Making Audience Engagement Visible: Publics for Journalism on Social Media Platforms

Axel Bruns

Introduction: A Second Wave of Citizen Journalism?

The digitization of journalistic practice which took off especially with the popularization of online media towards the end of the previous millennium has brought about a number of profound changes for journalism, but arguably none is more significant than the transformation of the relationship between journalists and their audiences. Early in this process, the focus of scholars and practitioners alike turned especially to the rise of citizen journalism as an alternative form of collaborative news production: popularized initially by *Indymedia* and similar online platforms, and later by a myriad of news and commentary blogs engaging with the public debates of the day (Bruns 2005), such citizen journalism activity was seen as a serious challenge to the authority of professional, industrial journalism which – depending on one's view – had to be combatted or embraced. Citizen journalists were demonized by some as "upstarts" and "armchair journalists", and embraced by others as valuable partners in the coverage and evaluation of news events – as Dan Gillmor famously put it, "my readers know more than I do" (2003: vi), especially on specialist topics beyond the general knowledge of the journalist.

But because the barriers to sustained, long-term participation in citizen journalism were almost as high as those to professional employment in the industry, citizen journalism in its conventional definition has remained a space populated by the usual suspects: "political junkies" (Coleman 2003) who were already highly engaged in discussions about news and politics and simply shifted these debates to more visible online spaces. Some of them have managed to convert their amateur or semi-professional engagement into a more professional occupation over the past decade: such processes can be observed for practitioners from Matt Drudge to Arianna Huffington, and from Guido Fawkes to Oh Yeon-ho. Far from a multitude of citizen journalists and news bloggers committing "random acts of journalism" (Lasica 2003) as a continuous, distributed practice, citizen journalism itself has become increasingly professionalized, and a number of Websites which started out as citizen journalism sites must now be regarded simply as news organizations in their own right, even if they had a very different genesis and maintain journalistic practices and attitudes that diverge significantly from the leaders of the mainstream news industry.

But alongside these mainstream and alternative news outlets, whose relationship mirrors the two-tier framework Herbert Gans sketched out as early as 1980, more recent developments have brought about a new wave of engagement with the news which may be able to lay a more convincing claim to finally realizing the "random acts of journalism" that Lasica envisaged (Bruns 2015). This new wave is enabled largely by a further lowering of the barriers of entry to the public discussion of the news, brought about by the widespread adoption of the current generation of mainstream social media platforms – such as *Facebook* and *Twitter* – for the public discussion of news and current affairs. For citizens to engage with the news – to share it with their social media friends and followers, to comment on and critique it, and even to add to it by contributing additional facts and interpretations, and posting eyewitness accounts from the scene of news events – it is now no longer necessary to set up a content management system, create a blog site, or write lengthy commentary articles: all that is required is a *Facebook* or *Twitter* account that has an established "personal

public" (Schmidt 2014) of friends and followers or can tap into the debate raging around a relevant topical hashtag.

The nature of such social media contributions to public debate is necessarily different from those made by the first wave of citizen journalists (and not just because of the specific technological affordances and limitations of current social media spaces, such as *Twitter*'s 140-character limit). Many in this second wave of contributors are truly committing *random* acts of journalism: 'drive-by' comments on news and politics that are interspersed with observations from their daily personal and political lives, comments on football scores, music and movies, and updates on other everyday activities. The role of *Facebook* and *Twitter* as general-purpose social networks – rather than providing spaces only for specific topics, themes, or groups of users – makes this unavoidable, and yet their fundamental character as algorithmically determined platforms (Gillespie 2013) also always allows the automated or on-demand surfacing of specific discussion threads, themes, or communities from the billions of messages exchanged through these platforms every day.

This is what Hermida (2010; 2014) and Burns (2010) describe – for the case of *Twitter* – as the platforms' "ambient news" function: much like ambient music in a physical environment, ambient news discussion is always already happening in the background on such social media platforms, amongst self-selecting pockets of interested users or as part of overall, everyday activities – but when new stories break and major events unfold, this news discussion comes to the foreground and becomes considerably more visible (spawning topical *Twitter* hashtags or public *Facebook* pages set up to facilitate and contain it, for example). Such activities may be uncoordinated, decentralized, and in that sense truly random, but in this simply represent the predominant ways in which audiences have always engaged with the news, well before the advent of online and social media. As Habermas notes, "the public sphere is rooted in networks for the wild flows of messages – news, reports, commentaries, talks, scenes and images" (2006: 415); social media merely make these "wild flows" a great deal more visible by endowing them with digital, traceable, quantifiable form. This chapter demonstrates how these processes may be investigated by using advanced social media analytics research methods.

