City Research Online

City, University of London Institutional Repository

Citation: Hermida, A. (2014). Open journalism: dynamics of change and continuity in news work in the 21st century. (Doctoral thesis, City University London)

This is the accepted version of the paper.

This version of the publication may differ from the final published version.

Permanent repository link: https://openaccess.city.ac.uk/id/eprint/13439/

Link to published version:

Copyright: City Research Online aims to make research outputs of City, University of London available to a wider audience. Copyright and Moral Rights remain with the author(s) and/or copyright holders. URLs from City Research Online may be freely distributed and linked to.

Reuse: Copies of full items can be used for personal research or study, educational, or not-for-profit purposes without prior permission or charge. Provided that the authors, title and full bibliographic details are credited, a hyperlink and/or URL is given for the original metadata page and the content is not changed in any way.

City Research Online: http://openaccess.city.ac.uk/ publications@city.ac.uk

Open journalism: Dynamics of change and continuity in news work in the 21st century

Alfred Hermida

A thesis submitted in fulfilment of the requirements for the degree of Doctor of Philosophy

at

City University London

Department of Journalism

December 2014

CITY UNIVERSITY LONDON
EST 1894

CityLibrary
Your space
Your resources
Your library

THE FOLLOWING PREVIOUSLY PUBLISHED PAPERS HAVE BEEN REDACTED FOR COPYRIGHT REASONS:

pp 78-90:
Hermida, A. and Thurman, N. (2008) A clash of cultures. In *Journalism Practice*, 2 (3), pp 343-356.

pp 93-108
Hermida, A. (2009) The blogging BBC. In *Journalism Practice*, 3 (3), pp 1-17.

pp 111-121
Hermida, A. (2010) Let's talk: how blogging is shaping the BBC's relationship with the public. In Monaghan, G. and Tunney, S. (Eds.) *Web Journalism: A New Form of Citizenship*, Eastboune; Sussex Academic Press, pp 306-316.

pp 124-134:
Hermida, A. (2010) Twittering the news. In *Journalism Practice*, 4 (3), pp 297-308.

pp 136-155
Hermida, A. (2011) Mechanisms of participation: how audience options shape the conversation. In Singer, J.B, Hermida, A., Domingo, D., Heinonen, A., Paulussen, S., Quandt, T., Reich, Z., and Vujnovic, M. *Participatory Journalism: Guarding Open Gates at Online Newspapers*, Chichester: Wiley Blackwell, pp 13-33.

pp 158-166
Hermida, A., Fletcher, F., Korell, D. and Logan, D (2012) Share, like, recommend. In *Journalism Studies*, 13 (5-6), pp 815-824.

pp 169-177
Hermida, A. (2012) Tweets and truth: journalism as a discipline of collaborative verification. In *Journalism Practice,* 6 (5-6), pp 659-668.

pp 180-197
Hermida, A. (2013) #Journalism: reconfiguring journalism research about Twitter, one tweet at a time. In *Digital Journalism*, 1 (3), pp 295-313.

Continued on next page

Continued from previous page

pp 199-216:
Lewis, S.C., Zamith, R. and Hermida, A. (2013) Content analysis in an era of big data: a hybrid approach to computational and manual methods. In *Journal of Broadcasting and Electronic Media*, 57 (1), pp 295-313.

pp 218-237
Hermida, A,. Lewis, S.C. and Zamith, R. (2014) Sourcing the Arab Spring: a case study of Andy Carvin's sources on Twitter during the Tunisian and Egyptian revolutions. In *Journal of Computer-Mediated Communication*, 19 (3), pp 479-499.

Table of Contents

Table of Contents 1

List of tables 2

Acknowledgements 3

Abstract 5

1. Introduction 6

2. Locating the portfolio in the literature 9
- **2.1 Perspectives on the sociology of journalism** 9
- **2.2 From gatekeeping to gatewatching** 11
- **2.3 Processes of innovation** 13
- **2.4 Towards theoretical renewal** 14

3. Evaluation of methods 16
- **3.1 General approach** 16
- **3.2 Semi-structured research interviews** 19
  - 3.2.1 Anonymity 22
  - 3.2.2 Data collection, storage and transcription 22
  - 3.2.3 Coding and analysis 23
- **3.3 Content analysis** 24
- **3.4 Quantitative internet audience measurement** 26
- **3.5 Research synthesis** 28
- **3.6 Adapting methods during research** 30
- **3.7 Concluding remarks** 31

4. Evaluation of findings 33
- **4.1 Participatory journalism** 33
  - 4.1.1. The growth of participatory journalism 34
  - 4.1.2 A framework for analysis 36
  - 4.1.3 Processes of innovation and change 39
- **4.2 Social media** 41
  - 4.2.1. Understanding audience practices 41
  - 4.2.2. Theoretical renewal 43
  - 4.2.3. Rethinking professional practice 46
  - 4.2.4. Methodological renewal 48
- **4.3 Conclusion** 49

5. Directions for future research 51
- **5.1 Multiplicity of actors** 51
- **5.2 Technological actants** 53

References 56

Portfolio of Published Work 74

Statement of Co-authors of Joint Publications 238

List of tables

Table 1: Major methods used in papers submitted for PhD by prior publication…....18
Table 2: Issues identified from interviews.....23

Acknowledgements

I would like to thank Professor Howard Tumber for his support and encouragement during the writing of this thesis. His acumen and perspicacity proved invaluable through the process. I am also grateful to the external examiners, Professor Bob Franklin and Professor Michael Bromley for their insights.

It has been a delight to work with such a talented range of scholars:
David Domingo, Fred Fletcher, Ari Heinonen, Darryl Korell, Seth Lewis, Donna Logan, Steve Paulussen, Thorsten Quandt, Zvi Reich, Neil Thurman, Jane Singer, Maria Vujnovic and Rodrigo Zamith.

My research owes a great deal to the willingness of journalists and news executives to share their ideas, insights, hopes and fears at a time of change and uncertainty. Without them, such work would not be possible.

I am thankful for the support of friends and colleagues at the Graduate School of Journalism, University of British Columbia: Candis Callison, Kathryn Gretsinger, Brianne Howard, Peter Klein, Taylor Owen, Barry Warne and Mary Lynn Young. And to the graduate students who worked with me as research assistants since I joined UBC in 2006.

I have been fortunate to have my research supported by the Social Sciences and Humanities Research Council of Canada, the Canadian Media Research Consortium, GRAND NCE: News project, the University of British Columbia and the Peter Wall Institute for Advanced Studies.

I am grateful to the editors and anonymous reviewers who have helped me improve my work and make it to the best it can be.

This thesis is dedicated to Rachel for her unwavering support, encouragement and affection.

I grant powers of discretion to the University Librarian to allow this thesis to be copied in whole or in part without further reference to me. This permission covers only single copies made for study purposes, subject to normal conditions of acknowledgement.

Abstract

This review of eight years of research into digital media addresses the methodological and epistemological issues and tensions arising out of the emergence of new communicative spaces that have expanded the range of actors involved in the construction of the news. Until recently, journalism has developed as a relatively closed professional culture for the production of knowledge, based on a system of editorial control. Yet digital media technologies have disrupted established concepts of communication, prevailing notions of space and time and the distinction between public and private spheres. The research in this portfolio highlights elements of change and continuity in the way journalists think about and engage in their work, through processes of adaptation shaped by cultural, social, economic and technological factors. The work reveals how far participatory media technologies are transforming how journalists and audiences relate to the news in a profession where norms and routines that have remained, until now, decidedly consistent. But it goes beyond a focus on journalists as a distinct group to advance ideas about how the media environment itself is being reconfigured, particularly due to the development of social media. The research presented here on Twitter reveals how news and information have become woven into social awareness streams that represent a constantly updated public account of the experiences, interests and opinions shared by the platform's users. They are able to reframe or reinterpret messages through networked platforms that extend the dissemination of news through social interaction, infusing hybridity in news production, selection and dissemination

1. Introduction

This portfolio draws on eight years of research, informed by a grounding in working as a journalist for the BBC for sixteen years. My research and professional work has focused on the convergence of media technologies, industries, content, and audiences, examining the intersection between tradition and change. I came to academia with direct experience of working at the juncture of tradition and change at the BBC, where I balanced established norms and values with new approaches to digital journalism. My scholarly work since 2006 has explored change in journalistic practices, challenges to established professional dynamics, the role of user-generated content and processes of innovation.

A key strand of this portfolio addresses the impact of changing societal information practices on journalism. My research seeks to add to an understanding into how traditional functions of journalism - informing citizens, holding the powerful to account, providing analysis of current events and mobilising public opinion – are being transformed by socio-technical changes in information and communication flows. While journalism studies is largely informed by the standards of research, education and practices set by print journalism, I have sought to advance alternative directions of inquiry, particularly in my more recent work. By investigating the information architecture of digital environments and the increased opportunities for audience involvement, I have sought to contribute to rethinking the way we understand journalism in the contemporary media environment.

The studies included as part of this portfolio present a picture of a profession in transition that has tended to extend existing journalistic culture to digital media rather than rethinking established routines and conventions. My research draws inspiration from Neil Postman's contention that new technologies alter the way we think (1992). I have sought to advance avenues of thinking that aim to address how journalism functions in a digital environment by contributing to an understanding of how technological change combines with and emerges out of existing norms, routines, relationships and social and material contexts.

The overarching theme of my research is a shift from the "'we write, you read' dogma of modern journalism" (Deuze 2003: 220), to the user as a producer of news and the role and identity of journalists in a networked society. Recent years have seen a dramatic change in the relationship between online media and the audience with user-generated content becoming a common feature of news websites. My research has explored how journalists are thinking about, and dealing with, the inclusion of content produced by the public in professionally edited publications. Such work accounts for 40 per cent of the studies included in this portfolio. Participatory media creates a space where even the question of who is a journalist and what is journalism is open to interpretation.

The scholarship on online journalism presented in this portfolio spans what Mitchelstein and Boczkowski describe as "the intersection of tradition and change," (2009: 563). Initially, the focus of my research was on professional journalists, largely drawing on existing theoretical lenses. They provide insights into journalists' perceptions of the changes in newsroom culture due to the influences on journalism norms and practices stemming from participatory and social media, and their own understanding of the profession. The scope of my research has recently expanded to consider journalism as a set of practices involving a multiplicity of actors, with journalists as just one of the voices. Digital communications technologies, such as social media, have blurred the definitions of who is a journalist and even what is viewed as journalism (Zelizer, 2004).

Rather than being caught up in a debate on who is a journalist, my research has examined how the object of journalism itself has changed. Such work is in line with Napoli's (2011) suggestion that researchers across disciplines need to consider not only the newness of innovations but also their impacts on the ways people communicate and engage with one another. This framework provides a method to understand changes in journalism, acknowledging that the media have been in a state of continual technological, cultural, and institutional change, from print to radio to television to the internet.

My research on social media falls within what Steensen and Ahva have called a "fourth wave" of research on digital journalism that "theorises the field beyond the

traditional institutions and understandings of journalism," (2014: 1). Through my work, I have sought to bring in a wider range of theoretical perspectives, since, as Steensen and Ahva point out, "digitisation has brought a need to reassess the theories with which we make sense of journalism," (2014: 1). Through the work included in this portfolio, I have sought to contribute to a theoretical renewal in journalism studies at a time of "mind-blowing uncertainty in the evolution of journalism," (Domingo, Masip and Costera Meijer, 2014: 4).

2. Locating the portfolio in the literature

My research belongs within the body of work on the interplay between journalism as a professional ideology, new media technologies, and the public. The increased ability of publics to take part in the observation, selection, filtering, distribution and interpretation of events, facilitated by digital technologies, has contributed to the emergence of participatory journalism as a scholarly object of research (Merel et al., 2013). Definitions of participatory journalism tend to be based on a normative assumption that individuals will do more than simply read the news. Terms such as participatory journalism, citizen journalism and user-generated content are often used interchangeably to refer to the greater role of the public in producing media that would formerly have been the domain of professional journalists.

My research in this area has drawn on various theoretical frameworks to reflect on the significance and impact of the ability of individuals to "participate in modifying the form and content of a mediated environment in real time", (Steuer, 1991: 84), and more specifically relating to news and journalism, "the degree to which journalists technologically empower consumers over content," (Massey and Levy, 1999: 140). A consistent thread in my research is the sociology of journalism, with a focus on journalism as a professional ideology.

2.1 Perspectives on the sociology of journalism

Sociological research into news production focuses on how historical, social, cultural, political and economic factors affect journalism and the production of news. Modern journalism is closely linked to the socio-historical rise and dominance in the late 19th and 20th century of mass media in the Anglo-American societies that contributed to journalism as a discursive field with its own principles, traditions and norms (Chalaby, 1998). Half of the work in this portfolio focuses specifically on the sociology of news production, investigating the practices and values of journalists (Schudson, 2003). Methodologically, my studies follow in the footsteps of the sociological newsroom studies of the 1970s (see, for example, Hermida and Thurman, 2008; Hermida, 2011). They focus on the production side of journalism, examining how journalists approach

citizen participation, based on in-depth interviews with journalists and editors, and analyses of the participatory functionality of news websites.

Research into the routines of news production has been a consistent thread in journalism studies from the 1950s onwards in the work of White (1950), Galtung and Ruge (1965), Tuchman (1978) and Gans (1978). Online news production has become a distinct focus for scholars, with studies suggesting that digital journalism has been developing its own routines, norms and practices (see, for example, Domingo and Paterson, 2008). Such work considers how the routines and values of journalism that were relatively consistent for almost a century are being challenged by changes in working practices, communication technologies, business models and the relationship with audiences.

Much of the research into how new media is shaping practices and values considers journalism as a professional occupation. A scholarly focus on journalism as a profession raises its own questions. Journalism studies has contributed to professionalised journalism by researching journalists as a distinct occupational field (Zelizer, 2009). Solely framing journalism as a profession is problematic. In his study of professions, Abbott (1988) argues that professions are distinct in that they are thought to possess and display abstract knowledge. Only individuals that acquire this abstract knowledge through formal training and system of licensure are considered members of a profession. In journalism, though, the knowledge can be considered as less abstract and more based on what reporters and editors do to maintain their special position. Professional jurisdiction comes from the daily routines that display and cement abstract knowledge. Journalistic authority is discursively constructed by what journalists do and how they do it, rather than simply by what they know. Journalists establish occupational boundaries by how they parse and produce knowledge, rather than depending on specialist knowledge as a professional barrier to entry (Zelizer, 1992).

In my work, I approach journalism as a profession constructed through the shared norms, values and practices that serve to distinguish it from other forms of public communication. Taking the lead from Deuze (2005), I consider how these form a

system of beliefs that are characteristic of a particular group. While there are no "universal occupational standards" (Weaver, 1998: 468), there is what Deuze describes as "a dominant occupational ideology of journalism on which most newsworkers base their professional perceptions and praxis," (2005: 445).

My work considers how this occupational ideology is applied and reinterpreted in the challenge from new media. For example, in Hermida, Lewis and Zamith (2014), I investigate how journalism's claim to represent reality and establish professional jurisdiction over the news is strained in a digital environment where new actors can take on some of the roles and responsibilities of journalists. The case study points to the innovative forms of production that can emerge with new communication technologies, offering fresh insights into the process through a member of the professional news media negotiating information gathering and dissemination in a social media environment.

2.2 From gatekeeping to gatewatching

New media technologies contest one of the most fundamental notions of journalism: the journalist as the gatekeeper who determines what is news, how it is presented and disseminated (Singer, 1998). Professional routines and conventions are the means to enforce and maintain a gatekeeping role. Yet as Schudson and Anderson note, "in an era of cellphone, camera phone and blog, jurisdictional questions will be legion" (2009: 98), pointing out, for example, how bloggers who were once viewed as trespassers by professional journalists now receive press credentials. In my research, I use the term participatory journalism to describe the broad and diverse processes through which individuals both inside and outside the newsroom are involved in the gathering, production and distribution of news and information (Singer et al., 2011).

