Blogs, Twitter, and breaking news:

The produsage of citizen journalism

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Debates over the role and relevance of what has been described as citizen journalism have existed at least since the late 1990s; positions have ranged from the fulsome dismissal of such bottom-up journalism activities (and indeed, almost all user-led content creation) as being part of a new "cult of the amateur" (Keen, 2007) to nearly equally simplistic perspectives which predicted citizen journalists would replace the mainstream journalism industry within a short timeframe. A more considered, more realistic perspective would take a somewhat more moderate view. Aided by circumstances including the long-term financial crisis enveloping journalism industries in many developed nations, the creeping corporatization and politicization of journalistic activities in democratic and non-democratic countries alike, and the largely unmet challenge of new, Internet-based media forms, citizen journalism (as well as other parajournalistic media, including TV comedy such as *The Daily Show*) has been able to make credible inroads into what used to be the domain of journalism proper.

Technology has played an important role as disruptor and enabler in these developments, even if – of course – it has not determined their eventual course. First, the rise of the Internet as a popular medium has led to a substantial increase in available channels for information and entertainment, among other purposes. One such further purpose, indeed, has fundamentally undermined the existing business model of conventional newspaper publishing; with specialist Web sites and generalist search engines providing a more effective and easily searchable

platform for job, real estate, car and other advertisements, and with the subsequent shift of such advertising to new and independent online platforms, much of the financial foundation of newspaper journalism has been eroded beyond recall. Coupled with broader economic trends, this shift alone has led to the decline of many once well-established newspapers.

Second, and relatedly, the proliferation of possible channels for news content, and the increasing precariousness of their financial bases, have combined to make corporate pressures on fearless, independent journalism felt ever more immediately. On the one hand, this simply means that few journalistic organizations can afford to engage in much long-form, resource-intensive, investigative journalism, and that press release journalism which barely conceals news stories' origins in commercial and government releases has grown correspondingly. Such tendencies lower the average quality of journalistic publications and broadcasts, and thereby further undermine the attractiveness of the journalistic product, leading to a continuation of the decline in audiences. On the other hand, the flipside of A. J. Liebling's famous statement "freedom of the press is guaranteed only to those who own one" (1960, p. 105) is revealed: potential commercial returns now only rarely still constitute the principal motivation for owning and operating a newspaper or news channel – rather, with owning a press organization comes the opportunity to freely engage in political lobbying (or indeed, pressure) in favor of the proprietor's political or corporate causes. Thus, influential newspapers such as *The Australian* or *The Times* are unlikely ever again to be able to fund their own operations from sales and advertising; rather, they are cross-subsidized by the other, more lucrative branches of the conglomerate which owns them, and they repay that investment in the currency of political influence. This, however, also means that editorial commentary (at least), as well perhaps as

journalistic content (often), will and must be slanted toward these selected causes – freedom of the press might be guaranteed, but freedom of the individual journalist isn't.

Third, partly because of the already depleted resources available to mainstream journalistic operations, partly because of a deep-set conservativism among journalistic staff, and partly also because many possible new models of operation are inherently anathema to the long-established journalistic way of doing things, the journalism industry has been slow to embrace the potential offered by new, Internet-based media forms. Many early online news offerings by established news organizations limply replicated part of the content available in their corresponding newspapers (in formats ridiculed as "shovelware"); even well into the 2000s and what is often (although not unproblematically) called the "Web 2.0" era, few mainstream news Web sites sought to position their readers as anything other than largely passive audiences, or to directly engage and correspond with them. Readers as potential sources of story ideas or feedback were often addressed only in a tokenistic, haphazard fashion; reader comments (attached to news stories or op-eds) became more commonplace, but often still provided little more than a space for random rants which are neither policed nor engaged with by journalistic or editorial staff. It is only recently, and largely as a result of the growing competitive pressure from alternative, citizen journalism Web sites, that more advanced approaches to interaction are being tested in earnest, and even then only by a handful of news organizations – famously, for example, *The Guardian* (2011) sought its readers' collaboration in sifting through the tens of thousands of documents related to the UK MPs' expenses scandal, providing an interface for readers to annotate and highlight information in any of these documents and thereby help uncover further instances of corruption and wrongdoing.

Citizen journalism?