New Opportunities for Researching Journalism Audiences

These methods generate significant new opportunities for research that seeks to investigate how audiences use, engage with, and respond to news content. Advances in social media analytics over the past few years have enabled the unobtrusive study of patterns of public user activities at very large scale and in close to real time (as a prime example of developments in the wider field of 'big data' research, focusing here especially on 'big social data'), and are making it possible to observe the dynamics of social media activities around given news stories or news outlets, for example. Some such research focuses especially on the participation of users in topical hashtags on *Twitter* that relate to specific world events, from the Arab Spring uprisings to political scandals (e.g. Bruns, Highfield, & Burgess 2013; Maireder & Schlögl 2014), but such approaches are generally able to capture only the tip of the iceberg of what is likely to be much more widespread engagement with these topics beyond the self-selecting group of hashtag participants (Burgess & Bruns 2015); by contrast, more comprehensive (but also more complicated and resource-intensive) studies are able to generate a far more detailed picture of the full range of the "wild flows of messages" that result from "random acts of journalism" on social media (combining Habermas and Lasica).

This chapter draws on data from one such longitudinal study, the Australian *Twitter* News Index (ATNIX), as an illustrative case. Since mid-2012, ATNIX has captured all tweets that contain links to a list of (at the time of writing) 35 Australian news and commentary Websites (independent of whether such links were shortened using services such as *t.co* or *bit.ly*). ATNIX covers virtually all Australian outlets of national or regional importance; however, it excludes recent overseas entries *The Guardian*, *Daily Mail*, and *Buzzfeed*. These outlets launched Australian versions in recent years, but continue to operate under their .com or .co.uk domains; it is therefore impossible to distinguish tweets that link to the Australian editions of these titles from those that link to the UK or international editions. Conversely, Australian-based commentary publication *The*

Conversation continues to be tracked in ATNIX, but its recent expansion to the UK and US, and its shift from a .edu.au to a .com domain for all content, has meant that its numbers will now be inflated by tweets from overseas users that link to *Conversation* content. Studies similar to ATNIX are underway for Germany and the Nordic countries, and the same model could be applied to other national media markets as well.

Now capturing more than one million tweets each month, ATNIX still only constitutes a subset of the full range of audience engagement with the news on *Twitter*, of course: it will not capture tweets which mention newsworthy events but do not include a link to news articles covering them. What the dataset represents, then, is one specific form of news engagement: the sharing of articles deemed to be relevant or important with one's own network of *Twitter* followers, potentially also including some framing comments in the tweet (cf. Bruns, Highfield, & Harrington 2013). Arguably such engagement constitutes a particularly important public function exercised by this second wave of citizen journalism: the evaluation, dissemination, and contextualization of mainstream news media content by everyday social media users who are thus acting as gatewatchers (Bruns 2005, 2015; Bruns & Highfield 2015).

The following discussion illustrates the uses of the ATNIX dataset – and, by extension, of similar empirical data that may be gathered from other social media platforms – in understanding the activities and dynamics of social media-based news audiences as they actively engage with and contribute to the news. It explores the temporal dynamics of news engagement over time; examines the specific social media footprints of different news organizations; and thus reveals social media audiences' overall role in disseminating, discussing, and evaluating the news. Finally, it also compares these patterns with other data about the general use of online news sources in Australia, to highlight the similarities and differences between the active social media news audience and more general online news audiences.

The Active Social Media News Audience

Twitter-based engagement with Australian news and commentary sites has grown considerably over the timeframe covered by ATNIX. While 2012 and 2013 saw an average of some 675,000 tweets per month that shared links to the various sites, that number has grown consistently during the subsequent period, to more than 1.5 million tweets identified in the most recent reporting period of March 2015. This increase is both an indicator of continuing growth in the userbase for *Twitter* in Australia (with 2.8 million Australian *Twitter* accounts identified by September 2013, and an estimate of more than three million at the time of writing; cf. Bruns et al. 2014), and of the increasing importance of *Twitter* in the national public debate. ATNIX data also show an increase from some 153,000 unique monthly users who shared news links during 2012 and 2013 to an average of 233,000 unique monthly users sharing the news since mid-2014 (but this number may be somewhat inflated by an increasing number of overseas users sharing *The Conversation* content, in particular).