Deuze's call for research that considers new media as one of the "forces of change when seen through the lens of journalists' perceptions of themselves," (2005: 458) has been a guiding principle. I have applied the gatekeeping metaphor (White, 1950) in the context of participatory forms of news to examine how journalists try to "guard open gates" (Hermida and Thurman, 2008; Hermida, 2011). Such research contributes

to an understanding of how journalists are responding to socio-technical changes that enable consumers to become producers of news. My research into processes of gatekeeping has been guided by the levels of analysis proposed by Shoemaker and Vos (2009): individual (e.g. personal background), routines (e.g., work patterns), organisational (e.g., media ownership), social institutional (e.g., extra-organisational forces such as public relations), and social system (e.g., ideology). The studies on the former NPR social media strategist Andy Carvin specifically addresses the suggestion by Shoemaker and Vos for a greater focus on the agency of individual gatekeepers, given that "the sociological turn in gatekeeping studies has left Mr. Gates as a minor character in the selection of news" (2009: 34). The two papers on Carvin (Hermida, Lewis and Zamith, 2014; Lewis, Zamith and Hermida, 2013) build on the framework proposed by Shoemaker and Vos to investigate individual agency in the context of the broader social institutional level of influence of other actors, including the impact of information from the public.

The Carvin research, and the three works on social media, and Twitter specifically, are located within the shift from gatekeeping to gatewatching, defined by Bruns as "the observation of the output gates of news publications and other sources, in order to identify important material as it becomes available," (2005: 17). My work builds on Bruns' work to advance the notion of ambient journalism (Hermida, 2010). Drawing on the literature in computer science, I suggest "broad, asynchronous, lightweight and always-on communication systems such as Twitter are enabling citizens to maintain a mental model of news and events around them." (Hermida: 5). I argue that news and information has become, literally, ambient and is being produced by professionals and citizens alike, facilitated by networked and distributed technologies.

The gatewatching duties assumed by individuals include sending a message about a breaking news event, alerting their social circles to an item in the mainstream media or curating the flow of information in real time. Users become part of the flow of news, reframing or reinterpreting a message through networked platforms that extend the dissemination of news through social interaction, introducing hybridity in news production and news values (Chadwick, 2011; Papacharissi & de Fatima Oliveira, 2012). My research provides insights into the impact of open, networked platforms

such as Twitter on journalism, pointing to how core journalistic norms of gatekeeping and framing are being reshaped from outside the field (Hermida, 2013).

Such work addresses the study of participatory journalism from the perspective of the public, considering how actors outside of the formal structures of journalism are reshaping journalism practices and influencing what is defined as journalism (Lotan et al., 2011; Meraz and Papacharissi, 2013). It addresses the call by Borger et al. (2013) to put the audience in a more central position in studies of participatory journalism, shifting away from the dominant focus on newsroom processes. They urge scholars to move towards "the motives, expectations and conditions on the part of the audience", (2013: 130).

My paper Share, Like, Recommend involved a survey of 1,600 people in Canada to provide insights into online news habits (Hermida et al., 2012). In line with previous audience research carried out in the U.S. (Purcell et al., 2010; Olmstead et al., 2011), the research showed how social media are becoming one of the mediums for sharing and recommending news as users appropriate computer-mediated technologies for their own purposes. The study forms part of scholarly work that investigates how networked publics are reframing the news and shaping news flows. With the emergence of the recommendation of news as a form of cultural currency on social networks, Olmstead et al. suggest that "understanding not only what content users will want to consume but also what content they are likely to pass along may be a key to how stories are put together and even what stories get covered in the first place," (2011, p. 1).

2.3 Processes of innovation

In line with much of the research on online journalism, my work has sought to provide insights into the causes, dynamics and effects of innovation processes in the newsroom. While acknowledging the influence of technology on journalism, I have set aside deterministic explanations in favour of a more nuanced approach, following Boczkowski's (2004) insights that technological change in newsrooms emerges out of existing norms, routines, relationships and social and material contexts. Technology

does not in itself shape journalism, but rather is itself shaped by the way it is adopted, adapted and altered in specific and diverse news contexts (Deuze, 2007).

My studies into blogging at the BBC (Hermida, 2009; Hermida, 2010) highlight the importance of organisational and institutional contexts in shaping processes of technological adoption and adaption. The BBC was chosen as a case study as it presents a distinctive journalistic setting to investigate innovations in online journalism. Its long-standing editorial values of accuracy, impartiality and fairness would seem to be at odds with notions of blogs as immediate, unmediated and inherently subjective (Allan, 2006; Wendland, 2003). The BBC research reveals an uneven process of technological adoption, with blogging coming out of existing social, organisational and material contexts, adding to the research on blogs and journalism (Robinson, 2006; Singer, 2005). By approaching newsroom technological change through an understanding of the adoption process in specific local contexts, my work advances knowledge in how digital media both constitute and are constituted by practice and innovation.

2.4 Towards theoretical renewal

In their overview of research on online news production since 2000, Mitchelstein and Boczkowski (2009) identified five broad themes. The work presented in this portfolio addressed four of these themes; the adoption and impact of innovations; changing newsroom practices; professional and occupational issues; and the public as content producers. My research straddles the tension between tradition and change identified by Mitchelstein and Boczkowski, with my earlier work applying existing lenses to investigate online news production. I am conscious that consistent with much of the research on journalism, my early research drew heavily on "standards of research, education, routines, rituals, and practices set by print journalism", (Deuze, 2008). For example, by applying gatekeeping theory that maintains a clear separation between the production and consumption of news (Hermida and Thurman 2008; Hermida, 2009; Hermida, 2011).

In my later research, I have taken heed of the critique by Mitchelstein and

Boczkowski that scholarship about online journalism "still relies primarily on traditional conceptual lenses to make sense of emergent phenomena, but shows potential for theoretical renewal," (2009: 563). Instead, I have sought to follow their exhortation that "the evolution of online news scholarship will gain much by choosing trends that lead to rethinking major building blocks in the understanding of journalism and its role in society," (2009: 578). In Twittering the News (Hermida, 2010), I framed the use of networked technologies such as Twitter as ambient journalism, providing a new conceptual lens to analyse the flow of news and information in hybrid media spaces.

In later work, I have drawn on the theoretical framework of new literacies to contextualise the evolution of journalism into a tentative and iterative process where contested accounts are examined and evaluated in public in real-time (Hermida, 2012; Hermida, Lewis and Zamith, 2014). In my research synthesis on the literature on Twitter and the news, I highlighted scholarship from other academic fields to note the potential for novel approaches and new directions for research to take account of new paradigms of journalism that deviate from classic narrative structures and break with established norms. The work presented in this portfolio, I suggest, is particularly relevant given that "the phenomenon of online news production and the study of it are at a kind of liminal moment between tradition and change," (Mitchelstein and Boczkowski, 2009: 563).

3. Evaluation of methods

3.1 General approach

The work presented in this portfolio investigates how journalists in Western liberal democracies have been melding established models of the collection, production and distribution of news with emerging digital communication technologies. The research is part of an increasing number of studies that consider journalists' attitudes and understanding of change and continuity in professional norms, values and practices (for example: Boczkowski, 2004; Deuze, 2003, Fortunati et al., 2009, Robinson, 2007; Ryfe, 2009; Singer, 2004). At the time of the first work included here (Hermida (date), research into digital journalism was at an early stage, with much of it focused on the U.S. news industry. Research on the causes, dynamics, and consequences of online journalism in the U.K. was particularly underdeveloped. Yet, as Dahlgren indicated early on, "the advent of cyberspace will inevitably impact on the factors which shape how journalism gets done - and may well even colour how we define what journalism is," (1996: 60).

Given this context, the studies presented here are mostly based on interpretative research that sought to understand phenomena based on the meanings participants assign to them. For Orlikowski and Baroudi, "interpretative studies assume that people create and associate their own subjective and intersubjective meanings as they interact with the world around them," (1991: 24). The studies take as their starting point the position that social reality is shaped by individual actors and social contexts and is therefore best studied by seeking to reconcile the subjective perspectives of the various actors (Walsham, 1993).

Interpretative research is not exclusively done through qualitative methods. But such methods do lend themselves to such research as "qualitative researchers study things in their natural settings, attempting to make sense of, or to interpret, phenomena in terms of the meanings people bring to them," (Denzin and Lincoln, 2005: 3). By approaching newsroom cultural and technological change through an understanding of the adoption process in specific local contexts, scholars can discern how digital

media both constitute and are constituted by practice and innovation. Thus interpretative research is suited to study journalists as a distinct set of actors and journalism as a set of norms and practices socially constructed through factors such as shared language, consciousness and meanings. It focuses on participants' perspectives on organisational and institutional contexts, mindful that an individual's ability to change social circumstances is constrained by structural social, political or cultural elements.

For most of the studies submitted, the unit of analysis was the individual. Such an approach was the most suited to studying the characteristics of journalists working within news organisations and their attitudes to changes in media, technology and society. However, the resulting data was contextualised to understand the characteristics of professional journalists as a group, given that journalism professionals tend to have a common set of norms and values (Singer et al., 2011; Weaver, 1998). Such an approach enables a researcher to identify and document how participants assign meaning through an interpretation of their views, values, and thoughts about the phenomena under investigation, in order "to document and interpret as fully as possible the totality of whatever is being studied in particular contexts from the people's viewpoint or frame of reference," (Leininger, 1985: 5). The interpretative research framework meant that most of the studies included in this portfolio employed a theoretical sampling strategy. Cases or participants were selected based on considerations such as how they related to the phenomenon being studied or whether they displayed characteristics that meant they were particularly suited for the research.

The studies here mostly take an inductive and mixed-methods approach to investigate changes in newsroom cultures and journalism practices as the internet became institutionalised as an alternative for the gathering, production and consumption of news. An inductive approach offers a general framework in order to infer theoretical concepts and patterns from emerging and evolving practices of continuity and change in digital journalism. Inductive methods are more suitable when theories or explanations for behaviours are underdeveloped, whereas deductive methods are valuable when there are competing theories and researchers seek to test concepts and patterns.

The inductive methods were guided by thematic analyses that centred on the tensions between tradition and change in journalism, covering professional identity, journalistic practices, processes of innovation and user-generated content. A thematic approach is valuable in discerning commonalities in the adoption of digital technologies in journalism and offering more generalisable conclusions. Thematic analysis was central in most of the papers included here. Thematic analysis allows for "identifying, analysing and reporting patterns (themes) within data. It minimally organises and describes your data set in (rich) detail. However, frequently it goes further than this, and interprets various aspects of the research topic," (Braun and Clarke 2006: 79).

I adopted a case study approach to investigate emerging trends in digital news production within specific contexts. The method was adopted to further "an empirical inquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used," (Yin, 1984, p. 23). The two studies on blogging at the BBC, for example, sought to highlight how multiple themes, namely professional identity, journalistic practices and processes of innovation, influence outcomes within the context of a public service broadcaster. The findings are specific to the BBC but are also relevant to studies of the adoption of new technologies within news organisations with a strong institutional identity.

Similarly a case study approach was adopted for the Carvin study – an in-depth investigation of patterns of behaviour by a specific individual over a particular period of time and related to specific events. Such an approach was used in order to investigate the dynamics of information sourcing and sharing in the context of accelerated temporal patterns of content production and discover behaviours not known in advance. The specific nature and context of Carvin's work need to be contextualised and results nuanced. While the findings may not be readily generalisable to other studies, the case study approach allowed for an exploratory study that other can build on.

Paper	Semi-structured research interviews	Content analysis	Quantitative internet audience measurement	Research synthesis
A Clash of Cultures	x	x		
The Blogging BBC	x	x		
Let's Talk Twittering the News	x	x		x
Mechanisms of Participation	x	x		
Share, Like, Recommend			x	
Tweets and Truth				x
#Journalism				x
Content Analysis in an Era of Big Data		x		
Sourcing the Arab Spring		x		

Table 1: Major methods used in papers submitted for PhD by prior publication

The range of studies presented here reflects the complexity of researching an emerging and evolving field and therefore necessitated an application of a multiple methods. The most commonly used methods were semi-structured interviews and content analysis (see Table 1). Four of the studies used mixed methods, while two focused solely on content analysis. While research based on quantitative online audience measurement informed most of the work, it was only used for one paper. Research synthesis was the primary method in three papers that drew from studies in a wide range of disciplines in order to generate new concepts and understandings about journalism in a digital environment.

3.2 Semi-structured research interviews

Semi-structured research interviews were used in four of the ten studies included in this portfolio. The interviews were not designed to test any specific notions but to examine the motivations and attitudes of a group of professionals who occupy particular positions in a social system. For these studies, the professionals were

journalists working in news organisations. Semi-structured interviews offer a means to gain a thorough understanding of the personal opinions and attitudes of professionals in a field. Structured interviews were considered too rigid while unstructured interviews may have produced too diverse results of limited value. The semi-structured interviews were not intended to test any specific assumptions but to examine the attitudes of professional journalists to changes in the media environment, with the use of prompts and follow-up questions. Interviews were structured around a common set of questions and a shared framework based on previous research into user input into the news production process (Thurman, 2008; Domingo et al., 2008).

The qualitative interview as a methodology allows for insights into the subjects' individualistic perceptions and belief systems. Such an approach allows researchers to use "one of the most powerful methods" in qualitative research to "step into the mind of another person, see and experience the world as they do themselves," (McCracken, 1988: 9). The qualitative interview is well suited to investigate sub-cultures within professional groups such as journalists, as it explores "areas of broad cultural consensus and people's more personal, private and special understandings." (Arksey and Knight, 1999: 4).

The participants for the qualitative interviews were chosen for their particular position in the social system in question (Lindlof, 1995). Through purposive sampling, the studies focused on journalists involved in making decisions about digital news operations to explore the "unusual contexts" and "new contexts with clear, familiar features," (Arksey and Knight, 1999: 4). For the Clash of Cultures paper (2008), the eleven participants were member of an elite group of senior editors and managers at the most popular newspaper websites in the United Kingdom. In the papers on the blogs at the BBC (2009; 2010), the participants were selected for their connection to their development of blogging at the corporation. The Mechanisms of Participation chapter (2011) was part of a transnational project involving eight researchers and a total of sixty-seven interviewees. They were drawn from executives in charge or newsroom strategy, senior editors and journalists engaged with online participation at leading national newspapers and their affiliated websites in ten Western democracies: Belgium, Canada, Croatia, Finland, France, Germany, Israel, Spain, the United

Kingdom and the United States. I led the Canadian part of the research, which included six journalists.

For both of these studies on participatory journalism – Clash of Cultures and Mechanisms of Participation - the number of participants surpassed McCracken's suggestion that "for many research projects, eight respondents will be perfectly sufficient" (1998: 17). For the other two studies of blogs at the BBC, the six interviews were supplemented by a textual analysis of documents (twenty-two in total) to identify key themes and ideas related to a set of core issues of interest to the development of blogs at the BBC, including official texts, internal BBC documents and contemporary accounts by editors and journalists.