These shortcomings of industrial journalism combined with the opportunities inherent in new Internet-based media forms and platforms to give rise to the new models which have been described as "citizen journalism." To some extent, the term is a misnomer; it implies that professional journalists are not *also* citizens (meaning in this context, invested in the future political and societal course of their country), and it equates the news-related activities of "citizen journalists" with the journalism committed by professional staff in the news industry – strictly speaking, both these assumptions are incorrect.

While the former point may be self-evident, the latter requires some further discussion. Overall, "citizen journalism" refers to an assemblage of broadly journalistic activities (what J. D. Lasica [2003] has described as "random acts of journalism") which are characterized by specific practical and technological affordances: they draw on the voluntary contributions of a wide-ranging and distributed network of self-selected participants rather than on the paid work of a core team of professional staff, and they utilize Internet technologies to coordinate the process and share its results. Such activities may take place under the auspices of a central Web site (from *Indymedia* through *Slashdot* and *OhmyNews* to the *Huffington Post*), or unfold in a more decentralized fashion through interactions among individual participants in the (political) blogosphere or through the collaboration of dispersed networks of individuals using a shared underlying social media platform such as Twitter.

Arguably, citizen journalism began as a direct and determined response to the perceived shortcomings of mainstream journalistic coverage; often cited as a seminal moment, for example, the first *Indymedia* site was established to cover the 1999 World Trade Organization meeting in Seattle – and the political protests surrounding it, which became known as the "Battle of Seattle"

(see Meikle, 2002). Here, activists who anticipated that mainstream media coverage of their protests would be strongly biased toward portraying them as anarchists and hooligans took matters into their own hands by publishing their own, alternative text, audio, and video reports from the protests through the then still new digital publishing platform of the Web. Similar alternative reporting from such events has since become a standard feature of political protests, and has effectively undermined the ability of politicians and mainstream media alone to determine how such protests are framed in news reports.

This orchestrated first-hand reporting from major events remained somewhat unusual over the next few years, however – not least because of the planning and organization required. Rather, much of the citizen journalism which rose to prominence in the early 2000s could be better described as "citizen commentary:" independent responses to political events and developments which provided an alternative, bottom-up view to the top-down and sometimes self-censoring narrative of mainstream journalism. Such citizen commentary was especially important in the aftermath of the events of September 11, 2001, when few U. S.-based (and even international) news media organizations dared to openly criticize the belligerent response of the Bush administration or the conduct of the subsequent wars in Iraq and Afghanistan, for fear of being branded "unpatriotic." Citizen commentary – as well as a handful of new news-related formats, especially including news satire television such as *The Daily Show* – filled the gap created by self-censorship in the news industry, and such alternative news media (many of them blogs or blog-style collaborative sites) became established elements in the wider news and political media ecology.

As spaces for news *commentary*, such sites necessarily operate somewhat differently from sites built more strongly around first-hand alternative reporting, such as *Indymedia* or

OhmyNews, even if the latter also carry commentary and share some basic traits. Commentary responds to existing, already published news and opinion; it collects, collates, and combines these existing materials, contextualizes them and thereby points out new frames for their interpretation and analysis. Commentary, in short, compiles information and can therefore be seen as a form of news curation: of tracking a story and highlighting its origins and implications.

Additionally, of course, commentary expresses an opinion, and therefore violates the journalistic ideal of objectivity (a fact which has resulted in bloggers and other independent commenters being described at times as "armchair journalists" or worse) – however, it should be pointed out in this context that objectivity remains little more than an ideal in professional journalism, too, and has been deeply compromised in practice by political and corporate pressures. Indeed, objectivity (or at least its more achievable cousin, balance) is an aim which was more important to journalistic activities at a time of comparable channel scarcity; in a mediasphere characterized by an abundance of channels, it has been replaced by the ideal of multiperspectivality, as Herbert Gans has outlined it:

> Ideally, … the news should be omniperspectival; it should present and represent all perspectives in and on America. This idea, however, is unachievable, for it is only another way of saying that all questions are right. It is possible to suggest, however, that the news, and the news media, be multiperspectival, presenting and representing as many perspectives as possible – and at the very least, more than today. (1980, pp. 312-313)

Taken as a whole (rather than individually for each Web site), then, citizen commentary in combination with the news coverage of the mainstream media provides for such multiperspectivality.