Growth patterns for the various sites tracked by ATNIX are necessarily strongly divergent, and reflect the relative success of different news organizations in a rapidly changing media environment in general, and in the social media space in particular. Almost all Australian news sites now operate *Twitter* and *Facebook* presences as a matter of course, and many of their journalistic and editorial staff have also developed personal presences in social media environments. However, their success in doing so has been determined by a combination of factors including the traditional popularity and visibility of the parent imprint in the overall Australian news market; the overall thematic and ideological positioning of the news outlet, and its relevance to the demographics represented on *Twitter*; the impact of barriers to access and sharing, such as complete or partial paywalls; and the adequacy of the social media marketing strategies pursued by each outlet's institutional and staff social media accounts.

In particular, ATNIX data show a widening gap between joint market leaders *ABC News* (the major Australian public broadcaster) and *Sydney Morning Herald* (a leading quality newspaper) and the rest of the market. While monthly tweets for these leading sites have more than doubled from an average of 122,000 tweets per month during 2012 and 2013 to almost 270,000 tweets per month in the first quarter of 2015, results for other outlets have stagnated by comparison. Tweets linking to middle-of-the-road site *news.com.au*, for example, increased only by 29% between 2012/13 (67,000 per month) and Q1/2015 (87,000

per month) – given the growth in the number of Australian *Twitter* accounts over the same period this may even represent a loss of relative marketshare, in fact.

Such numbers document a substantial, and growing, engagement with the news via *Twitter*. Australian *Twitter* users actively seek out and share news information from a broad range of news and commentary sites, with specific relatively stable preferences for particular sites, and in doing so initiate and continue a lively, virtually permanent debate about news and current affairs ranging across all aspects of the news. This entirely user-driven process constitutes an example of Habermas's "wild flows" of news, and substantially amplifies the visibility of the news reports and commentary articles published by these outlets: their sharing through the personal publics of each participating user enables them to reach an audience well beyond the readers who would visit these sites on a regular basis. Further, as we must assume that many users will share specific news items also because they believe them to be of particular interest to their imagined audiences of friends and followers, this on-sharing of news items constitutes a form of at least loosely targeted news dissemination and curation. Such social media analytics make visible, then, active audiencing practices which have long been recognized in the literature (e.g. Fiske 1992), but have rarely been observed *in situ* in large-scale studies.

News Outlets' Social Media Footprints

Beyond tracking the overall sharing patterns to document the important role that social media now play in disseminating the news, thus augmenting the dissemination activities of the news outlets themselves, the approach outlined here also enables us to explore in more detail the specific audiences which exist around the various news organizations within the social media space. This approach addresses important questions relating to the relative fragmentation or interconnection of the Twittersphere and similar social networks: are the sharers of links to specific news and commentary sites highly loyal and partisan towards those sites to the exclusion of all others, forming what some have described as "filter bubbles" (Pariser 2011), or is their news diet considerably more varied?

To address these questions, the following discussion examines ATNIX data for the first quarter of 2015, and focuses on the 10,000 *Twitter* accounts which are most actively sharing links to the sites of *ABC News*, the *Sydney Morning Herald*, *news.com.au*, the popular tabloid newspaper *Herald Sun*, and the conservative national quality newspaper *The Australian*, respectively. Collectively, the 10,000 most active *ABC News* users posted 605,988 tweets sharing links to that site; those linking to the *SMH* posted 583,838 tweets; those for *news.com.au* 184,021; those for *The Australian* 147,248; and those for the *Herald Sun* 124,025. These five groups of 10,000 users each are thus responsible for a substantial portion of all news links shared in the Australian Twittersphere; together, they posted 1,645,120 of the 2,295,238 tweets linking to these five sites during the first quarter of 2015.