The use of qualitative, semi-structured interviews was appropriate as it can provide insights into a select group of individuals chosen for their involvement with particular decisions in the newsroom, rather than intended to represent the general population of journalists. In line with much online journalism research, this part of my research focused on professionals who are using emerging communication technologies and may be considered to be at the vanguard of digital journalism (see, for example Artwick, 2013; Hermida, Lewis and Zamith, 2014; Lasorsa, Lewis and Holton 2011). Subjective perspectives can provide insights into the sub-culture of journalists as "we share similar (but not identical) understanding of things that are common experiences and subject to society-wide implications," (Arksey and Knight, 1999: 3). The results are broadly indicative of professionals in similar roles in other countries given the high degree of homogeneity among journalists (Weaver**,** 1988). In the context of audience participation in the news, there tends to be a high degree of homogeneity among how journalists view their relationship to the audience. Indeed, in my co-authored book, Participatory Journalism (Singer et al., 2011), we found broadly consistent views of what journalism is and how it should be practiced across the publications in our study, indicating that journalists share a governing occupational ideology regardless of nationality or the nature of the newspaper for which they work.

3.2.1 Anonymity

The research in this portfolio was conducted in an ethical manner. Participation in research involving human subjects was based on informed consent. In line with established research ethics, human participants were informed fully about the aims, methods and uses of the research. Anonymity was provided in one of the four research projects that employed semi-structured interviews – the study of participatory journalism in ten Western liberal democracies. The purpose of the study was to incorporate the perspectives from journalists in different countries that broadly shared a political ideology, though the focus was on professional, rather than national, culture. As such, it was not deemed necessary to identify individual participants.

The respondents were identified in the other three studies – A Clash of Cultures, The Blogging BBC, and Let's Talk). The participants understood that it would not be possible to conceal identities. The research involved qualitative interviews with professionals who are being interviewed for their expertise in relation to the field of journalism and would generally be considered a very low vulnerability group. As news executives, editors and journalists working in the public sphere, the probability and magnitude of possible harms implied by participation in the research is no greater than those encountered by respondents in those aspects of their everyday life that relate to the research. Specific comments about decisions and actions would have made it difficult to maintain anonymity.

3.2.2 Data collection, storage and transcription

The interviews were recorded digitally for quality concerns and stored using standard audio file formats on a password-protected hard drive. The interviews were transcribed by myself, co-authors or research assistants to produce a textual record for analysis. If an interview was conducted in a different language, all relevant information was translated into English. For the Mechanisms of Participation study, the eight researchers created and shared a document that highlighted the interview data relevant to themes of interest. The transcriptions provided a verbatim record of the interviews. There was minimum amount of fine-tuning of spoken quotes in order

to “minimize any distortion of meaning”, (King and Horrocks, 2010: 149). Prior to data collection, informed consent and confidentiality issues were addressed.

3.2.3 Coding and analysis

The data yielded by the interviews was analysed and interpreted using grounded theory, developed by Glaser and Strauss (1967), as a systematic technique. The purpose was to use grounded theory techniques to generate concepts. Such an approach was used for the chapter Mechanisms of Participation from the book Participatory Journalism: Guarding Open Gates at Online Newspaper (Singer et al., 2011). For the project, the team of researchers interviewed sixty-seven editors and journalists at more than two dozen leading newspaper websites. A common list of questions was used, with researchers following up on specific areas of relevance. The interviews were recorded and later transcribed. A textual analysis of the transcriptions was conducted to identify key themes and ideas related to a set of core issues of interest to the researchers. These included the role of users in journalism, rationales for opening up areas of the website to user input and overall perceptions of the role of the journalist.

This trans-national project used thirty-four pre-defined codes rather than ad-hoc codes to address the complexities of working with coders in different countries and reduce inconsistencies in the coding of the material. The pre-defined codes identified major content categories and subsequent sub-categories of interest to the researchers, including channels available for user participation, newsroom practices for interactions with audience members and strategies for managing and making use of user contributions. The codes were based on a preliminary analysis of the material, the theoretical assumptions of the study and previous work by the team of researchers (Domingo et al., 2008). A pre-defined code of “other” was included for instances when a text portion did not fit within a specialised sub-category. The coding allowed for a broad range of issues to emerge, with those included in Mechanisms of Participation given in table 2.

Issues from semi-structured interviews	
1) The audience as sources for news tips	6) Crowdsourcing of journalistic activities
2) Users as eyewitnesses	7) Cost of moderation strategies
3) Public participation kept at arm's length	8) Distribution of news via social networks
4) Users as commentators on the news	9) New roles in the newsroom
5) Expectation of 'trivial' user submissions	10) Diverse tools for user contributions

Table 2. Issues identified from interviews

Each member of the research team coded a national set of interviews and then shared the relevant material. The results were organised into broad themes that formed the basis of the book Participatory Journalism: Guarding Open Gates at Online Newspaper. The chapter Mechanisms of Participation focused on the structures for audience participation. Other themes for subsequent chapters included journalists' relationship with users, legal and ethical considerations, and economic motivations. The final chapter of the book, Fluid Spaces, Fluid Journalism authored by myself, highlighted key trends and common approaches identified in the international comparative study.

3.3 Content analysis

Content analysis was used in six of the studies presented in this portfolio. The method was chosen to identify the concepts and themes relevant to the study of online journalism. It follows Berelson's classical definition of content analysis as "a research technique for the objective, systematic, and quantitative description of the manifest content of communication", (1952: 18). Although there have been other alternative definitions, most scholars agree that content analyses should be objective and systematic, following explicitly formulated rules and procedures (Holsti, 1969).

Several of the studies here are based on a content analysis of web content. The use of content analysis for online materials introduces a number of challenges to traditional conceptualisations of content analysis. Among the issues identified are difficulties in obtaining a representative sample due to the size of the web; the definition of the unit

of analysis; and ensuring coders access the same content for purposes of reliability (McMillan, 2000; Weare and Lin, 2000). Some of these challenges can be mitigated by adapting traditional approaches of content analysis, such as using software to capture snapshots of websites or lists to generate sampling frames.

The issue of stability and reproducibility was addressed in two studies (Hermida and Thurman, 2008; Hermida, 2011) on the mechanisms for user participation in professional news websites by selecting a specific timeframe for the analysis. Such an approach enabled the researchers to provide insights into the state of tools for user participation as well as providing the basis for longitudinal studies. The categories for coding and recording built on previous work (Domingo et al., 2008; Thurman, 2008) and, based on a preliminary analysis of the websites, adapted to take account of new emergent categories. The content analyses of the online mechanisms for user participation were not subjected to formal reliability testing. The content analyses were not aiming to determine the existence and frequency of concepts in a text that may be open to subjective interpretation by coders. Instead the aim was to measure in a consistent manner certain forms of web functionality over a set time period, given that the unit of measure was malleable and subject to change over time (Karpf, 2012). Setting out to measure pre-defined forms of functionality, rather than concepts, produced reliable results, consistent with other studies (Domingo et al., 2008; Thurman, 2008).

Formal reliability testing was a key part of the Sourcing the Arab Spring paper. The data for this study came from a dataset supplied by Andy Carvin, who had obtained it from Twitter. For the study, tweets appearing during key periods in January and February 2011 were subsequently identified. The unit of analysis was the actor type. To create a comparable and sufficiently large, yet manageable, sample, all profiles that accounted for 0.09% or more of the retweeted sources or 0.25% or more of the non-retweeted sources were coded. This yielded 330 unique sources, with 190 sources appearing in the Egypt sample, 172 in the Tunisia sample, and 32 sources overlapping both samples. A total of eight Twitter profiles could not be obtained since they had been either deleted or protected from public view, resulting in a final sample of 322 sources: 185 for Egypt and 168 for Tunisia, with 31 sources overlapping.

The source type classifications were adapted from Lotan et al. (2011). Two independent coders, who were blind to the research questions, were trained to assess the source type variable, with the coding later examined by the researchers. To assess intercoder reliability, the independent coders double-coded 46 randomly selected sources (14.3% of the sample) from the dataset but outside of the sample. To determine reliability, the researchers used Scott's Pi (Scott, 1955). The coefficient for the source type variable was .72, exceeding the minimum bound of .70 suggested by Riffe, Lacy, and Fico (2005), resulting in reliable and valid results.

3.4 Quantitative internet audience measurement

Survey research was the main method used in one of the studies, Share, Like, Recommend (Hermida et al., 2012). It provided data on the impact of social networked tools and services on news habits in Canada. Much of the research into the impact of social media on news flows and media consumption has focused on how mainstream media are responding to changes in technology, consumer preferences, and cultural habits (Hermida and Thurman, 2008; Newman, 2009; Singer et al., 2011). At the time of the study, quantitative survey research on the impact of new technologies on news habits had been primarily limited to the U.S. (for example, Smith and Rainie, 2010).

The study used a standardised questionnaire to collect data about subjects' behaviours, attitudes and preferences. A questionnaire survey was selected for this research for a number of reasons. The unit of analysis was the Canadian internet user. A survey presented an ideal format to collect data from a large and dispersed population. It contained mostly structured questions using a Likert scale to which respondents could indicate the extent of agreement or disagreement. The use of a Likert scale allowed the researchers to obtain more detailed responses and greater granularity than using solely binary questions. The questionnaire was derived from previous studies by the researchers, similar studies by Pew Research in the U.S. and earlier studies by the polling firm Angus Reid Public Opinion.

In order to ensure a representative online sample, the researchers commissioned Angus Reid Public Opinion to conduct the survey. The commission followed a

request for proposals. The researchers worked with Angus Reid on questionnaire design as the company had the most experience in online polling, given that it was the first major polling company to focus solely on online surveys. Respondents were recruited from the Angus Reid Forum, Canada's premier national access panel of online respondents. The online survey was conducted from August 26 to August 30, 2010, among 1,682 randomly selected Canadian adults, including 400 Francophones. The survey sample included 1,059 internet users who visited social networking sites at least once a month (63 per cent). The survey was self-administered so that respondents could complete it at their own convenience. Online was selected as the means of participation as our intended sample group was Canadians who have internet access. Such an approach can result in selection bias as it may exclude low-income groups, ethnic minorities or seniors

The margin of error - which measures sampling variability - was +/- 2.5%, 19 times out of 20. The results were statistically weighted according to the most current Statistics Canada data on age, gender, region, and education to ensure a representative sample. All results reported in the paper are statistically significant, based on two-sided tests with significance level 0.05. Tests were adjusted for all pairwise comparisons within a row of each innermost sub-table using the Bonferroni correction. If the cell counts of some categories were not integers, they were rounded to the nearest integers before performing column proportions tests.

The study was one part of a larger project on the impact of the internet and associated technologies on Canadian news habits. Overall the research pointed to shifts in online news behaviour, with Canadians mixing and matching different forms of media, trust remaining high in traditional media and a growing role for social media as a discovery mechanism. Four reports were produced by the researchers, each written by one of the four members of the team. I wrote the report on social media, which was featured in publications included in Canadian dailies The Vancouver Sun (Shaw, 2011) and The London Free Press (Dubinski, 2011) as well as on Nieman Journalism Lab in the U.S. (Coddington, 2011) and *ABC* (Oriheula, 2011) in Spain. The four reports received a total of 82 mentions in the media in Canada and internationally.

3.5 Research synthesis

Three of the studies in this portfolio - Twittering the News, 2008; Tweets and Truth, 2012; #Journalism, 2013 – are based on synthesis and analysis of existing research to advance the understanding of the relationship between new communication technologies and journalism. Twittering the News, Tweets and Truth, and #Journalism are part of the burgeoning scholarship of social media in general, and Twitter in particular. The studies consider Twitter as far more than a technological artefact, and instead address its role an agent of digital and social change by drawing from a broad range of literature.

Twittering the News brings in research from the field of human-computer interaction, and more specifically from the area of computer-supported cooperative work to reframe notions of Twitter and journalism. Tweets and Truth builds on this approach to examine studies of verification journalism in the context of the literature on new literacies. #Journalism brings together material from the two earlier studies to presents a "state of play" focused on key concerns within the field such as the implications of developments in social media, reflecting on key research themes and concerns within the existing scholarly literature but also signalling future possible directions for study.

While the research for these studies focused on academic papers, it also included working papers, trade publications and industry reports, whether in print or online. The use of multiple sources is recommended as it enables "the reviewer to *get more out of the data*, thereby (potentially) generating more meaning and, in turn, enhancing the quality of syntheses," (Onwuegbuzie et al., 2012: 8, emphasis in original). All three studies were between-study literature analyses (Onwuegbuzie et al., 2010), given the number of works from multiple disciplines included. The consequences of digitalisation on journalistic practices, cultures and institutions have tended to be studied through the lens of established theories of journalism. The three studies on Twitter take an interdisciplinary approach to go beyond prevailing theories of the discipline in order to better understand journalism's changing role in a digital age. They go beyond simply summarising previous work without analysis or interpretation,

to avoid turning into a research synthesis that is "mere disjointed summaries of a haphazard collection of literature" (Boote and Beile, 2005: 9).

#Journalism was a detailed examination and assessment of the research on journalism and Twitter in line with Machi and McEvoy's definition of a research synthesis as "a written document that presents a logically argued case founded on a comprehensive understanding of the current state of knowledge about a topic of study," (2009, 4). The study drew from the fields of journalism studies, communications, sociology, computer science and informatics in order to accomplish as comprehensive a review as possible. In the context of the study, comprehensiveness means that researchers seek a complete picture of "what has been conducted before, the inferences that have emerged, the inter-relationships of these inferences, the validity of these inferences, the theoretical and practical implications stemming from these inferences, and the important gaps in the literature," (Onwuegbuzie et al., 2010, p. 179).

For #Journalism, the literature review was based on my previous work in this area as well as further work to identity relevant studies. A total of eighty-nine papers were identified in EBSCO using the keywords Twitter and Journalism together, as well as Twitter on its own. The papers were reviewed and the number reduced to the sixty-eight studies or working papers cited. Studies were eliminated if they were not directly relevant to journalism, such as papers that focused on the role of Twitter in public relations, health or religion. The material was then examined to identify the strengths and weaknesses of research approaches in order to develop new ways to investigate. My approach incorporated both analysis and interpretation of the literature, as recommended by Combs et al., (2010). Themes were identified in the literature, following Schwandt's advice to break down the research into its components and then, "through assembly of the parts, one comes to understand the integrity of the whole," (2007, 6). Various approaches were adopted to represent and assess the "state of play" of research on Twitter and journalism. Specifically, the corroboration of information from different sources; the enhancement of information from one source with information from another; the use of information from one source to inform data from another; and the expanding the range of information by using different sources, (Greene, Caracelli and Graham, 1989).

The value of research synthesis is in producing benchmark studies that highlight important themes for future work, above all in new and emerging areas of study. #Journalism in particular sought to serve as both as a summary and an agenda for scholarly research. The importance of the themes identified in the research syntheses is reflected by the number of academic citations since publication of the three studies. Twittering the News has received 277 citations since 2010, Tweets and Truth has fifty citations since 2012 and #Journalism has had nineteen since publication in 2013 (see note).

3.6 Adapting methods during research

Researchers working at a high level of academic inquiry are expected to be able to amend research design when faced with unexpected issues. This section presents an example of the development of new methods to take account of massive data sets that challenge traditional, human-driven approaches to research. Big Data offers a "siren-song of abundant data" (Karpf, 2012; 10) for researchers, while at the same time, "the glittering promise of online data abundance too often proves to be fool's gold" (Karpf, 2012; 14). For the study on Andy Carvin, the researchers were faced with conducting a content analysis of a large cache of Twitter data. In order to extract meaning, the team developed computational and manual techniques to preserve the strengths of traditional content analysis, with its contextual sensitivity, while maximising the large-scale capacity of Big Data and the algorithmic accuracy of computational methods.

Andy Carvin obtained directly from Twitter a file containing all of his more than 60,000 tweets from December 2010 to September 2011. While obtaining data directly from the object of study may raise questions, the file provided was far more complete than the data scraped by the researchers. The original data set was a 199-megabyte, tab-delimited text file, containing eleven unique identifiers from Twitter's database. A software script developed by one of the researchers was used to clean up and parse the data into the key variables of interest. Once the time periods of interest were identified, the statistical package SPSS was used to pinpoint the unique sources and the proportion of the overall sources that they represented within the respective

segment. While the process could have been performed by humans, it would have taken longer and may have been marred by mistakes.