News curation is the core practice of these bottom-up, independent, participatory citizen journalism and citizen commentary sites. There can no longer be any suggestion that such sites act as traditional journalistic gatekeepers; they inherently and necessarily draw on materials already published by other mainstream and alternative news and opinion sites, to curate and comment on them. The same, however, is also true for the mainstream news media now: following the multiplication of channels which resulted especially from the emergence of the World Wide Web as a popular medium, their publications (online as well as offline), too, no longer perform a significant gatekeeping role. Excepting the work of deep investigative journalism (which, sadly, is a declining art), most of the information which even industrial journalism draws on is already available to the public, through press releases and statements from government, commercial, and non-government organizations. The gates have multiplied beyond all control, and nobody is able to keep them any more.

What replaces gatekeeping, then, can usefully be described as *gatewatching* (Bruns, 2005): professional and citizen journalists and commentators watch the gates of newsworthy organizations whose information is relevant to their specific interests; they capture and compile that information as it is released; and they process and curate such information with an aim to publish news stories and comments which build on it. Professional journalists may still be able to follow up by calling sources and spokespeople for additional statements, while such courses of action may be unavailable to unresourced non-professionals; professional gatewatching therefore results in a comparatively greater number of news stories, whereas bottom-up, independent

gatewatching tends to focus more strongly on compiling and commenting on available information. Gatewatching itself, however, is a core practice for both groups.

In principle, what may result from this could be a relatively straightforward split between professional news journalism, published by the news industry, and alternative news commentary, expressed through blogs and other independent Web sites and platforms. However, the politicization of mainstream journalism and the relatively low cost of producing commentary (compared to news reports) have also led to substantial growth of the space reserved for news commentary in mainstream news outlets in print, broadcast, and online (and this, in turn, fuels alternative news sites' desire to provide independent information which responds to what they perceive as political spin in the mainstream news). As a result, practices in mainstream and alternative news and commentary now overlap considerably, with such interconnections also evident in the sharing of personnel. In Australia, for example, all three major news organizations have launched dedicated online spaces for news and political commentary: the Murdoch-owned News Ltd. set up *The Punch*; the Fairfax Media group launched *The National Times*; and public broadcaster ABC relaunched an existing commentary space as *The Drum* – and in each case, the contributors include seasoned political journalists as well as leading Australian news and politics bloggers.

As news and commentary blend, and as professional journalists and independent commentators can no longer avoid engaging with one another, the potential exists for a new public sphere to emerge in and through these spaces. Notably, this does not imply that such a public sphere will necessarily be *functional*; the senselessly reductionist "us vs. them" arguments which have characterized many of the early debates about citizen journalism (see, for example, Bruns, 2005; Rosenberg, 2002) may well continue. At the very least, however, the underlying

structure of the situation has changed considerably since the early 2000s. Previously, industrial journalists and citizen journalists may have remained at some distance from one another, with few direct personal contacts; now they well and truly occupy the same shared space, as a heterogeneous group if not a homogeneous community.

A shared space of news produsage

This shared space now extends across a variety of online platforms (as well as into the offline world). It contains the Web sites of mainstream news organizations as well as the news and politics blogs and citizen journalism sites of independent citizen journalists and commentators; additionally, it takes in the social networks of Facebook, Twitter, and elsewhere where its protagonists – from professional journalists through independent commentators to those committing the rare "random act of journalism" – can be found.

Indeed, the emergence of these latter social networking spaces during the second half of the 2000s has yet again served to expand the range of participants available to engage in news dissemination, curation, and commentary. Previously, citizen journalism (or at least, citizen commentary) still meant setting up one's own blog or blog-style site, or becoming a regular contributor to an existing site; now, little more than a user registration on Facebook or Twitter is required to become engaged in news and political commentary and even to rise to some degree of prominence for doing so. The short messaging service Twitter, in particular (more than Facebook), provides an unprecedentedly open and accessible space for such activities. It builds on a much simpler networking structure where updates posted by users are either public or private, rather than visible and shareable only to selected circles of friends within one's social network; indeed, public Twitter messages are visible even to unregistered visitors to the Twitter Web site.