Having identified these five groups, it is now possible to examine the extent of the overlap between them. This reveals a number of notable patterns. First, the cross-tabulation in Fig. 1a indicates the overlap between these most active userbases for each publication. It shows, for example, that users sharing links to *ABC News* are most likely also to share links to quality newspaper sites *Sydney Morning Herald* and *The Australian* (more than 5,000 accounts belong to the userbase of top sharers for both *ABC* and *SMH*), and least likely to link to the tabloid *Herald Sun*; indeed, of all five sites examined here, prominent *ABC News* sharers are least likely to share *Herald Sun* links as well. Conversely, the most active *Herald Sun* sharers are most likely to also share the news articles published by *The Australian* and *news.com.au* (potentially as a result of cross-promotion across the News Corporation network to which all three sites belong). Most notably, however, *Herald Sun* sharers are the most likely of all five groups of users to limit their news diet to this one site only: more than 4,600 *Herald Sun* users – almost half of the 10,000 most active sharers considered here – did not also appear amongst the most active 10,000 users sharing links to one of the other sites. By contrast, those who shared links to *The Australian* or the *Sydney Morning Herald* were most likely also to frequently share links to one of the other sites; only just over 27% of *SMH* sharers chose to share links to that site alone.

Fig. 1b converts these observations into a basic network graph indicating the interconnections between the five sites' userbases; it demonstrates the strong triangle of interrelationships between *ABC News*, the *Sydney*

Morning Herald, and *The Australian* as well as the somewhat weaker connections within the NewsCorp stable between *news.com.au*, *The Australian*, and the *Herald Sun*, while pointing to the strong disconnects between the *Herald Sun* userbase and those of *ABC News* and the *Sydney Morning Herald*. Nodes in this network are sized by weighted degree, which affords *The Australian* particular prominence as it most uniformly shares its active users with the userbases of the other four sites examined here. This may boost the spread of its content beyond its comparatively limited marketshare as indicated by overall ATNIX metrics: while links to *The Australian*'s articles are not shared anywhere near as widely and frequently as those to *ABC News* or the *Sydney Morning Herald*, arguably they are shared by a more diverse range of users.

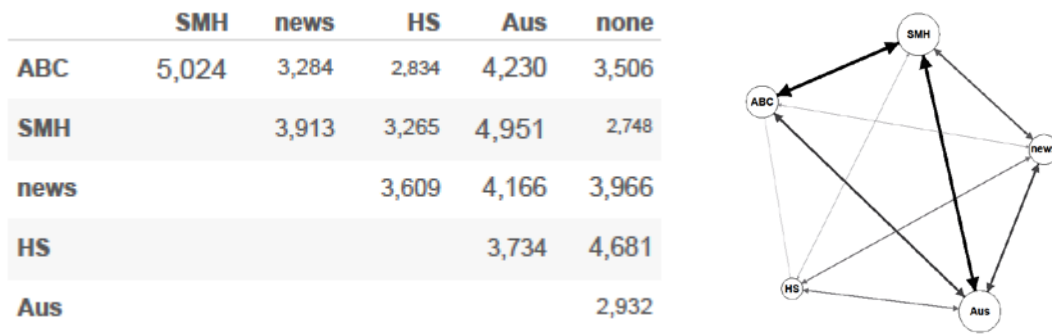|	SMH	news	HS	Aus	none
ABC	5,024	3,284	2,834	4,230	3,506
SMH		3,913	3,265	4,951	2,748
news			3,609	4,166	3,966
HS				3,734	4,681
Aus					2,932

Fig. 1: a) Number of users shared between the userbases of the five sites, considering the top 10,000 most active *Twitter* users sharing links to each site in Q1/2015. Totals for each site are greater than 10,000 because double counts are possible. b) Network graph of userbase overlaps between the 10,000 most active sharers of links to the five sites. Node size based on weighted degree; edge size based on weight of connection.

What emerges from this is that the processes of news engagement in the Australian Twittersphere are neither entirely random acts, where users tweet and retweets links to Australian news sites without considering the source of the information as they do so, nor are they always predetermined by deep loyalties to specific news organisations over others. Instead, we may surmise that the specific preferences for some news outlets over others, and the divisions between the *Twitter* audiences of these outlets, and driven in part by broader habitual news repertoires well beyond online and social media themselves (habits which in turn may be related to factors such as thematic interest or socioeconomic status), and in part also by the network effects of social media-based news sharing itself (as widely shared news outlets are more likely to attract further sharers than more obscure sites). Further, the social media outreach activities of the news outlets and their staff, and internal cross-promotions between sites within the same media corporation, may also influence further user-driven sharing practices.

