But there are arguably some more fundamental forces at play here too. Journalists themselves often report

that sports and entertainment are more appropriate places for audience material over more serious news (Loke and Grimm 2017; Thurman and Walters 2013). Implied in these accounts is the view that when the stakes are high, audiences should primarily play a passive role (outside of providing eyewitness material), and are only afforded epistemic authority in the “safe” spaces of sports and entertainment news.

Our typology represents a first attempt to systematically map the contours of live blogging sourcing practices and how they compare with those of online news articles – specifically since one format is native to the web, whilst the other follows more conventional news structures. It captures multiple characteristics that enable us to make more complex comparative observations about the epistemology and dynamics of online news formats than before. Most importantly for the purpose of understanding power-relationships within online news, we connect the *polyvocality* and *non-elite penetration* with the *narrative dynamics* of a news object and *temporality* of the event. Here, the typology reveals a much more complex interrelation between these characteristics than previous research has suggested, with the penetration of demotic voices in news narratives not solely dependent on the presence of social media or even the transparent structure of live blogs. Similarly, it reveals that the presence of *remediation* in news narratives is not linked to either a greater presence of *social media* or *non-elite penetration*, but is connected with *polyvocality*. The typology also begins to describe the characteristics of how audience relationships are constructed as *episodic publics*, which moves beyond previous characterisations as active or passive audiences, lurkers or contributors, to explain how audiences are both engaged with news texts and their participation re-inflected as part of the news narrative itself.

The typology posits seven characteristics across six variables, based on the findings in this study. We recognise that further characteristics and variables are possible and as such, it requires empirical examination across a range of settings. First, for a news format that is established across the world, existent live blogging research is remarkably UK-centric, and the present study was not designed to address this imbalance. There are many empirical gaps in large parts of the world outside northern Europe that future research should explore. Second, the research such as ours is typically drawn towards major news brands, in part because they have the resources to run frequent live blogs, but there may be different sourcing dynamics in news organisations depending on size, geographic focus, or subject specialism that challenge or can build on our typology. Moreover, even between major news organisations we found some distinctive practices, which suggest how institutional dynamics, editorial policies and journalistic cultures relate to and help explain the underlying dynamics of our proposed typology.

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