Additionally, and building on this flat and open network structure, Twitter users have instituted the hashtag system (brief keywords preceded by the symbol, "#"), which provides a simple and elegant solution for tagging one's own updates as relevant to specific topics, and for thereby making such updates (and the continuing discussions to which they may belong) discoverable and traceable by others. Hashtags enable public conversations by large groups of Twitter users without each participating user needing to subscribe to (to "follow") the update feeds of all other participants; they are also especially effective at establishing topical communities *ad hoc*, such as in response to breaking news stories. Hashtags are used for a wide variety of purposes, in fact: from breaking news (such as #tsunami, for the March 2011 earthquake and tsunami in Japan) through continuous discussion and regular events (such as #auspol for political discussion in Australia, or #qt for discussion of events in Prime Minister's Question Time in the Australian parliament), to more phatic and emotive uses which are unlikely to be intended as a means of coordinating ongoing conversations (such as #tired, #fail, or #headdesk). For the purposes of our present discussion, however, the use of hashtags to mark contributions to a topical discussion and to coordinate processes of exchanging information and opinion are of particular interest.

Twitter, then (as well as other social media platforms which may be used in a similar fashion), further extends the potential participant base for citizen commentary (and, to some extent, also for citizen journalism proper). In the first place, it in effect turbo-charges the practices of gatewatching: as soon as new and newsworthy information is discovered to be passing through the gates of a relevant organization, it (and/or hyperlinks to the source) can be shared with the wider Twitter userbase, hashtagged to be especially visible to relevant existing user groups. Additionally, more or less considered discussion and commentary on the new

information can ensue, and users can compare and connect the new information with other available material. In this way, the process of news curation which we have already encountered in previous citizen journalism or citizen commentary practices (but which in those contexts often remained the domain of the individual blogger or commenter) is further decentralized and shared; no one individual Twitter user is now responsible for compiling, collating, and curating the available information on any given topic. Instead, it becomes a thoroughly collaborative exercise.

As a result, Twitter comes yet closer to Lasica's (2003) idea of "random acts of journalism" than had been the case for earlier alternative online media forms. Not least simply because of the 140 character limit, individual tweets by individual users must *necessarily* constitute fragments of journalistic activity which make full sense only in combination and in the context of the activities of other participating Twitter users. Describing Twitter as a platform and medium for "ambient journalism," Alfred Hermida (2010) and Alex Burns (2010) have both drawn parallels between Twitter's coverage of newsworthy events and the patterns of ambient music, in fact: much as musical form in ambient music only emerges over time from often minimal variations in tone, timbre, and rhythm, so too does journalistic coverage and commentary on Twitter only emerge from the sum of a larger number of individual tweets containing summary information, links to further materials, and user comments and evaluation.

In this, then, the processes of news coverage and discussion on Twitter, even more than the back-and-forth exchanges in the news and political blogosphere or between blogs and mainstream journalism, position Twitter as a platform for news produsage (Bruns, 2008a): that is, the gradual and collaborative development of news coverage and commentary by a wide range of users voluntarily making small and incremental productive contributions to the whole,

rather than the orchestrated production of news stories and opinion by small teams of dedicated professionals. Twitter's underlying social, organizational, and technological structures make it exceptionally easy for users to participate in such ambient journalism processes: all that is required is that they post a short message containing the information or opinion they intend to share, as well as perhaps to mark it with a hashtag in order to increase its visibility to a wider target audience. In other words, participation in news dissemination, curation, and commentary processes on Twitter is open to all comers; through their random acts of journalism, Twitter participants are neither simply users nor fully producers of news coverage, but placed in a hybrid role as *produser*; and whether the contributions made by any individual user have any impact depends on the reaction and evaluation by other users, and especially on their sharing and further dissemination of such contributions through retweets (passing on these messages to their own followers either verbatim or in an edited, commented, contextualized form).

What gradually emerges from these processes of sharing and resharing on Twitter, in turn (as well as from overall patterns of following and being followed), are both more permanent and more *ad hoc* community structures: more permanent structures of influence as users follow others, where those users who have the most followers are most easily able to disseminate their information and opinion widely through the network; more *ad hoc* structures through interactions within topical hashtag communities, where for the duration that a hashtag is active specific users messages may be most widely visible as a result of the retweeting and responding activities of others. Such *ad hoc* patterns, especially, may shift more or less quickly over time, as new users with important new information join the discussion, or as others have no further ideas or comments to add to the current debate.