This points to the fact that the Australian Twittersphere is not strongly fragmented along political, sociodemographic, geographic, or other lines; there is no strong evidence of the formation of "filter bubbles" (Pariser 2011) or similar enclaves in the overall network which are hermetically sealed from the rest of the network and thus disconnected from information flows which may contradict their communities' commonly accepted beliefs and values. It is very much possible that the situation in other national Twitterspheres may differ considerably from this picture – and further research along the lines outlined here would be able to shed useful light on such questions. Australian news outlets clearly attract at least somewhat divergent audiences, but there appears to be enough overlap between these to avoid a fragmentation of the nationwide discourse into individual groupings, even on Twitter itself (and overlaps and interconnections in audiencing practices across other media forms should serve as further points of connection between these divergent audiences).

These distinctions between the different social media audiences for news outlets are also evident when the relative locations of the most active news sharers for each site are identified within the overall structure of the follower networks of the Australian Twittersphere. This builds on the comprehensive network map of the 140,000 most followed Australian Twitter accounts described in more detail in Bruns et al. (2014), which

positions accounts relative to each other based on the structure of their follower relations; densely interconnected accounts will form close clusters, while loosely connected accounts will be placed at a greater distance from each other.

Identifying the locations of the most active 10,000 *ABC News* and *news.com.au* sharers on this map, it is immediately obvious that those accounts which share links to *ABC News* are more predominantly concentrated in a cluster of accounts related to Australian politics, while *news.com.au* sharers are less prominent in this politics cluster, somewhat more prominent in a cluster relating to various sports, and more generally dispersed throughout the map. This clearly points to the very different informational functions of these sites in the Australian public sphere in general, and in the Australian Twittersphere in particular – functions which can be explained fairly directly by their divergent editorial directions.

The fact that these news outlets cater to and seek to attract different audiences may not be particularly surprising. What is notable, however, is that the social media analytics approach outlined here is able to detect the effects of such editorial positioning on actual audience engagement; this represents a new metric – in addition to site visits, user registrations, and other data gathered by news organisations but rarely made publicly available in full – which can be used to assess the relative market positioning of individual sites. The use of such external data (generated by and available from the Application Programming Interfaces (APIs) of social media platforms such as *Twitter*) provides an important opportunity for researchers to generate solid independent data on the performance of news outlets at least amongst specific social media communities; further, if demographic information on such communities is available, more general societal news engagement patterns may also be able to be extrapolated.

Twitter News Audiencing Practices in Context

One useful point of comparison in the Australian context is the data gathered by Experian Marketing Services, a company which captures anonymized information about the Web searching and browsing activities of some 1.5 million Australian Internet users. Its Experian Hitwise trends data, generated over the same timeframe as the ATNIX news sharing data and tracking the same set of news and commentary sites (with the addition of *The Guardian* and the *Daily Mail*), indicate that news *browsing* and news *sharing* practices in Australia differ considerably.

Fig. 2 compares the number of tweets linking to the ATNIX sites, as determined by the ATNIX data themselves, with the number of total visits to the same sites, as identified by Experian Hitwise, for the first quarter of 2015. The comparison shows a number of very significant differences in the ranking of the sites, which can be explained in large part by the specific demographics of *Twitter* in Australia, where the platform's core userbase remains centered around comparatively affluent, well-educated, and urban users in the 25-55 age range, even though a considerable number of teenage users have joined the platform since 2012 (Sensis 2014; Bruns et al. 2014). Amongst the general population, middle-of-the-road news sites such as *news.com.au* and *ninemsn News*, UK tabloid spin-off *Daily Mail Australia*, as well as the site of quality newspaper *Sydney Morning Herald* are clearly leading the market – but the news that *Twitter* users choose to share with their followers is predominantly sourced from quality outlets *ABC News* and *Sydney Morning Herald*.

Website	Tweets
ABC News	847,517
Sydney Morning Herald	811,222
The Age	356,255
news.com.au	266,323
The Australian	202,326
The Conversation	186,418
Herald Sun	153,966
SBS World News	143,589
Daily Telegraph	133,319

Website	Total Visits
news.com.au	165,271,547
Sydney Morning Herald	114,343,374
Daily Mail	88,598,701
ninemsn News	75,772,762
The Age	73,188,461
ABC News	65,723,995
The Guardian	40,418,969
Herald Sun	38,987,455
Courier-Mail	36,795,376