Given that online texts are subject to change, a simple script was created to download the Twitter profile of each of the unique sources and store them as separate files. This procedure allowed us to archive static copies of the profile pages, thereby ensuring that coders would be examining the exact same content. The electronic coding interface developed by one of the researchers showed the source's Twitter profile page next to the electronic code sheet. Entries were automatically transferred into a relational database, removing the need for human intervention and eliminating data entry error. It also helped reduce coder error by having options and categories presented as labels, with the system automatically converting selections into numerical values after each submission.

The approach outlined blended computational and manual approaches throughout the to maximise the precision of algorithms and the context-sensitive evaluations of human coders. Computational methods were used to objectively, systematically, and accurately filter the sample in order to facilitate the work of human coders by removing several inefficiencies and potential for data-entry error that are typical in manual coding. Such a hybrid combination can preserve the strengths of traditional content analysis while maximising the advantages of computational methods. The value of developing new approaches is reflected in the number of citations for the Content Analysis in an Era of Big Data paper, with twenty-four citations since its publication in March 2013 (see note).

3.7 Concluding remarks

This section has explored the use of research approaches to chart and understand the development of digital journalism in multiple contexts. The methods build on previous work in order to identify common themes and findings that contribute to the literature. A core focus on the papers included here has been the context of online news production, with the use of qualitative methods to investigate the attitudes and reactions of journalists to new entrants in the digital media space. Qualitative approaches were supported by quantitative methods that sought to catalogue the

evolution of online functionalities that have impacted the gathering, production and dissemination of news. Using multiple methods allowed for in-depth and contextualised findings, as such approaches are far more comprehensive than tackling an issue from a single perspective.

Four of the studies presented here focused on online journalism in the U.K., partly due to my knowledge of and familiarity with journalism in my home country. But it was also motivated by an awareness of the need for research beyond the U.S. context and the need to address what Wahl-Jorgensen and Franklin describe as a "lack of critical, home-grown research", (2008: 181). However, cognisant of the value of cross-cultural research, I collaborated with international scholars in order to test interpretations against cross-cultural differences and inconsistencies (Kohn, 1989). Even though such collaborative research has been described as "exhausting", "a nightmare" and "frustrating" (Livingstone, 2003:481), it is, as Weaver and Löffelholz argue, "indispensable for establishing the generalizability of theories and the validity of interpretations derived from single-nation studies," (2008: 288).

The use of research synthesis in three of the works (Hermida 2010, 2012, 2013) included here enabled me to take account of the state of research to address the gap identified by Mitchelstein and Boczkowski that "there have been few comprehensive assessments of what research has learned about online news production," (2009: 563). The studies on Twitter follow their exhortation to "to reflect on where the field has been as a way to chart new directions of inquiry for the future," (Mitchelstein and Boczkowski, 2009: 563). The trajectory of my research methods has sought to examine the emergence of novel spaces and forms for news production, such as in the studies on Andy Carvin, in an attempt to make sense of emergent phenomena and contribute to theoretical renewal. Through the adaption of existing research methodologies and development of novel approaches in my works, I have sought to advance possible avenues for future scholarship.

4. Evaluation of findings

The work presented in this portfolio broadly addresses the issues arising out of changes of the architecture of contemporary media spaces, where journalists are but one of a range of actors involved in public communication. My initial work in this area focused on the editorial side, considering how news organisations and journalists have approached participatory journalism. More recently, my work has moved "beyond the dominant focus on the production culture of professional journalism— which results in journalists setting the terms for participatory journalism - towards the motives, expectations and conditions on the part of the audience," (Borger et al., 2013: 132). The research addresses how socio-technical developments, specifically social media, "alter the character of our symbols: the things we think with. And they alter the nature of community: the arena in which thoughts develop," (Postman, 1992: 20).

4.1 Participatory journalism

Participatory journalism encompasses the idea of users as contributors to news spaces that were previously largely the domain of professional journalists. Terms such as participatory journalism, user-generated content and citizen journalism are used to refer to what Bowman and Willis defined in 2003 as "the act of a citizen, or group of citizens, playing an active role in the process of collecting, reporting, analysing and disseminating news and information," (2003, 9). They include a public interest element to the definition, suggesting that the "intent of this participation is to provide independent, reliable, accurate, wide-ranging and relevant information that a democracy requires" (2003, 9).

The notion of non-professionals producing their own media pre-dates the internet. The radical reformist newspapers published in England from the late 18th to the mid-19th centuries had characteristics similar to recent citizen journalism, as the journalists tended to see themselves as activists rather than as media professionals (Curran and Seaton, 2010). Moreover, the idea that audiences were passive recipients

of news content before the internet is widely contested. The active audience concept suggests that people make decisions about how to use the media, from deciding what to watch to decoding and making sense of media (Ang, 1985; Fiske, 1987).

Traditionally, though, individuals have had very limited ability to directly affect the construction of media messages or communicate with the producers of the content. As Sigal notes, "news is consensible: newspaper audiences, by their responses to news, actively shape its content. Yet the average reader has little impact on the consensual process," (1973, 37). For the purposes of this portfolio, I approach the term participatory journalism to explore the diverse processes through which individuals both inside and outside the newsroom are involved in the gathering, production and distribution of news and information (Singer et al., 2011).

4.1.1. The growth of participatory journalism

While the term "participatory journalism" first emerged in 2003, the majority of studies published in journals appeared between 2007 and 2010 as the phenomenon developed as a scholarly object in journalism studies (Borger et al., 2013). The study A Clash of Cultures, published in 2008, was part of this wave of research into how professional news organisations were exploring and expanding channels of audience interaction. It went on to become one of the most highly cited papers on participatory journalism, with more than 300 citations at the time of writing (see note).

The paper developed the taxonomy of user-generated content initiatives carried out by Neil Thurman in 2004-5. Published in 2008, Thurman quantified and analysed the distribution of user-generated content initiatives at ten leading U.K. news websites and examined editors' attitudes to participatory journalism. The research for A Clash of Cultures, conducted in 2006, documented how the opportunities for audiences to become involved in online news publications had multiplied in the course of just 18 months. The analysis of twelve U.K. newspaper websites revealed that all but one, Independent.co.uk, offered channels for user participation.

More significantly, there was a noticeable increase in the adoption of three specific formats: Blogs, commenting on stories and "have your says". The most substantial increase was in the adoption of blogging, though there were notable differences in the use of the format. Overall, the number of blogs rose from seven to 118 from August 2005 to November 2006, with most enabling user comments. Times.co.uk, for example, introduced 39 blogs, while its broadsheet competitor, Telegraph.co.uk, had 37. The study also noted the rise of the comment on stories format, which went on to become a default feature on most news websites. By 2006, six UK newspaper websites had adopted the format, up from just one 18 months earlier. The number of sections of the news site labelled as "have your says" that provided a forum for user discussion, rose moderately from three to five over the same period. Also notable was the appearance of a new channel for participation, reader blogs at TheSun.co.uk. The format marked a radical departure from previous initiatives as it enabled readers to create their own blogs within the online framework of a professional news organisation.

The website analysis for the A Clash of Cultures study suggested at first glance that participatory areas were becoming a common feature of the online news landscape, offering more opportunities for readers to become content creators in mainstream news spaces than ever before. However, the proliferation of channels and spaces for readers to take part in the news process is only part of the picture. In-depth interviews with senior news executives provided a means to examine the attitudes and motivations of professional journalists.

The results indicated how the online trend towards participation, as evidenced by the emergence of user-generated platforms such as YouTube and Wikipedia, influenced editorial decisions. The interviewees spoke of being left behind or being latecomers to the party. One editor encapsulated the views of many when he described user-generated content as a "phenomenon you can't ignore", (Hermida and Thurman 2008: 347). The expansion of existing channels of participation was motivated, at least in part, by a fear of marginalisation at a time when user-generated content was the "paramount cultural buzz phrase of 2006" (Pareles, 2006). That is not to say that editors were resistant to the idea of greater audience participation in the news. Rather, the research identified a shift away from the dismissive discourse surfaced in

Thurman's earlier work (2008). Instead, editors spoke of the potential for dialogue with readers, with an acknowledgment that the audience could make a valid contribution to the news.

However, any enthusiasm was counter-balanced by professional, legal and economic considerations. There were concerns that user contributions could undermine professional editorial values and standards, as well as the legal implications of allowing readers to publish anything. A Clash of Cultures identified how the traditional gatekeeping role of journalists was being extended to user-generated content through the widespread use of moderation to vet material before publication. The perceived need to protect the reputation of a newspaper was offset by the expense of managing user contributions. Cost was one of the factors behind the decision by *The Independent* not to offer any channels for audience participation on its websites, with concerns it would sap resources from the newsroom.

What emerges from this study is a picture of an industry seeking to adjust to a new media environment. The way media organisations have adopted mechanisms to involve audiences in the news process reflects the tensions of integrating participatory media into traditionally tightly controlled and closed editorial practices. At the heart is a struggle between encouraging users to engage in the news through multiple tools and spaces, while at the same time defending the core of the journalistic production as the preserve of professionals. As Boczkowski noted in Digitizing the News, the ways newspapers have taken up digital initiatives "expresses a culture of innovation marked by reactive, defensive and pragmatic traits," (2004: 20).

4.1.2 A framework for analysis

My subsequent work, Mechanisms of Participation, developed the themes of A Clash of Cultures, taking a more nuanced perspective on how journalists were opening up the news to the public and sharing media spaces that traditionally belonged to them. The cross-national research, conducted in late 2007 and 2008, examined user participation channels across the websites of more than two dozen leading national newspapers in 10 Western liberal democracies, together with 67 in-depth interviews.

The chapter was published in the book Participatory Journalism (Singer et al., 2011) which has received 183 citations since publication (see note).

The work developed the taxonomy of Hermida and Thurman and identified two additional means by which users impact the news. The first was content hierarchies published on news websites, with stories ranked according to audience ratings, usually based on the most read or emailed content. The second was social networking, enabling users to distribute and reframe content via social media platforms. Overall, the generic formats of participation were broadly found across the sample of news websites.

But this research went further than quantifying the evolution of participation formats. It developed a model to analyse participatory journalism practices in the context of the historical evolution of public communication (Domingo et al. 2008). The model breaks news production into five stages: access/observation, selection/filtering, processing/editing, distribution, and interpretation. The model provides a framework systematically to evaluate how far the audience is able to participate in the making of the news.

The analysis revealed that the most open stages of the news-making process were at the access and observation stage and at the interpretation stage. The newspapers actively urged users to submit photos, videos and eyewitness reports of breaking news events. For example, journalists at *Le Figaro* would appeal for readers to send in their accounts if they were at the scene of breaking news. Others actively appealed for news tips, such as the Finnish dailies *Helsingin Sanomat* and *Kaleva*. Some editors suggested that lifestyle-related material was far more common than what might be considered hard news. “If we ask people to send in a picture of their dog, we get 1,200 a day,” said one editor, while another noted that dog photos were “wildly popular.”

Essentially, the newspapers were extending existing newsgathering practices online, At the pre-story stage, the most sought-after user-generated content is eyewitness accounts and footage or stills of breaking or on-going news stories to fill in for the lack of professional material. Having said that, the work identified some more

collaborative practices, with journalists crowdsourcing information. For example, the Belgian newspaper, *Het Nieuwsblad*, asked users to help it put together a detailed map of cycle paths, while the *National Post* in Canada turned to its readers to help map the extent of a major fire in Toronto. Such initiatives were the exception, rather than the rule.

The research found that the selecting and filtering of the news, coupled with the processing and editing of stories, are largely closed spaces. The audience was able to exercise some degree of agency over the distribution of stories, largely through social networking tools. But editors still sought to retain a degree of control over the hierarchy and distribution of information, seeing social recommendation as functioning alongside the journalism. In the words of one editor, the news website is "not a social networking site. It offers social networking functionalities along with its journalism."

By far, the greatest number of opportunities for participation was at the interpretation stage. Readers are invited back in once a journalist has processed the information to produce a news product, usually by letting them post a comment at the bottom of a story. Comments on stories echo earlier forms of participation such as letters to the editor. But they are far more open, representing a significant expansion in the ability of users to contribute to the interpretation of the news. While editors expressed ambivalence about the value of comments, they did see some worth in the ability to gauge reaction to a published story.

Many of the initial studies of participatory journalism lauded its potential to offer new democratic opportunities for citizens to be involved in the co-creation of news (Borger et al., 2013). The model developed in Mechanisms of Participation provided a way to gauge the degree of agency and authority exercised by audience contributors. In general, many major newspapers remained averse to opening up significant stages of the news-production process to the audience. Instead users are framed as active recipients: they are expected to act when an event happens, and then react when a story is published. Audiences are framed as idea generators and observers of newsworthy events at the start of the journalistic process, and then in an interpretive role as commentators who reflect upon the material that has been produced.

4.1.3 Processes of innovation and change

Two of the papers included in this portfolio offer insights into the causes, dynamics and consequences of media change, offering generalisable tendencies for understanding the technological adoption of blogging in journalism. The studies take a case study approach to understanding how the technological innovation of blogging was mediated and influenced by norms, routines, relationships, and social and material contexts. The focus on the BBC allowed for an in-depth examination of innovation with the organisational and institutional framework of public service broadcasting. Approaching newsroom technological change through an understanding of the adoption process in specific local contexts can aid in discerning how digital media both constitute and are constituted by practice and innovation

The paper, The Blogging BBC (2009), investigated how one of the world's leading news organisations incorporated a format seemingly at odds with staunchly held editorial values of accuracy, impartiality and fairness. The research showed local organisational practices, content, identities, and tools interdependently led to the adoption of a new genre within news. Blogging emerged out of the BBC News website in the early 2000s, where key individuals played key roles in the promoting, supporting and defending the practice. At the time, the website team had an unusually high level of independence within the corporation, with considerable freedom to trial new ideas online (Allan, 2006). The website served as an incubator for early forays into blogging practices and hosted the first ever BBC News blog in December 2005. It served as a torchbearer for blogging at BBC News and its success contributed to the rapid diffusion of blogging with 37 blogs authored by journalists by November 2008.

The paper illustrated the tensions that arise from innovation, as there was significant resistance and mistrust from more mainstream areas of BBC News. As Rogers argues, an idea that is incompatible with the values and norms of a social system will not be adopted as rapidly as an innovation that is compatible (1995). Consequently, blogging was portrayed as an innovation that was compatible, rather than at odds, with existing BBC journalistic standards. The corporation sought to normalise an emergent media

participatory format to conform to established professional practice. While the findings are specific to a public service broadcaster, the results were consistent with earlier research on blogs and journalism (Robinson, 2006; Singer, 2005).

While blogging did not affect the substance of BBC journalism, it did have a greater impact on the style of the journalism. Broadcast journalists, accustomed to having to pack the news into short TV or radio reports, welcomed the ability to expound in greater detail online. Blogging was seen as complementing rather than replacing, traditional news products, offering a way to communicate with audiences in a more personal and informal manner. The research highlighted how blogs emerged as a new genre in institutionalised journalism, where the journalist is more visible. But it also underscored how news organisations struggled to incorporate participatory formats. The BBC experience with blogging reflected how "participatory ideals do not mesh well with set notions of professional distance in journalism; notions which tend to exclude rather than to include," (Deuze et al., 2007: 335).