Somewhat paradoxically, the resultant knowledge (as well as interpretation and opinion) base which is established and continuously maintained through these processes exists everywhere and nowhere at the same time. Dedicated followers of the hashtag discussion can develop for themselves a comprehensive understanding of the issues and views involved; others who dip in and out of the discussion or track it only remotely as followers of selected contributors to the hashtag community will only see a partial representation of the full range of exchanges. Twitter remains, in the first place, a discovery mechanism for news and views, rather than any kind of full replacement for more comprehensive platforms for news coverage and commentary – and the news and views which are retweeted and discussed most frequently will reach the largest number of Twitter users. At the same time, of course, it would be a mistake to regard Twitter in isolation from other such platforms. It is itself both a disseminator of links to further information elsewhere (especially in other online media), and embedded in a growing range of other media forms and formats – from Twitter feeds on selected topics or by selected authors as they appear on the pages of blogs and online newspapers, to superimposed Twitter messages incorporated into the content of mainstream news channels. In many ways, Twitter provides the glue – the interconnections – between a wide and diverse variety of different news sources and platforms, and these interconnections are driven by Twitter users' gatewatching efforts.

From ambient to actual: Breaking news

Such gatewatching efforts are especially visible during breaking news events. Breaking news has always posed a challenge for news organizations, and the pressures of the 24-hour news cycle have further amplified these challenges; real-time online and social media such as Twitter add new complications as information purporting to originate from affected local areas is

often immediately available, but has yet to be independently verified. Twitter's (and more broadly, social media's) utility for the live coverage of breaking news – and the journalistic problems which come with such coverage – have been well-identified at least since the first major breaking news story closely identified with Twitter, the emergency landing of a commercial flight on New York's Hudson River in 2009. The incessant string of natural disasters and political upheavals in 2011, in the coverage of each of which Twitter played a significant role, has further cemented these perceptions (see, for example, Lotan, Graeff, Ananny, Gaffney, Pearce, & boyd, 2011, for a first examination of the use of Twitter in the Arab Spring uprisings).

Breaking news events demonstrate the importance of Twitter as a mechanism for distributed gatewatching especially clearly. As Twitter users encounter early rumors about an unfolding newsworthy event (often via Twitter itself), some will search for further information, and share their findings with the wider Twitter community in turn. Some will also include what they deem an appropriate hashtag for the event. This, then, leads to further users encountering such information (and such hashtags), and a proportion of these users will again become active in seeking and sharing additional information, as well as in retweeting the material already shared by their predecessors; as a result, coverage of the event, and its corresponding hashtag(s), gain prominence on Twitter as a whole as well as in the update feeds received by individual Twitter participants from the users they follow. (Twitter provides a simple indicator of what it calls "trending topics," both global and organized by specific geographic regions: a list of hashtags and keywords whose overall volume of mentions has increased especially rapidly during the preceding hours.)

In addition to the sharing and retweeting of relevant information about the breaking news event, commentary and discussion which evaluates the available information and begins to shed

light on contexts and backgrounds to the story also emerges rapidly; in the process, the real-time communication activities taking place on the Twitter platform provide not so much a "first draft of history," as journalism has been famously described, but in essence a first draft of the present, to be revised and completed as further information comes to hand. Distinctions between rumor and fact are especially crucial at this stage, and are attempted through crowdsourced, collaborative processes, with varying degrees of success; similarly, and in direct connection to such verification processes, leading participants in the discussion and curation of information relating to the breaking news event are also gradually identified. In the context of natural disasters such as the 2011 southeast Queensland floods or the 2010 and 2011 earthquakes in Christchurch, New Zealand, the ecosystem of leading information sources on Twitter contained a range of emergency authorities, mainstream media organizations, NGOs, and directly affected local users (Bruns, Burgess, Crawford, & Shaw, 2011; 2012).

The effectiveness of such information dissemination and evaluation activities also depends on Twitter users avoiding the fragmentation of their efforts by settling on a single, widely used hashtag. As noted, when news breaks, participating users will usually experiment with a range of possible hashtag solutions; in early Twitter coverage of breaking news about the 2011 Oslo bombing by political extremist Anders Breivik, for example, hashtags ranging from #oslo through #osloexpl to #oslobomb could be observed before news about the massacre on Utøya island shifted the focus toward the more encompassing hashtag #norway. In contrast, during the second and third major earthquakes in Christchurch, in February and June 2011, Twitter users recycled the #eqnz hashtag which had already been used during the first event in September 2010 (Bruns & Burgess, 2011a). Hashtags can be used to facilitate the formation of

ad hoc publics on Twitter, but whether such processes are successful depends on the extent of uptake by the larger community of participating users (Bruns & Burgess, 2011b).