Brisbane Times	124,741	Daily Telegraph	36,285,479
Courier-Mail	87,698	Perth Now	20,218,662
Canberra Times	83,540	The Australian	18,532,520
Yahoo!7 News	74,066	Brisbane Times	16,718,828
Australian Financial Review	66,344	Yahoo!7 News	10,868,806
Adelaide Now	39,666	Canberra Times	9,284,677
Sky News	35,179	WA Today	8,533,372
The West Australian	34,757	Sky News	6,998,228
Crikey	33,971	SBS World News	6,897,622
Perth Now	32,967	NT News	6,434,396

Fig. 2: Tweets linking to the top 20 Australian news and commentary sites during Q1/2015 (left) and total visits to the top 20 Australian news and commentary sites during the same period (right; also contains data on the Australian editions of *Daily Mail* and *Guardian*, which cannot be tracked by ATNIX). Data on total visits courtesy of Experian Marketing Services Australia.

In addition to the demographic differences that are likely to be major drivers of these trends, other factors may also play an important role. It is probable, for example, that comparatively high-brow news content is shared disproportionately much (and that less valued content is overlooked) if *Twitter* users are consciously taking into account the perceptions of their own imagined audiences as they make their sharing decisions: sharing news and commentary from quality publications could be seen as making the sharing users themselves appear more cultured and sophisticated, while sharing more low-brow content could have the opposite effect. (Such strategic decisions on how to position one's online persona are not limited to *Twitter* activities, of course.)

As a result, the ratios between visits and shares diverge widely across the different news outlets. Such ratios can be read in a number of ways, as it is difficult to ascribe a clear causal relationship between visits and shares: on the one hand, it may appear that a very substantial number of visits to a site such as *news.com.au* still results only in a comparatively low number of tweets sharing the content further; on the other hand, however, we might also say that a very high number of tweets linking to *ABC News* still appears to result only in a comparatively limited number of additional visits to the site. In the end, neither causal interpretation (visits result in shares; shares generate visits) is necessarily more likely than the other; what is most likely is simply that the ATNIX data on how news is being shared on *Twitter* represents a specific subset of audiencing practices that are very different from such practices as they unfold in other online spaces. (A brief glance at user practices on *Facebook* shows that the distribution of user activities across the various pages of Australian news outlets exhibits a different pattern yet again, for instance.) Any detailed investigation of causality would likely to have to trace user paths across specific Websites, and across the Web as such.

Conclusion

What emerges from this brief study of the available data on news sharing in the Australian Twittersphere is a glimpse of the rich and diverse practices for news audiencing and engagement in social media. Such social media-based engagement necessarily constitutes only one component of a wider range of audience practices across multiple media forms, but – given the recognized amplifier effect of social media sharing and news curation – an increasingly important one. The analytics approach presented here can contribute significantly to our understanding of how audiences use the news, and of the effects that this may have on overall public debate and the democratic processes that depend on it; such analysis may then also come to affect the editorial and promotional strategies of news organizations themselves, for better or for worse. Already, some news outlets are actively exploring changes to their sites, content, or headlines that are designed to improve

searchability and sharability, sometimes to the detriment of the journalistic quality of such content; the research methods outlined here are able to examine the impact of such changes on audience activities.

But beyond such more instrumental uses, the techniques outlined here also enable researchers to address some much more fundamental questions about what journalistic audiences do with the news. In a way that conventional methods are usually unable to do, these 'big data' analytics approaches are able to trace Habermas's "wild flows of messages" well beyond their point of origin, and do so in ways that (unlike interviews, surveys, media diaries, or observational methods) are generally unobtrusive and do not disrupt or affect these flows themselves. They thus provide a useful counterpoint to the self-reporting of user activities which has been a common feature in many studies of audience attitudes and behaviors: they are able to test what news users tell us they do, and fill in the gaps on what they fail to tell us. As a result of the combination of these diverse methods, a considerably more comprehensive picture of the processes by which publics for journalistic content form, act, and dissolve can be created.

Further Reading

Citizen journalism in its diversity of approaches, styles, and local adaptations is captured very successfully in the 2009 and 2014 volumes of *Citizen Journalism: Global Perspectives*, edited by Stuart Allan and Einar Thorsen. Further, Alfred Hermida's *Tell Everyone: Why We Share and Why It Matters* provides additional insights on the drivers of news sharing through social media. For more insights especially into the uses of *Twitter*, and potential research approaches to this important platform, see *Twitter and Society*, edited by Katrin Weller *et al*.

Acknowledgment

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