Efforts by the BBC to use blogs to better listen to and engage with its audiences were explored in my chapter, Let's Talk. This work examined the integration of a new communication technology during a challenging time for the BBC's history, from 2001 to 2008. Over this period, BBC was under intense scrutiny over its editorial and ethical standards, most notably in the Hutton Inquiry, described by then Director-General Mark Thompson as "the biggest crisis in BBC journalism's 80-year history", (Thompson, quoted in Douglas 2005). The research showed how blogging developed from a peripheral activity to an activity cited in policy documents as evidence of the corporation's aspiration to be more accountable, open and transparent.

The adoption of blogs was facilitated by two related factors specific to the local conditions at the BBC. First the traditional conception of a public service broadcaster was under pressure due to the rise of digital media, audience fragmentation and increased commercial competition (Born 2002; Enli 2008). Secondly, the fallout of the Hutton Inquiry led the BBC to consider how to regain the public trust. Let's Talk showed how the internal discourse framed blogs as one way to make parts of the BBC's operations more accountable to the public. The BBC's desire to be seen as more open and transparent aided the introduction and spread of a new

communications format within an established news organisation. It accounts for the BBC's late adoption of blogs, even though it had been a online news pioneer in the late 1990s with the launch of the BBC News website in 1997.

However, the research also highlighted the gap between the rhetoric of accountability and the everyday discourse on the BBC blogs. In 2008, Enli suggested "participation, facilitated by digital technology, is a key strategy for the public broadcasters in an attempt to regain the position as a national arena" (117). In practice, editors and executives tend to use blogs as a way to explain and justify decisions, rather than to engage in a discussion with the public. Fundamentally, a new format was largely normalised to fit within established practices, and mainly used as an additional publishing, rather than participatory, platform.

4.2 Social media

The next stage of my work focused on the impact on journalism from the rise of social networking as a "global phenomenon" (Pew Research, 2010: 1). The papers presented in this section are an extension of the earlier work on participatory journalism, going beyond participation as a practice articulated through formal journalistic structures. The aim of the work was to advance the understanding of journalism in a networked media environment.

4.2.1. Understanding audience practices

The paper Share, Like, Recommend investigated how Canadian audiences were appropriating the relatively new technology of social networking to reshape the circulation of texts, artefacts and ideas. At the time of the research, there was a deficit in academically grounded research outside of the United States on the effect of social media on news habits. The work addressed the need identified by Boyd and Ellison (2007) for more quantitative and qualitative research into the use of social networking sites. As Olmstead et al. suggested, "understanding not only what content users will want to consume but also what content they are likely to pass along may be a key to

how stories are put together and even what stories get covered in the first place," (2011: 1).

While social interaction has always played a role in the dissemination of news, the research showed the extent to which the sharing of links and recommendations on social networks has become a form of cultural currency. Two-fifths of social networking users said they received news on a daily basis from their social circles online, while a fifth got news from news organisations and individual journalists they followed on social media.

The study filled a need to understand the motivations behind the use of social media for news. An analysis of the habits of social media users revealed that getting news and views was one of the main reasons for using sites like Facebook (71 per cent). Moreover, two-thirds cited the ability to obtain first-hand information about important events. The results challenged assumptions about the social fragmentation of news online into filter bubbles (Pariser, 2011). Almost two-thirds said social networks meant they were exposed to more news and information. Serendipity appeared to play a significant role too, with 90 per cent noting that, at least some of the time, they came across news and information they had not expected to find. More surprising, perhaps, was the finding that social media use did not have a significant impact on the use of the news websites of newspapers, radio or TV channels. But frequent users of social media were more likely to turn to sites that combined news and commentary or to individual blogs.

At the time of the study, news organisations were rapidly adding social networking functionality to websites, encouraging users to "like" or "tweet" a story in an effort to increase audience reach and potentially build brand loyalty. The findings of the research offered helpful insights for an industry contending with how to adapt to social media. For example, they highlighted the importance of social discovery, given that people preferred to receive news recommendations from friends rather than from journalists or a news organisation. The traditional gatekeeping function of the media is weakened as users can bypass professional editors and instead receive news based on the recommendations of people they trust.

Moreover, the research indicated a relationship between the use of social media in general and the level of comfort with receiving news on social networks. The finding suggested that with the spread of social media would result in the growing importance of social discovery and recommendation of news, The work foreshadows what Henrik Bødker has called "cultures of circulation", (2014), highlighting the importance of understanding how news users have appropriated social media to curate, reframe and reinterpret news content.

4.2.2. Theoretical renewal

Building on the research into participatory journalism and changing audience behaviours, the three papers on Twitter (Hermida, 2010; 2012; 2013) address the call by scholars for a wider range of theoretical and methodological perspectives in journalism studies (Zelizer, 2000; Mitchelstein and Boczkowski, 2009). They go beyond approaching journalism based on traditional institutions and understandings of the field and seek to address "the changing nature of the object itself," (Broersma and Peters, 2013: 2). The papers can be considered part of what Steensen and Ahva (2014) label as a "fourth wave" of research on digital journalism, coming after the normative, empirical and constructivist waves (Domingo, 2008).

The papers form part of a burgeoning body of scholarship on Twitter. Since its launch in 2006, the social media platform has developed as a hybrid communication space, hosting streams of news and information generated by practices of broadcasting, redacting and listening by professional journalists, mainstream news organisations, interested parties and individuals. The work here went beyond considering Twitter as a technological artefact and instead is more in line with the notion of the platform as "a backbone for a much wider range of manual and automated communicative exchanges," (Puschmann, Bruns, Mahrt, Weller & Burgess, 2014: 430).

My work here seeks to rethink what journalism is and, consequently, reassess the methods to study it due to socio-cultural practices that have developed mostly related to social media. The paper Twittering the News (2010) was published at a time when much of the popular discourse was dismissive of Twitter, concluding that it was full

of banal comments (Arceneaux & Schmitz Weiss, 2010). My work refashioned Twitter as a new and valid object of study by conceptualising the platform as ambient journalism, facilitated by networked, always-on communications technologies and media systems of immediacy and instantaneity. The paper sought to contribute to the "need within journalism studies to widen the scope of theoretical perspectives and approaches even further", (Steensen and Ahva, 2014: 13).

The immediate and rapid dissemination and reception of short fragments of information from various sources results in a constantly updated, live representation of the experiences, interests, and opinions of contributors. It creates a multifaceted experience of ambient news operating in the periphery of a user's attention, akin to ambient background music (Crawford, 2009). Conceptualising Twitter as an ambient news network acknowledges that most tweets on any given day may be banal and phatic. But it also provides a way to understand that news does not need to be at the core of a user's cognitive field. Rather tweets shift from being ambient to central when significant information is spread on the network, as changes in the volume and tone of incoming tweets catch the attention of users.

Twitter emerges as a platform for ambient journalism as users undertake some of the institutional tasks commonly associated with the journalist, from sending a message about a breaking news event, to alerting their online social network about a story in the mainstream media, to curating the flow of information in real-time. Users become part of the flow of news, reframing or reinterpreting a message through a networked platform that introducing hybridity in news production and news values (see, for example, Chadwick, 2011).

Since publication, Twittering the News has influenced subsequent studies on the platform, as evidenced by its 296 citations (see note). Research into the role of Twitter during key events has demonstrated how the platform functions as an ambient news network. For example, Papacharissi and de Fatima Oliveira on the use of Twitter during the Egyptian uprising of 2011 concluded that the "constant pace, frequency, and tone of tweets contributed to and constructed an 'ambient' information sharing environment," (2012: 277).

Twittering the News proposed a realignment of the role of the journalist in such an

ambient news environment, from the producer to the curator of news and information. In such a position, the journalist brings to bear professional knowledge, training and experience in the selection and editing of information to filter, contextualise and interpret the noisy social media environment. It builds on the notion advanced by Bardoel and Deuze of the journalist as "a node in a complex environment between technology and society, between news and analysis, between annotation and selection, between orientation and investigation" (2001: 101).

The manner in which Twitter has affected professional news practices was the focus of "#Journalism" (2013). The paper reviewed the existing literature on Twitter to understand how far an ambient news environment was reconfiguring existing journalistic norms and practices. The framework for the research synthesis was how Twitter was impacting journalism as a distinct cultural field of production (Bourdieu, 2005). The paper identified the dominance of sociological research that focuses on the use of Twitter through the lens of established norms and routines.

Much of the work in journalism studies on Twitter attempts to identify how far beliefs and practices are challenged and altered by a medium that blends news, opinion, experience and emotion and may be incompatible with paradigms of Western journalism, such as fact-checking and objectivity. Yet, as #Journalism noted, there is a growing body of work on Twitter as a hybrid space for the cultural production of journalism, where networked gatekeeping and networked framing, co-exist alongside the practices of established media (Papacharissi and de Fatima Oliveira, 2012; Meraz and Papacharissi, 2013).

Significantly, #Journalism highlighted a paradox in the use of social media by journalists. Industry and academic studies suggest social media, and Twitter in particular, has become standard practice for virtually all journalists. But more detailed work on actual practices of journalists suggest only a minority have integrated social media into daily routines (see, for example, Hedman and Djerf-Pierre, 2013). This paper also raised other issues with existing research on the use of Twitter. Some studies focus on the early adopters in a newsroom or select individuals who may be far from typical, while others rely on self-selected non-representative samples. While such studies provide a window into the activities of select groups of journalists, there is a dearth of representative research on the range of professional practitioners.

Given that proviso, #Journalism identified how the practice was being reconfigured by an ambient news environment, highlighting the emergence of the hybrid and innovative forms of news production. These included how journalists are negotiating professional practice in a space where there is a precarious separation between the personal and private, and the hierarchical roles of reporter, editor and audience are blurred (Lasorsa, Lewis, and Holton, 2012; Sheffer and Schultz, 2010; Vis 2013). The analysis of the literature pointed to new paradigms of journalism at play that break with classic narrative structures and deviate from long-held norms, most notably at times of breaking news. Emerging practices in real-time live coverage point to a change first suggested in Twittering the News: the shift away from the traditional journalistic gatekeeping function towards gatewatching (Bruns, 2005). The journalist serves as a pivotal node, trusted to authenticate, interpret, and contextualise information flows in an ambient news environment knowledge and expertise are fluid, dynamic, and hybrid.

4.2.3. Rethinking professional practice

The two papers in this section (Hermida, 2012; Hermida et al., 2014) develop the ideas advanced on the changing role of the journalist in an ambient news environment. The first, Tweets and Truth (2012), examined how social media practices are impacting verification. The paper approaches verification as one of the cornerstones of the professional ideology of journalism in Western liberal democracies, together with related concepts such as objectivity, impartiality and autonomy (Kovach and Rosenstiel, 2007). A commitment to accuracy and truthfulness is simultaneously a prevailing norm and discursive strategy that exemplifies how journalists define their expertise and claim authority. Yet the volume, velocity and visibility of social media are pushing the practice of "verify then publish" into the penumbra, an ambiguous grey area at the edges of established norms and conventions (Bruno, 2011; Newman, 2009).

Tweets and Truth advanced ideas on how the discipline of verification could be rearticulated rather than abandoned, cognisant that verification is a fluid and contested practice, inconsistent in its application (Shapiro et al., 2013). The paper drew on the work of new literacies researchers (see, for example, Lankshear and Knobel, 2007;

Prinsloo, 2005) to suggest journalists adopt a more collaborative, fluid and iterative approach to verification, where contested accounts are examined and evaluated in public in real-time. The work noted how verification practices were edging in this direction as news organisations adopted new methods, such as live blogging, to report on breaking news events. The paper was one of the first to rethink the professional practice of verification to take account of networked media systems where, in theory, the cultural production and control of knowledge is shared. At the time of writing, it had received fifty-six citations (see note).

The second paper, Sourcing the Arab Spring (2014), applied the idea of collaborative knowledge production in an ambient news environment to a case study of Andy Carvin. The former social media strategist at NPR made his name during the Arab Spring of 2011 when he used Twitter to identify and contact credible sources, carry out real-time fact-checking, mediate discussions, and aggregate news and information flowing from the region on social media (Farhi, 2011; Sonderman, 2011). The paper examined his selection of sources on Twitter during key periods of the 2011 Tunisian and Egyptian uprisings.

The analysis of his sourcing practices showed how Carvin's use of Twitter diverged from the established paradigm of journalistic reporting and its reliance on official sources (Ericson, Baranek, & Chan, 1989; Gans, 1979; Hall et al., 1978; Tuchman, 1978). Instead he favoured non-elite sources and gave priority to alternative voices, raising questions about long-held ethical norms of balance, fairness and objectivity in journalism. Moreover, the findings pointed to the emergence of a revised form of gatekeeping, with Carvin engaging in gatewatching (Bruns, 2005) by filtering, synthesising and highlighting source material provided by a diverse set of actors online, contributing to a "real-time verification system" (Silverman, 2011, para. 1). It suggested that near real-time reporting via social media could lead to the use of a broader set of sources by journalists, similar to the findings of Thurman and Walters in their analysis of live blogging at *The Guardian*.

In some ways, Carvin presented a unique case study. While the use of social media content in news has become commonplace, few journalists turn to social media on a

regular and consistent basis to seek and corroborate information (Cozma and Chen, 2013; Hedman and Djerf-Pierre, 2013; Lasorsa, Lewis, and Holton, 2012; Vis, 2013). At the time of publication, it was unclear how far Carvin was a precursor to a proto-journalist immersed in an ambient news environment that simultaneously functions as newswire, newsroom and new outlet. But the forty-one citations to date (see note) are indicative of the interest in discovering how professional practices are being rearticulated.

4.2.4. Methodological renewal

Finally, Content Analysis in an Era of Big Data examines the methods used for the Carvin study. It addresses the challenges faced by scholars in studying innovative forms of news production on open, networked platforms occurring outside the boundaries of traditional media outlets. Methods for studying Twitter have, themselves, become a focus for research, with a growing body of work on novel ways to collect, parse, analyse and interpret tweets around a particular event or topic (Bruns, 2011; Bruns and Burgess, 2012). The availability of a wealth of data that reflect new media activities and artefacts presents new opportunities and challenges for researchers. Content Analysis in an Era of Big Data drew on the experience of the research team in deriving meaning from a large cache of Twitter data. It offered insights into how computational methods could be combined with more established approaches in content analysis to evaluate a large body of social media data.

The paper showed how computational methods could be leveraged to ease the work of human coders, while, at the same time, interpreting context at a large scale. This is an ongoing question in Big Data research, as "context is hard to interpret at scale and even harder to maintain when data are reduced to fit into a model," (boyd and Crawford, 2012: 671). By writing a paper solely focused on methods, the authors demonstrated how computational and manual approaches could be combined to maximise the precision of algorithms and the context-sensitive evaluations of human coders. In a sign of the high degree of interest in reinventing traditional content analysis for the era of Big Data, the paper has received twenty-four citations to date (see note).

4.3 Conclusion

The ten works presented here chart the blurring of previously established boundaries of production at a time when journalists, who once could claim a monopoly on the supply of everyday public information, contend with citizens sharing eyewitness accounts, curating reports or evaluating information online. My work has evolved from an initial emphasis on how participatory journalism was influencing journalistic practices and cultures, to a broader perspective on how the phenomenon of participation is transforming the object of journalism itself.

The initial papers were in line with much of the work on participatory journalism that focuses on the production culture of journalists (Borger et al., 2013). The gatekeeping metaphor (Shoemaker, 1991) runs through the work, considering participatory journalism as undermining the "we write, you read" dogma of modern journalism (Deuze, 2003: 220). The way journalism has operated for decades is challenged by what Singer characterises as "the inherently uncontrollable nature of a network as vast and as open as the Internet," (2009, p.139).