Overall, however, the coverage of breaking news events on Twitter tends to demonstrate the point at which ambient journalism becomes actual news coverage and dissemination, where a substantial number of Twitter users come together to – in journalistic parlance – "work the story" and engage in a more or less committed and orchestrated effort at gatewatching and disseminating relevant information. Indeed, in line with the view that citizen journalism and user-led news produsage are driven at least in good part by the perceived shortcomings of mainstream journalism, such activities appear to be especially focused in breaking news contexts, where news organizations may still be scrambling to get their reporters to the scene and find footage of the events; as and when sufficient mainstream media coverage is available, gatewatching efforts by the Twitter community decline, and shift focus toward commentary and evaluation rather than news dissemination.

This is clearly evident from a quantitative analysis of tweet types within selected hashtag streams addressing foreseen and unforeseen newsworthy events, as depicted in Figure 1: here, we examine the percentage of tweets in each overall hashtag dataset which contain links to external sources – URLs – and/or unedited manual retweets (i.e. retweets without additional commentary by the retweeting user). Together, these two metrics indicate the extent to which participating users are both introducing new information to Twitter (URLs) and disseminating existing information verbatim to their own follower networks (retweets).

In our analysis, two obvious clusters of similarly structured hashtag conversations emerge: on the one hand, a cluster containing immediately crisis- and breaking news-related hashtags, ranging from the 2011 southeast Queensland floods (#qldfloods) through the 2010 and

2011 Christchurch earthquakes (#eqnz) and the 2011 Japanese tsunami (#tsunami) to political

upheavals including the 2011 revolution in Libya (#libya) and the 2011 riots (and subsequent,

self-organized cleanup efforts) in London and the UK (#londonriots, #ukriots, and #riotcleanup).

Each of these hashtag datasets – collected in each case from the early stages of the event through

to their relative conclusion, when overall tweet volumes had dropped considerably – is marked

by a substantial percentage of URLs in tweets (above 40% on average) and retweets (between

50% and 60% on average), indicating significant sourcing and sharing of information. This

constitutes clear and direct evidence of gatewatching processes in action, responding to an urgent

need for more information within minutes of first news or rumors of the acute event itself, as

well as each time that further aspects of the event begin to unfold (or, especially in the case of

#libya, throughout a lengthy unfolding chain of acute events).

By contrast, a second cluster of hashtags is marked by a substantially lower percentage of

URLs in their respective datasets (between 10% and 20% on average) and a similarly smaller

percentage of retweets (roughly between 10% and 30% on average). The hashtags collected here

represent a diverse group of events ranging from major cultural and sporting events such as the

2011 Eurovision Song Contest (#eurovision) and the 2011 Tour de France (#tdf) to the 2011

British royal wedding (#royalwedding) and the 2011 Australian and Irish general elections

(#ausvotes and #ge11, respectively – with Twitter activity strongly skewed toward election day

in each case). These hashtags address non-breaking news events: scheduled events whose dates

had been known well in advance, and for which ample live television and other media coverage

was available. Here, clearly, there is very little need for sustained gatewatching practices (even if

some Twitter users may feel that specific features or aspects of these events are underreported in

the mainstream media), manifesting in a much reduced incidence of information sourcing and