The studies chart how change within news organisations is the result of a combination of local conditions, professional practices, available tools and social contexts. At the core of the tension is the notion of a shared media space. The works, A Clash of Cultures, Mechanism of Participation, The Blogging BBC and Let's Talk explored these tensions, contributing to the emergence of participatory journalism as an object of research in journalism studies. They identified how, as a rule, participation was normalised to fit within existing journalistic ways. Member of the public were framed as active recipients: idea generators and observers of newsworthy events at the start of the journalistic process, and then in an interpretative role as commentators who react to and reflect upon professionally produced material.

Participatory journalism evolved against a backdrop of journalists balancing the potential benefits of opening up their news products to the public with a perceived need to retain their occupational authority. By and large, journalism practices have become more technologised, with reporters doing old things in new ways, rather than

negotiating the transition to a post-industrial knowledge society. With journalism as a practice becoming more diffuse and indistinct, there is a need to study journalism beyond institutional frameworks (Steensen and Ahva, 2014). The later work in this portfolio takes on this exhortation. The work on Twitter addresses the need identified by Mitchelstein and Boczkowski for online news scholarship that chooses "trends that lead to rethinking major building blocks in the understanding of journalism and its role in society," (2009: 578).

Much of this work has focused specifically on Twitter, not as an isolated phenomenon but as an agent of digital and social change. The social media platform is one of the new lenses for researchers to examine societal patterns of communication on a local, national and global level. The papers on Twitter consider how new literacies emerge as media technologies evolve and reconfigure everyday social practices around communication (Lankshear and Knobel, 2007). The new literacies of networked media shape, and are shaped by, journalism. My contribution here contends that the established, industrial mindset of traditional media is ill equipped to navigate emergent communication spaces.

My major contribution here is in theorising networked communication spaces as an ambient news environment, that favours participation over publication, sharing over owning, change over stability, abundance over scarcity and relationships over information delivery. Such environments offer a mix of information and comment usually associated with current reality but without an established order. The content flows continuously in near real-time. Environments such as Twitter break with the classic narrative structure of journalism and instead create multi-faceted, fragmented and fluid news experiences. The work in this portfolio on social media provides a lens to examine and understand how journalism is being reconfigured. It offers insights into how journalism evolves from being a finite product with the fixed endpoint of publication to being an iterative process through which information is dissected, discarded, or disseminated online by a wide range of actors.

5. Directions for future research

The final section considers two broad directions for future research based on the work in this portfolio. Firstly, future research could go beyond a journalist-centric focus and instead consider the range of actors involved in the production of news. This does not mean abandoning the newsroom or journalist as an object of study, but rather considering how professional practice could be rearticulated. Secondly, future work could place a greater emphasis on technology as a distinct actor, with its own set of norms and practices, while avoiding a technological deterministic outlook. This section highlights some of my current work that develops these areas for research.

5.1 Multiplicity of actors

As studies on participatory journalism and social media have indicated, including those presented in this portfolio, professional journalists are no longer viewed as holding the central position as gatekeepers in the collection, production and dissemination of news. Networked technologies have enabled citizens, officials, and celebrities to bypass the media, undermining the principle that journalists ought to act as gatekeepers on behalf of the greater good (Lewis, 2012). But as the literature, and my own research, have shown, journalists tend to regroup around established norms and practices in the face of socio-technical developments that disrupt authorial structures.

Studies over the past decade have found a trend towards normalisation, rather than a rethinking of existing routines. Yet as Lewis asks, "how long can such resistance persist?" (2012: 851). Lewis goes on to point to "small but significant" (2012: 852) evidence of greater openness, including our own study on NPR's Andy Carvin (Hermida, Lewis, & Zamith, 2014), as well as work by Robinson (2011) and Lewis (2012). Future work could explore how far the prevailing gatekeeping model of journalism is giving way to what Lewis calls "an emerging logic of openness," (2012: 842) to map how the boundaries of journalism as being reconfigured. Such an approach acknowledges the place of a journalist-centric focus as part of a broader spectrum of research that is cognisant of other actors performing tasks that were once the domain of professionals. For example, in a forthcoming chapter, I build on the

work presented in this portfolio to investigate how the discipline of verification is being rearticulated in the context of a hybrid media environment to both reconfigure and reinforce a long-standing boundary of journalism (Hermida, 2015).

However, a simple focus on the tensions in journalism as a jurisdictional conflict is too reductionist. The multiplicity of actors involved in the range of activities in the production of news highlights the limitations of a journalist-centric perspective in journalism studies. My research into social media has underscored how technologies such as Twitter serve as always-on ambient media systems of immediacy and instantaneity, meaning that information previously filtered by journalists may already be in the public domain. Future research could frame journalism less as a profession to be defended and instead as a practice to be shared, involving a diverse range of actors with fluid levels of power and authority, where the newswork is contested, corroborated and circulated.

Studies into the use of social media by social movements already point to how theories of gatekeeping and framing are being reconfigured as a plurality of actors. The research shows how committed individuals are appropriating social media to articulate a counter narrative, and contest selective or dismissive framing by mainstream media (Gleason, 2013; Lotan et al., 2011). For example, research by Meraz and Papacharissi (2013) on the role of Twitter during the Egyptian uprising of 2011 revealed how communicative authority was dynamically assigned on the network through networked gatekeeping and networked framing. The researchers identified similar processes at play in a study of the use of Twitter by the Occupy protest movement (Papacharissi and Meraz, 2012).

There is scope here for further analysis of how processes of networked gatekeeping shape the dissemination and representation of news and information, as citizens reframe or reinterpret a message through networked platforms. Such research would help understand how far social media spaces create a terrain for negotiation where the strength of actors such as journalists and other elites is offset by crowdsourced elites. My own research is pursuing this avenue with a study on how the Idle No More

movement in Canada used social media to articulate and evolve their message via multi-vocal grassroots indigenous voices, opening up public discourse around colonialism, shared history and environmental issues. Our results indicate that while Twitter imitates and replicates existing power structures in society by elevating those with influence through mainstream media, the network creates conditions for supplanting established elites (Callison and Hermida, forthcoming).

Such approaches help to identify the diversity of actors involved in the production of news and information and provide new avenues for rethinking established practices such as sourcing. My research on Andy Carvin suggested the potential for a wider range of voices to make the news. But other work suggests that, despite the range of voices on social media, journalists fall back on professional routines in sourcing and relying on institutional and elite sources ((Broersma and Graham, 2012; Lariscy et al., 2009). Research carried out in 2010-11 by Moon and Hadley found that journalists predominantly turned to verified accounts of established figures on Twitter, concluding that "Twitter might not contribute to a decrease in source bias at all," (2014: 302).

Such results highlight questions over how influence and authority are assigned via networked platforms by engaged individuals, with the emergence of a crowdsourced elite. Understanding how influence and authority may be temporal, relational and spatial could help to inform future journalistic practices. It could help to address the deficit in sourcing when journalists cover movements that do not have specific, concise demands that can be easily reported by mainstream media, but present an open-ended, unspecified meta-narrative where participants seek to create their own meaning. Future research in what Domingo and Le Cam (2014) describe as journalism in dispersion could advance an understanding of the new paradigms of collaborative and collective newsgathering, production and management at play, facilitated by the sociotechnical dynamics of networked media.

5.2 Technological actants

The second broad area for further research addresses the growing interest in the study of digital artefacts related to aspects of modern journalism. De Maeyer and Le Cam

argue that the study of the objects of journalism is a way to "contextually define journalism by analysing the 'things' that actually populate it", (2014: 2) at a time when the boundaries of the profession are porous, perhaps even defying definition. They propose a broad definition of the objects of journalism that includes more intangible assets such as a content management system. For Anderson, "the traceability of action afforded by digital tools" (2013: 1010) offers a way of investigating their impact on the making of the news.

Such an approach builds on my work on blogging at the BBC (Hermida, 2009; 2010). The studies in this portfolio on BBC blogs examined how blogging was shaped by local contexts, actors and particular discourses around the blog as an artefact to facilitate audience participation, even if the reality was out of line with the rhetoric. But my focus was on human-centric factors such as organisational constraints and professional norms. As De Maeyer and Le Cam suggest, "focusing on objects allows us to unravel the ins and outs of the dynamics shaping news production: it provides direct insights into economic, ideological, organizational concerns," (2014: 10).

A related approach has been proposed by Lewis and Westland (2015). They argue for a greater sociotechnical emphasis in journalism studies that "acknowledges the extent to which contemporary journalism is becoming interconnected with technological tools, processes, and ways of thinking as the new organizing logics of media work," (2015: 3). Several of the works in this portfolio pay attention to the role of technology in the production of news (Hermida, 2010; 2011: 2012; Hermida, Lewis and Zamith, 2014). The work spans what Lewis and Westlund (2015) describe as the continuum of the human-technology tension.

My research on Twitter, for example, considers the platform as a technological actant that affects the actions of an individual (cf Latour, 2005). Lewis and Westlund use the term "technological actant" (2015: 1) to refer to technological elements that impinge on journalistic activities such as algorithms, content management systems and networks. As they suggest, research that addresses the norms, values and practices embedded in technological actants "better acknowledges how journalism is becoming interconnected with technological tools, processes, and ways of thinking," (2014: 15).

One growing area of research that would benefit from such an approach is Big Data and computational journalism. Computational journalism refers to forms of algorithmic, social scientific, and mathematical processes and systems for the production of news. It is the latest in a series of technological actants that have shaped journalistic work and builds on techniques of computer-assisted reporting (CAR) and the use of social science tools in journalism. In a forthcoming paper on the data desk at the *Los Angeles Times*, I chart the emergence of a new class of computational journalist and non-human journalist – algorithms that have assumed functions traditionally associated with the reporter (Young and Hermida, forthcoming). With the increasingly important role of algorithms in society (Mayer-Schonberger and Cukier 2013; Steiner 2012), there are opportunities to examine how they are structuring ways of knowing, particularly within journalism (Beer 2009; Gillespie, 2014). The application of political, economic and social as well as technological and institutional frameworks in such studies can contribute to understanding the interrelated forces underlying news work and computational journalism.

NOTES

1) Citation counts were taken from Google Scholar. Google Scholar citations are computed and updated automatically using an algorithm.

References

ABBOTT, ANDREW (1988) *The System of Professions: An Essay on the Division of Expert Labor*, Chicago: University of Chicago Press.

ALLAN, STUART (2006) *Online News*, Maidenhead: Open University Press.

ANDERSON, CHRIS W. (2013) "What Aggregators Do: Towards a Networked Concept of Journalistic Expertise in the Digital Age," *Journalism*, November 2013 14: 1008-1023, first published on June 25, 2013 doi:10.1177/1464884913492460

ANG, IEN (1985) *Watching Dallas: Soap Opera and the Melodramatic Imagination*, New York: Routledge.

ARKSEY, HILARY and KNIGHT, PETER (1999) *Interviewing for Social Scientists: An Introductory Resource with Examples,* Thousand Oaks, CA: Sage.

ARCENEAUX, NOAH and SCHMITZ WEISS, AMY (2010) "Seems Stupid Until You Try It: Press Coverage of Twitter 2006–9," *New Media & Society* ,12 (8) pp. 1262–1279. doi: 10.1177/ 1461444809360773.

ARTWICK, CLAUDETTE G. (2013) "Reporters on Twitter", *Digital Journalism* 1 (2), pp. 212–228. doi:10.1080/21670811.2012.744555.

BEER, DAVID (2009) "Power Through the Algorithm? Participatory Web Cultures and the Technological Unconscious", *New Media and Society*, 11 (6): 985-1002.

BERELSON, BERNARD (1952) *Content Analysis in Communication Research*. New York: Free Press.

BOCZKOWSKI, PABLO (2004) *Digitizing the news: Innovation in online newspapers,* Cambridge, MA: MIT Press

BØDKER, HENRIK (2014) "Journalism as Cultures of Circulation", *Digital Journalism*. Online first 10 July, 2014. doi: 10.1080/21670811.2014.928106

BARDOEL, JO and DEUZE, MARK (2001) "Network Journalism: Converging Competences of Media Professionals and Professionalism", *Australian Journalism Review* 23, pp. 91-103.

BOCZKOWSKI, PABLO (2004) *Digitizing the News: Innovation in Online Newspapers*, Cambridge, MA: MIT Press

BOOTE, DAVID. N. and BEILE, PENNY (2005) "Scholars before researchers: On the centrality of the dissertation literature review in research preparation," *Educational Researcher*, 34(6), pp. 3-15. doi:10.3102/0013189X034006003

BORGER, MEREL, VAN HOOF, ANITA, COSTERA MEIJER, IRENE and SANDERS, JOSÉ (2013) "Constructing Participatory Journalism as a Scholarly Object", *Digital Journalism*, 1:1, pp. 117-134, doi: 10.1080/21670811.2012.740267

BORN, GEORGINA (2002) "Reflexivity and Ambivalence: Culture, Creativity and Government in the BBC," *Journal for Cultural Research*, 6(1), pp. 65-90. DOI:10.1080/1362517022019000

BOYD, DANAH and ELLISON, NICOLE (2007) "Social Network Sites: definition, history, and scholarship'", *Journal of Computer-mediated Communication* 13(1), article 11, http://jcmc.indiana.edu/vol13/issue1/boyd.ellison.html.

BOWMAN, SHANE and WILLIS, CHRIS (2003) "We Media: How audiences are shaping the future of news and information", The Media Center, http://www.hypergene.net/wemedia/download/we_media.pdf (PDF), accessed 8 May, 2014

BROERSMA, MARCEL, and GRAHAM TODD (2012) "Social Media As Beat: Tweets As a News Source during the 2010 British and Dutch Elections." *Journalism Practice* 6 (3): 403–419. doi: 10.1080/17512786.2012.663626.

BROERSMA, MARCEL and PETERS, CHRIS (2013) "Introduction. Rethinking Journalism: The Structural Transformation of a Public Good", in Chris Peters and Marcel J. Broersma (eds) *Rethinking Journalism: Trust and Participation in a Transformed News Landscape*, pp. 1–12. Oxon: Routledge.

BRUNO, NICOLA (2011) "Tweet First, Verify Later? How Real-time Information is Changing the Coverage of Worldwide Crisis Events," Reuters Institute for the Study of Journalism. http://reutersinstitute.politics.ox.ac.uk/publication/tweet-first-verify-later, accessed 12 June, 2014

BRUNS, AXEL (2005). *Gatewatching: Collaborative Online News Production*. New York: Peter Lang.

BRUNS, AXEL (2011) "How Long Is a Tweet? Mapping Dynamic Conversation Networks on Twitter Using Gawk and Gephi", *Information, Communication & Society 15* (9) pp. 1323–1351. doi: 10.1080/1369118X.2011.635214.

BRUNS, AXEL and BURGESS, JEAN (2012) "Researching News Discussion on Twitter," *Journalism Studies* 13 (5–6) pp.801–814. doi:10.1080/1461670X.2012.664428.

CALLISON, CANDIS and HERMIDA, ALFRED (forthcoming) "Dissent and Resonance: #Idlenomore as an Emergent Middle Ground," *Canadian Journal of Communication*.

CHADWICK, ANDREW (2011) "The Political Information Cycle in a Hybrid News System: The British Prime Minister and the 'Bullygate' Affair", *International Journal of Press/Politics*, 16(1), pp. 3–29. DOI: 10.1177/1940161210384730

CHALABY, JEAN K (1998) *The Invention of Journalism*, London: Palgrave Macmillan.