sharing practices. Instead, the activities taking place here are much more closely related to the cultural studies concept of *audiencing* (see, for example, Fiske, 1992): participation in the shared experience of engaging with the same media text together (if at a distance), at the same time, as members of an imagined community of audience members.
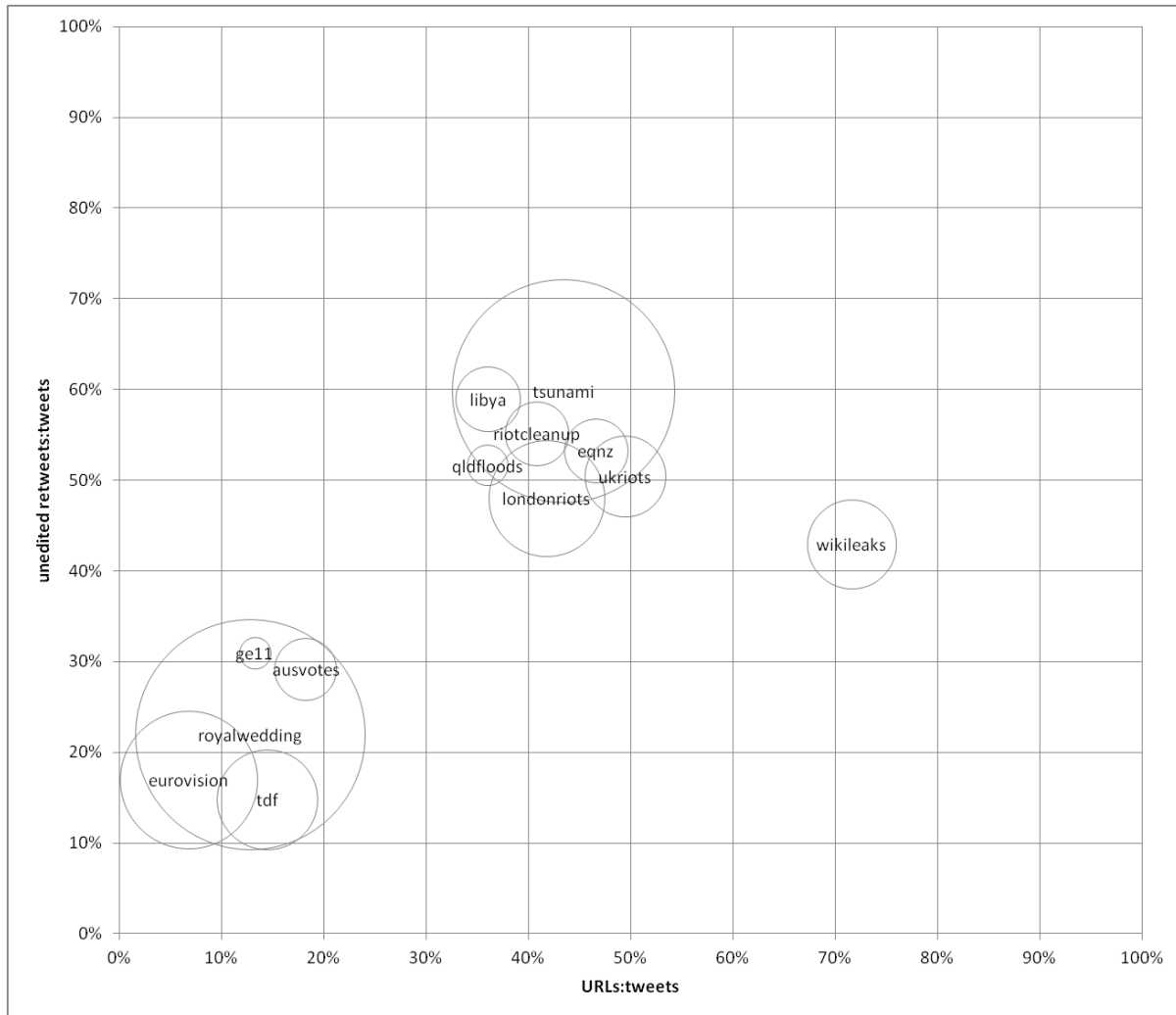
Figure 1: User activity patterns for selected Twitter hashtags (size indicates total number of contributors)

Finally, the #wikileaks hashtag, used for discussion of the continuing controversies surrounding the *WikiLeaks* whistleblower Web site and its founder, Julian Assange, acts as a further outlier to these two clusters of similarly structured hashtags. Its patterns of user activity appear somewhat similar to the hashtags collected in the breaking news cluster, but #wikileaks contains a substantially greater percentage of tweets with URLs (over 70%), indicating an even greater focus on identifying and sharing information available from external sources – this may be an indication of the fact that *WikiLeaks* supporters believe that their causes are especially poorly reported by the mainstream media, and that they are engaging in a concerted effort to spread relevant information through other means. Additionally, of course, the very purpose of *WikiLeaks* is to disseminate previously unavailable materials to the public; an especially high incidence of URLs is therefore hardly surprising in this case (for more on #wikileaks, see Lindgren & Lundström, 2011).

It is also striking that these patterns appear to remain constant regardless of the total number of unique Twitter users contributing to each hashtag (the size of the overall user community contributing to each hashtag is indicated in Figure 1 by the size of each node on the graph). Only some 9,500 users participated in the #ge11 discussion of the 2011 Irish general election during its final days, for example, but their patterns of tweeting are scarcely different from the 15,000 participants in the #ausvotes discussion of the Australian federal election during July and August 2010, or from the more than 502,000 users posting tweets containing the #royalwedding hashtag. Similarly, the 15,500 contributors to #qldfloods or the 38,500 posters to #eqnz share URLs and retweets at a rate comparable to the 474,000 Twitter users posting tweets containing the #tsunami hashtag. Audiencing or gatewatching practices, it seems, do not depend

on the existence of a substantial critical mass of fellow participants, at least once a common hashtag has been established.