CODDINGTON, MARK (2011) "The Week in Review," Nieman Journalism Lab, April 29, http://www.niemanlab.org/2011/04/this-week-in-review-wikileaks-forced-hand-a-patch-recruiting-push-and-two-sets-of-news-maxims/, accessed 8 May, 2014

COMBS, JULIE P. BUSTAMANTE, REBECCA M. and ONWUEGBUZIE, ANTHONY J. (2010) "A Mixed Methods Approach to Conducting Literature Reviews for Stress and Coping Researchers: An Interactive Literature Review Process Framework", in Gordon S. Gates, Walter H. Gmelch, Christine Schwarzer and Mimi Wolverton (eds.) *Toward a broader understanding of stress and coping: Mixed methods approaches*, pp. 213-241, The Research on Stress and Coping in Education Series (Vol. 5). Charlotte, NC: Information Age.

COZMA, RALUCA, and KUAN-JU CHEN (2013) "What's in a Tweet?" *Journalism Practice* 7 (1) pp.33–46. doi: 10.1080/17512786.2012.683340.

CRAWFORD, KATE (2009) "Following You: Disciplines of Listening in Social Media", *Continuum: Journal of Media & Cultural Studies* 23(40), pp. 525-35.

CURRAN, JAMES and SEATON, JEAN (2010) *Power Without Responsibility: Press, Broadcasting and the Internet in Britain*, 7th edition. Abingdon, Oxon: Routledge.

DAHLGREN, PETER (1996) Media Logic in Cyberspace: Repositioning Journalism and its Publics. *Javnost/The Public* 3 pp. 59-72.

DENZIN, NORMAN, K. and LINCOLN, YVONNA S. (Eds.) (2005) *Handbook of qualitative research* (3rd ed.). Thousand Oaks, CA: Sage.

DEUZE, MARK (2003) "The Web and Its Journalisms: Considering the Consequences of Different Types of Newsmedia Online," *Discourse & Society* 5 (2) (June 1) pp. 203– 230. doi:10.1177/1461444803005002004.

DEUZE, MARK (2005) “What is Journalism?: Professional Identity and Ideology of Journalists Reconsidered,” *Journalism*; 6, pp. 442-464 doi:10.1177/1464884905056815

DEUZE, MARK (2007) *Media Work*. Cambridge: Polity.

DEUZE, MARK, BRUNS, AXEL and NEUBERGER, CHRISTOPH (2007) “Preparing for an Age of Participatory News,” *Journalism Practice* 1(3), pp. 322-38.

DEUZE, MARK (2008) “Understanding Journalism as Newswork: How It Changes, and How It Remains the Same,” Westminster Papers in *Communication and Culture* (2), pp 4–23

DOMINGO, DAVID (2008) “Inventing Online Journalism: A Constructivist Approach to the Development of Online News,” in Chris Paterson and David Domingo (eds.) *Making Online News. The Ethnography of New Media Production*, New York: Peter Lang: pp. 15-28

DOMINGO, DAVID and LE CAM, FLORENCE (2014) “Journalism In Dispersion”, *Digital Journalism*, Online first 17 Apr 2014. doi:10.1080/21670811.2014.897832

DOMINGO, DAVID, QUANDT, THORSTEN, HEINONEN, ARI, PAULUSSEN, STEVE, SINGER, JANE B. and VUJNOVIC, MARINA (2008) “Participatory Journalism Practices in the Media and Beyond: An International Comparative Study of Initiatives in Online Newspapers”, *Journalism Practice* 2 (3): 326–342. doi:10.1080/17512780802281065

DOMINGO, DAVID, MASIP, PERE, and COSTERA MEIJER, IRENE (2014) “Tracing Digital News Networks”, *Digital Journalism*, Online first 2 July, 2014. doi:10.1080/21670811.2014.927996..

DOUGLAS, TORIN (2005) “Blogging and the BBC,” BBC News website, 26 October,

http://news.bbc.co.uk/newswatch/ukfs/hi/newsid_4280000/newsid_4286400/4286490.stm, accessed 8 May, 2014

DUBINSKI, KATE (2011) "Twitter: Little Birdie Spreads News," LFPress.com, April 29, http://www.lfpress.com/news/london/2011/04/28/18080061.html, accessed 8 May, 2014

ENLI, GUNN SARA (2008) "Redefining Public Service Broadcasting," *Convergence*, 14(1), pp. 105-120. doi: 10.1177/1354856507084422

ERICSON, RICHARD. V., BARANEK, PATRICIA. M. and CHAN, JANET B. L. (1989). *Negotiating Control: A Study of News Sources.* Milton Keynes: Open University Press.

FARHI, PAUL (2011) "NPR's Andy Carvin, Tweeting the Middle East," *The Washington Post,* 13 April. http://www.washingtonpost.com/lifestyle/style/npr-andy-carvin-tweeting-the-mid- dle-east/2011/04/06/AFcSdhSD_story.html, accessed 12 June, 2014

FISKE, JOHN (1987) *Television Culture*, New York, NY: Routledge.

FORTUNATI, LEOPOLDINA, SARRICA, MAURO, O'SULLIVAN, JOHN, BALCYTIENE, AUKSE, HARRO- LOIT, HALLIKI, MACGREGOR, PHIL, ROUSSOU, NAYIA, SALAVERRÍA, RAMÓN, and DE LUCA, FEDERICO (2009) "The Influence of the Internet on European Journalism", *Journal of Computer-Mediated Communication* 14 (4) (July), pp/928–963. doi:10.1111/j.1083-6101.2009.01476.x.

FRANKLIN, BOB, HAMER, MARTIN, HANNA, MARK, KINSEY, MARIE and RICHARDSON, JOHN E. (2005) *Key Concepts in Journalism Studies*. London: Sage.

GALTUNG, JOHAN, AND MARI H. RUGE (1965) "The Structure of Foreign News: The Presentation of the Congo, Cuba and Cyprus Crises in Four Norwegian

Newspapers," *Journal of Peace Research* 1 (2), pp. 64–91. doi:10.1177/002234336500200104

GANS, HERBERT (1979) *Deciding What's News. A Study of CBS Evening News, NBC Nightly News, Newsweek and Time*, New York: Pantheon Books.

GLASER, BARNEY and STRAUSS, ANSELM (1967) *The Discovery of Grounded Theory: Strategies for Qualitative Research Basics of Qualitative Research*, Chicago: Aldine.

GILLESPIE, TARLETON (2014) "The Relevance of Algorithms", in Tarleton Gillespie, Pablo Boczkowski, and Kirsten Foot (eds.) *Media Technologies: Essays on Communication, Materiality, and Society*, Cambridge: MIT Press: pp. 167-194

GREENE, JENNIFER C., CARACELLI, VALERIE J., & GRAHAM, WENDY F. (1989) "Toward a Conceptual Framework for Mixed-Method Evaluation Designs," *Educational Evaluation and Policy Analysis*, 11, pp. 255-274. doi:10.3102/01623737011003255

HALL, STUART, CRITCHER, CHAS, JEFFERSON, TONY, CLARKE, JOHN N. and ROBERTS, BRIAN (1978). *Policing the Crisis: Mugging, the State, and Law and Order*. London: Macmillan.

HEDMAN, ULRIKA and DJERF-PIERRE, MONIKA (2013) "The Social Journalist: Embracing the Social Media Life or Creating a New Digital Divide?" *Digital Journalism*, 1(3), pp 368-385. doi:10.1080/ 21670811.2013.776804.

HERMIDA, ALFRED (2009) "The Blogging BBC: Journalism Blogs at 'the World's Most Trusted News Organisation'," *Journalism Practice*, 3 (3) pp. 1 – 17. doi:10.1080/17512780902869082

HERMIDA, ALFRED (2010) "Twittering the news: The emergence of ambient journalism," *Journalism Practice*, 4 (3), pp. 297 – 308. doi:10.1080/17512781003640703

HERMIDA, ALFRED (2010) "Let's talk: How blogging is shaping the BBC's relationship with the public," in Garrett Monaghan and Sean Tunney (Eds.) *Web Journalism: A New Form of Citizenship*. Eastbourne: Sussex Academic Press, pp. 306 – 316

HERMIDA, ALFRED (2011) "Mechanisms of Participation: How Audience Options Shape the Conversation," in Jane B. Singer et al., *Participatory Journalism: Guarding Open Gates at Online Newspapers*, Chichester: Wiley-Blackwell: pp. 13–33

HERMIDA, ALFRED (2012) "Tweets and Truth: Journalism as a Discipline of Collaborative Verification," *Journalism Practice*, 6 (5-6), pp. 659 – 668. doi:10.1080/17512786.2012.667269

HERMIDA, ALFRED, (2013) "#Journalism: Reconfiguring Journalism Research about Twitter, One Tweet at a Time," *Digital Journalism*, 1(3), pp. 295-313. doi:10.1080/21670811.2013.808456

HERMIDA, ALFRED (2015) "Nothing But The Truth: Redrafting the Journalistic Boundary of Verification," in Carlson, Matt and Lewis, Seth (eds.) *Boundaries of Journalism*. New York: Routledge. Forthcoming.

HERMIDA, ALFRED, FLETCHER, FRED, KORRELL, DARRYL and LOGAN, DONNA (2012) "Share, Like, Recommend: Decoding the Social Media News Consumer," *Journalism Studies*, 13 (5-6), pp. 815-824. doi:10.1080/1461670X.2012.664430

HERMIDA, ALFRED and THURMAN, NEIL (2008) "A Clash of Cultures: The Integration of User-generated Content Within Professional Journalistic Frameworks at British Newspaper Websites," *Journalism Practice* 2(3), pp. 343-356. doi:10.1080/17512780802054538

HERMIDA, ALFRED, LEWIS, SETH C. and ZAMITH, RODRIGO. (2014) "Sourcing the Arab Spring: A Case Study of Andy Carvin's Sources on Twitter

During the Tunisian and Egyptian Revolutions,",*Journal of Computer-Mediated Communication***,** 19(3), pp. 479-499. doi: 10.1111/jcc4.12074

HOLSTI, OLE. R. (1969) *Content Analysis for the Social Sciences and Humanities*, Reading, MA: Addison-Wesley Publishing Company.

KARPF, DAVID (2012) "Social Science Research Methods in Internet Time. Information," *Communication & Society*, 15(5), pp. 639–661. doi:10.1080/1369118X.2012.665468

KING, NIGEL and HORROCKS, CHRISTINE (2010) *Interviews in Qualitative Research*, London: Sage Publications

KOHN, MELVIN, L. "Cross-National Research as an Analytic Strategy," in Melvin L. Kohn (ed.) *Cross-National Research in Sociology*. Newbury Park, CA: Sage, 1989:77-102.

KOVACH, BILL, and ROSENSTIEL TOM (2007) *The Elements of Journalism: What Newspeople Should Know and the Public Should Expect*. 1st rev. ed. New York: Three Rivers Press

LARISCY, RUTHANN WEAVER, JOHNSON, ELIZABETH AVERY, SWEETSER, KAYE D. and HOWES, PAULINE (2009) "An Examination of the Role of Online Social Media in Journalists' Source Mix," *Public Relations Review* 35 (3), pp. 314–316. doi: 10.1016/j.pubrev.2009.05.008.

LASORSA, DOMINIC L., LEWIS, SETH C. AND HOLTON, AVERY E. (2011) "Normalizing Twitter: Journalism Practice in an Emerging Communication Space", *Journalism Studies*, 13 (1), pp. 19-36. doi:10.1080/1461670X.2011.571825

LATOUR, BRUNO (2005) *Reassembling the Social: An Introduction to Actor-Network-Theory*. Oxford: Oxford University Press.

LEININGER, MADELEINE M. (1985) “Nature, Rationale, and Importance of Qualitative Research Methods in Nursing”, in Madeleine M. Leininger (ed.), *Qualitative research methods in nursing*, Orlando, FL: G rune & Stratton: pp. 1-26

LEWIS, SETH C. (2012) “The Tension Between Professional Control and Open Participation: Journalism and its Boundaries,” *Information, Communication & Society*, 15(6), pp. 836-866. doi:10.1080/1369118X.2012.674150

LEWIS, SETH C. (2012) “From Journalism to Information: The Transformation of the Knight Foundation and News Innovation”, *Mass Communication and Society*, *15*(3), pp. 309-334. doi:10.1080/15205436.2011.611607

LEWIS, SETH. C. and WESTLUND, OSCAR (2014) “Actors, Actants, Audiences, and Activities in Cross-media News Work: A Matrix and a Research Agenda”, *Digital Journalism*. Published online: 16 July, 2014. doi:10.1080/21670811.2014.927986

LIEVROUW, LEAH A. and LIVINGSTONE, SONIA (eds.) (2006) *Handbook of New Media*. Rev. student ed. London: Sage.

LIVINGSTONE, SONIA (2003) “On the Challenges of Cross-National Comparative Media Research,” *European Journal of Communication* 18(4), 2003: 477-500.

LLOYD, JOHN and SEATON, JEAN (2006) *What can be done? Making the media and politics better,* Oxford: Blackwell.

LOTAN, GILAD, GRAEFF, ERHARDT, ANANNY, MIKE, GAFFNEY, DEVIN, PEARCE, IAN and BOYD, DANAH (2011) “The Revolutions Were Tweeted: Information Flows During the 2011 Tunisian and Egyptian Revolutions”, *International Journal of Communication*, 5, 1375–1405.

MACHI, LAWRENCE A. and MCEVOY, BRENDA T. (2009) *The Literature Review: Six Steps to Success*, Thousand Oaks, CA: Corwin.

MASSEY, BRIAN L. and LEVY, MARK (1999) "Interactivity, Online Journalism, and English-language Web Newspapers in Asia", *Journalism & Mass Communication Quarterly* 76(1), pp. 138-51.

MAYER-SCHONBERGER, VIKTOR and CUKIER, KENNETH (2013) *Big Data: A Revolution That Will Transform How We Live, Work, and Think*, New York: Houghton Mifflin Harcourt.

MCCRAKEN, GRANT (1988) *The Long Interview*, Newbury Park, CA: Sage.

MCMILLAN, SALLY. J. (2000) "The Microscope and the Moving Target: The Challenge of Applying Content Analysis to the World Wide Web. *Journalism & Mass Communication Quarterly*, 77(1), pp. 80–98. doi:10.1177/107769900007700107

MERAZ, SHARON and PAPACHARISSI, ZIZI (2013) "Networked Gatekeeping and Networked Framing on #egypt", *International Journal of the Press and Politics* 18 (2) pp 1–29. doi:10.1177/ 194016121247447.

MITCHELSTEIN, EUGENIA and BOCZKOWSKI, PABLO J. (2009. "Between Tradition and Change: A Review of Recent Research on Online News Production." *Journalism* 10 (5) pp. 562–586. doi:10.1177/1464884909106533.

MOON, SOO JUNG and HADLEY, PATRICK (2014) "Routinizing a New Technology in the Newsroom: Twitter as a News Source in Mainstream Media," *Journal of Broadcasting & Electronic Media*, 58 (2) pp.289-305, doi:10.1080/08838151.2014.906435

NAPOLI, PHILIP M. (2011) *Audience Evolution: New Technologies and The Transformation of Media Audiences*, New York: Columbia University Press

NEWMAN, NIC (2009) "The Rise of Social Media and Its Impact on Mainstream Journalism", Reuters Institute for the Study of Journalism, University of Oxford, http://reutersinstitute.politics.ox.ac.uk/publication/rise-social-media-and-its-impact-mainstream-journalism, accessed 10 May, 2014

OLMSTEAD, KENNY, MITCHELL, AMY and ROSENSTIEL, TOM (2011) "Navigating News Online: Here People Go, How They Get There and What Lures Them Away," Pew Research Center's Project for Excellence in Journalism, 9 May, http://www.journalism.org/2011/05/09/navigating-news-online/, accessed 10 May, 2014

ONWUEGBUZIE, ANTHONY. J., COLLINS, KATHLEEN. M. T., LEECH, NANCY. L., DELLINGER, AMY B., and JIAO, QUN G. (2010) "A Meta-Framework for Conducting Mixed Research Syntheses for Stress and Coping Researchers and Beyond," in Gordon S. Gates, Walter H. Gmelch, Christine Schwarzer and Mimi Wolverton (eds.) *Toward a broader understanding of stress and coping: Mixed methods approaches* (pp. 169-211). The Research on Stress and Coping in Education Series (Vol. 5). Charlotte, NC: Information Age.