Conclusion: Blogs, social media, and the produsage of citizen journalism

Digital environments have changed substantially since the emergence of the first online citizen journalism projects in the late 1990s. Painstakingly hand-coded platforms for the collaborative identification, publishing, and discussion of current issues and stories, such as *Indymedia* and *Slashdot*, have given way to more advanced Web 2.0 tools and social media spaces, but the underlying principles of such activities appear to have remained remarkably constant. Gatewatching continues to be the core practice supporting and enabling the produsage of quasi-journalistic content by users for users; whether on blogs, in collaborative news platforms, or through collective action in social networking services, interested users are engaging in collective processes of finding and disseminating newsworthy materials from a wide variety of sources, and in collaboratively curating these collections and interpreting their content.

The overview of crisis-related gatewatching activities on Twitter presented here can only provide a few general insights into these practices. Further, more detailed studies are needed to explore the nature of the source materials being shared on Twitter and through other spaces (Highfield, 2011), for example, the community dynamics of the loose agglomerations of participating users which form and dissolve again around shared topics of interest (Bruns, 2010a; Bruns, 2010b), the temporal processes of the coverage of acute news events on social media platforms, or the breadth of possible news events which operate according to the patterns we have observed here. There appear to be clear differences in Twitter's reaction to breaking, unforeseen news and to foreknown, widely televised events, for example, but to what extent is a theme such as *WikiLeaks* an outlier from these two major groups of events, or an example of a

third major category of stories: long-term controversies which are to some extent ignored by the mainstream media?

But well beyond Twitter as a current space for what we continue to call, somewhat loosely, "citizen journalism," the practices of user-led sharing, reporting, and discussing of news stories appear to be alive and well; indeed, social media spaces such as Twitter indicate that participation in these practices – that is, committing "random acts of journalism" – has become even easier in recent years. In general, online and social media which allow for substantial user participation and collaboration inherently carry an opportunity to move from ambient news sharing to actual citizen journalism, as specific stories happen to or near users who are able to cover them first hand, or as such stories attract the attention of a number of participants sizeable enough to make existing reports more widely visible through sharing and commenting activities.

What is slowly changing, however, is the relationship between citizen and professional journalists. Clear structural boundaries between the Web sites of news organizations and the blogs and collaborative spaces of citizen journalism enabled the maintenance of an "us vs. them" attitude that manifested in a series of often highly acrimonious "blog wars" between the journalism industry and its independent, upstart critics (see, for example, Bruns, 2008b) in the first years of the new millennium; clichés of bloggers as pajama-clad armchair critics of hard-working professional journalists emerged during this time. In contrast, Twitter and other social media platforms constitute a more neutral space, shared by professionals and amateurs (or more accurately, peopled by users with a wide range of professional backgrounds and diverse forms of personal expertise), making it much more difficult for defenders of the true journalistic faith to attack and dismiss that space outright. Here, many (though not all) participating journalists engage more freely with their supporters as well as their critics, and – especially in the context of

breaking, acute news events – do not shy away from drawing on these other users as potential sources for their stories. The blog wars have given way to a wary truce, at least, if not to an outright peace.

Such dissolution of the battle lines cannot help but change the journalistic industry as well as its position in society. Journalists' embrace of social media to disseminate, discuss, and expand their coverage of specific stories turns those stories from finished products into the unfinished, evolving artifacts common to produsage processes, and invites broader citizen engagement and participation in them, even if the Web sites of their news organizations still claim to contain the finished product, the complete article. Users who access (and perhaps share) these articles, as well as discuss, compare, and curate the overall coverage of an event or story through their participation in various online and social media platforms, sometimes in direct communication and exchange with the journalists involved, already know better; they know to look to their social networks (understood here in the narrow technical as well as the wider societal sense) for context, confirmation, or contestation. The journalism – the collaborative pro-am journalistic coverage – which emerges from this is a shared journalism, one which no longer belongs to news organizations or news audiences alone. As Herbert Gans once suggested, "the news may be too important to leave to the journalists alone" (1980, p. 22) – and in social media environments where news is ambient, shared, fluid, and circulating, it no longer is.

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