ONWUEGBUZIE, ANTHONY J., LEECH, NANCY, L. and COLLINS, KATHLEEN, M. T. (2012) "Qualitative Analysis Techniques for the Review of the Literature," *The Qualitative* Report, 17(56), pp. 1-28

ORIHEULA, JOSÉ LUIS (2011) "Medios Mas Cercanos a la Gente," ABC.es, 9 May, cached copy http://webcache.googleusercontent.com/search?q=cache:QdFCHEgyjUEJ:www.abc.es/blogs/jose-luis-orihuela/public/post/medios-mas-cercanos-a-la-gente-8803.asp, accessed 12 May 2014

ORLIKOWSKI W. J. and BAROUDI, J. J. (1991) "Studying Information Technology in Organizations: Research Approaches and Assumptions," *Information Systems Research* 2(1), pp. 1–28

PATTERSON, CHRIS and DOMINGO, DAVID (eds,) (2008) *Making Online News*, Berlin: Peter Lang.

PAPACHARISSI, ZIZI and DE FATIMA OLIVEIRA, MARIA (2012) "Affective News and Networked Publics: The Rhythms of News Storytelling on #Egypt",

Journal of Communication, 62(2), pp. 266–282. doi:10.1111/j.1460-2466.2012.01630.x

PAPACHARISSI, ZIZI and MERAZ, SHARON (2012) "The Rhythms of Occupy: Broadcasting and Listening Practices on #ows", Paper presented at the Association of Internet Researchers conference, Salford, 19 October.

PARELES, JON (2006) "2006, Brought to You by You", *New York Times*, 10 December, http://www.nytimes.com/2006/12/10/arts/music/10pare.html, accessed 3 July, 2014.

PARISER, ELI (2011) *The Filter Bubble*, London: Penguin Books.

PEW RESEARCH (2010) "Global Publics Embrace Social Networking," Pew Research Center, 15 December, http://www.pewglobal.org/2010/12/15/global-publics-embrace-social-networking/, accessed 10 May, 2014.

POSTMAN, NEIL (1992) *Technopoly: The Surrender of Culture to Technology*. New York: Vintage Books

PUSCHMANN, CORNELIUS, BRUNS, AXEL, MAHRT, MERJA, WELLER, KATRIN and BURGESS, JEAN (2014) "Why Study Twitter?" in Cornelius Puschmann, Axel Bruns, Merja Mahrt, Katrin Weller, and Jean Burgess (eds.) *Twitter and Society*, New York: Peter Lang.

PURCELL, KRISTEN, RAINIE, LEE, MITCHELL, AMY, ROSENSTIEL, TOM and OLMSTEAD, KENNY (2010) "Understanding the Participatory News Consumer," Pew Internet and American Life Project, 1 March, http://www.pewinternet.org/Reports/2010/Online-News.aspx, accessed 10 May, 2014.

PRINSLOO, MASTIN (2005) "The New Literacies as Placed Resources," *Perspectives in Education* 2 (4): 87–98

RIFFE, DANIEL, LACY, STEPHEN, and FICO, FREDERICK (2005) *Analyzing Media Messages: Using Quantitative Content Analysis in Research* (2nd ed.). Mahwah, NJ: Lawrence Erlbaum Associates

ROBINSON, SUSAN (2006) "The Mission of the J-Blog: Recapturing Journalistic Authority Online," *Journalism* 7(1), pp. 65-83

ROBINSON, SUE (2007) '"Someone's Gotta Be In Control Here': The Institutionalization of Online News and the Creation of a Shared Journalistic Authority," *Journalism Practice* 1 (3), pp. 305-321. doi:10.1080/17512780701504856

RYFE, DAVID M. (2009) "Broader and Deeper: A Study of Newsroom Culture in a Time of Change" *Journalism* 10 (2), pp. 197–216. doi:10.1177/1464884908100601

SCHUDSON, MICHAEL (2003) *The Sociology of News*, New York: W. W. Norton

SCHUDSON, MICHAEL and ANDERSON, CHRIS (2009) "News Production and Organizations: Professionalism, Objectivity and Truth-seeking," in: Karin Wahl-Jorgensen and Thomas Hanitzsch (eds), *The Handbook of Journalism Studies*, New York: Lawrence Erlbaum, Routledge, pp. 88-101

SCHWANDT, THOMAS A. (2007) *Sage Dictionary of Qualitative Inquiry* (3rd ed.). Thousand Oaks, CA: Sage

SCOTT, WILLIAM A. (1955) "Reliability of Content Analysis: The Case of Nominal Scale Coding," *Public Opinion Quarterly*, 19(3), pp. 321–325. doi:10.1086/266577

SHAPIRO, IVOR, BRIN, COLETTE, BÉDARD-BRÛLÉ, ISABELLE and MYCHAJLOWYCZ, KASIA (2013) "Verification as a Strategic Ritual: How Journalists Retrospectively Describe Processes for Ensuring Accuracy," *Journalism Practice*, 7(6) pp. 657–673. doi:10.1080/17512786.2013.76 5638.

SHAW, GILLIAN (2011) "UBC study finds social media is the new news filter for Canada," *The Vancouver Sun*, 28 April, http://blogs.vancouversun.com/2011/04/28/ubc-study-finds-social-media-news-filter-of-choice-for-canadians/, accessed 9 May, 2014

SHEFFER, MARY LOUR and SCHULTZ, BRAD (2010) "Paradigm Shift or Passing Fad? Twitter and Sports Journalism," *International Journal of Sport Communication* 3(4) pp. 472–484.

SHOEMAKER, PAMELA. J. (1991). *Gatekeeping*. Newbury Park: Sage.

SHOEMAKER, PAMELA. J. AND VOS, TIM P. (2009). *Gatekeeping Theory*. New York: Routledge.

SIGAL, LEON (1973) *Reporters and Officials: The Organisation and Politics of Newsmaking*, London: Heath.

SINGER, JANE (1998) "Online Journalists: Foundation for Research into their Changing Roles," *Journal of Computer-Mediated Communication* 4(1). doi: 10.1111/j.1083-6101.1998.tb00088.x

SINGER, JANE B. (2004) "Strange Bedfellows? The Diffusion of Convergence in Four News Organizations," *Journalism Studies* 5(1) pp. 3-18

SINGER, JANE (2005) "The Political J-Blogger: 'normalising' a new media form to fit old norms and practices," *Journalism* 6(2), pp. 173-98.

SINGER, JANE B., HERMIDA, ALFRED, DOMINGO, DAVID, HEINONEN, ARI, PAULUSSEN, STEVE, QUANDT, THORSTEN, REICH, ZVI and VUJNOVIC, MARINA (2011) *Participatory Journalism. Guarding Open Gates at Online Newspapers,* Chichester, West Sussex: Wiley-Blackwell.

SILVERMAN, CRAIG (2011) "Is This the World's Best Twitter Account?" *Columbia Journalism Review*, 8 April,

http://www.cjr.org/behind_the_news/is_this_the_worlds_best_twitter_account.php, accessed 9 May, 2014

SMITH, AARON and RAINIE, LEE (2010) "8% of Online Americans Use Twitter," Pew Internet, 9 December, http://pewinternet.org/Reports/2010/Twitter-update-2010.aspx, accessed 10 May, 2014

SONDERMAN, JEFF (2011) "NPR's Andy Carvin Tweets 1,200 Times Over Weekend as Rebel Forces Overtake Tripoli," Poynter, 22 August. http://www.poynter.org/latest-news/mediawire/143580/nprs-andy-carvin-tweets-1200-times-over-weekend-as-rebel-forces- overtake-tripoli/, accessed 10 May, 2014

STEENSEN, STEEN and AHVA, LAURA (2014) "Theories of Journalism in a Digital Age", *Digital Journalism*, Online first 10 July, 2014. doi:10.1080/21670811.2014.927984

STEINER, CHRISTOPHER (2012) *Automate This: How Algorithms Came to Rule Our World*, New York: Portfolio

STEUER, JONATHAN (1992) "Defining Virtual Reality: Dimensions Determining Telepresence," *Journal of Communication*, 42(4), pp. 73-93

TUCHMAN, GAYE (1978) *Making News. A Study in the Construction of Reality*. New York: Free Press

THURMAN, NEIL (2008) "Forums for Citizen Journalists?: Adoption of User Generated Content Initiatives by Online News Media", *New Media & Society* 10(1), pp. 139-57. doi:10.1177/1461444807085325

THURMAN, NEIL and WALTERS, ANNA (2013) "Live Blogging - Digital Journalism's Pivotal Platform? A Case Study of the Production, Consumption, and Form of Live Blogs at Guardian.co.uk," *Digital Journalism* 1(1), pp. 82-101. doi:10.1080/21670811.2012.714935

VIS, FARIDA (2013) "Twitter As a Reporting Tool for Breaking News," *Digital Journalism*, 1 (1), pp. 27–47. doi:10.1080/21670811.2012.741316

WAHL-JORGENSEN, KARIN and FRANKLIN, BOB (2008) "Journalism Research in the UK: From Isolated Efforts to an Established Discipline," in Martin Löffelholz and David Weaver (eds.) *Global Journalism Research: Theories, Methods, Findings, Future*, Malden MA: Blackwell Publishing: pp. 172–184

WALSHAM GEOFF (1993) *Interpreting Information Systems in Organizations*. Wiley, Chichester

WEARE, CHRISTOPHER and LIN, WAN-YING (2000) "Content Analysis of the World Wide Web Opportunities and Challenges",*Social Science Computer Review*, 18(3), pp. 272–292. doi:10.1177/089443930001800304

WEAVER, DAVID (1998) *The Global Journalist: News People Around the World*, Cresskill, New Jersey: Hampton Press

WEAVER, DAVID and LÖFFELHOLZ, MARTIN (2008) "Global Journalism Research: Summing Up and Looking Ahead," in Martin Löffelholz and David Weaver (eds.) *Global Journalism Research: Theories, Methods, Findings, Future*, Malden MA: Blackwell Publishing: pp. 285–294

WENDLAND, MIKE (2003) "Blogging Connects a Columnist to Story Ideas," Nieman Reports 57(3), http://www.nieman.harvard.edu/reports/article/101102/Blogging-Connects-a-Columnist-to-New-Story-Ideas.aspx, accessed 12 May, 2014

WHITE, DAVID M. (1950) "The Gatekeeper: A Case Study in the Selection of News." *Journalism Quarterly* 27 (3): 383–390

YIN, ROBERT (1984) *Case Study Research: designs and methods*, Beverly Hills, CA: Sage

YOUNG, MARY LYNN AND HERMIDA, ALFRED (forthcoming) “From Mr and Mrs Outlier to Central Tendencies: Computational journalism and crime reporting at the Los Angeles Times,” *Digital Journalism*.

ZELIZER, BARBIE (1992) *Covering the Body: the Kennedy assassination, the media, and the shaping of collective memory*, Chicago: University of Chicago Press

ZELIZER, BARBIE (2000) “What is Journalism Studies?” *Journalism* 1 (1), pp. 9–12. doi: 10.1177/146488490000100102

ZELIZER, BARBIE (2004) *Taking journalism seriously: News and the academy*. London: Sage

ZELIZER, BARBIE (2009) “Journalism and the Academy,” in *The Handbook of Journalism Studies*, edited by Karin Wahl-Jorgensen and Thomas Hanitzsch, 29–41. New York: Routledge

Portfolio of Published Work

The published work is presented in chronological order of publication. The papers' original page numbers have been retained and new page numbers added—bottom centre—in order that the page numbers of this thesis are uninterrupted.

Hermida, Alfred and Neil Thurman. (2008) "A clash of cultures: The integration of user-generated content within a professional journalistic framework at British newspaper websites." Journalism Practice. 2 (3): 343-356. Reprinted in The Future of Newspapers, Franklin, Bob (Ed.), Routledge, 2009.

Hermida, Alfred. (2009) "The blogging BBC: Journalism blogs at 'the world's most trusted news organisation'," *Journalism Pra*ctice, 3 (3): 1-17.

Hermida, Alfred. (2010) "Let's talk: How blogging is shaping the BBC's relationship with the public," in Garrett Monaghan and Sean Tunney (Eds.) Web *Journalism: A New Form of Citizenship*. Eastbourne: Sussex Academic Press. 306-316

Hermida, Alfred. (2010) "Twittering the news: The emergence of ambient journalism." *Journalism Practice*. 4 (3), 297 – 308.

Hermida, Alfred. (2011) "Mechanisms of participation: How audience options shape the conversation," in Singer, Jane B., Alfred Hermida, David Domingo, Ari Heinonen, Steve Paulussen, Thorsten Quandt, Zvi Reich, Marina Vujnovic.

Participatory Journalism: Guarding Open Gates at Online Newspapers. New York: Wiley-Blackwell. 21-49.

Hermida, Alfred, Fred Fletcher, Darryl Korrell and Donna Logan (2012) "Share, Like, Recommend: Decoding the Social Media News Consumer." *Journalism Studies*, 13 (5-6), 815 – 824.

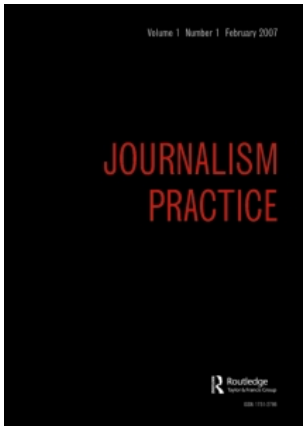
Hermida, Alfred (2012) "Tweets and Truth: Journalism as a Discipline of Collaborative Verification." *Journalism Practice*, 6 (5-6), 659 – 668.

Hermida, Alfred, (2013) "#Journalism: Reconfiguring Journalism Research about Twitter, One Tweet at a Time," *Digital Journalism*, 1(3), 295-313.

Lewis, Seth C., Rodrigo Zamith and Alfred Hermida, (2013) "Content Analysis in an Era of Big Data: A Hybrid Approach to Computational and Manual Methods," *Journal of Broadcasting & Electronic Media*, 57 (1), 34-52.

Hermida, Alfred, Seth C. Lewis and Rodrigo Zamith (2014) "Sourcing the Arab Spring: A Case Study of Andy Carvin's Sources on Twitter During the Tunisian and Egyptian Revolutions," *Journal of Computer-Mediated Communication,* 19(3), 479-499.

This article was downloaded by: *[University Of British Columbia]*
On: *29 September 2010*
Access details: *Access Details: [subscription number 917249060]*
Publisher *Routledge*
Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



Journalism Practice
Publication details, including instructions for authors and subscription information:
http://www.informaworld.com/smpp/title~content=t762290976

A CLASH OF CULTURES

Alfred Hermida; Neil Thurman

To cite this Article Hermida, Alfred and Thurman, Neil(2008) 'A CLASH OF CULTURES', Journalism Practice, 2: 3, 343 — 356
To link to this Article: DOI: 10.1080/17512780802054538
URL: http://dx.doi.org/10.1080/17512780802054538

PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: http://www.informaworld.com/terms-and-conditions-of-access.pdf

This article may be used for research, teaching and private study purposes. Any substantial or systematic reproduction, re-distribution, re-selling, loan or sub-licensing, systematic supply or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

A CLASH OF CULTURES
The integration of user-generated content within professional journalistic frameworks at British newspaper websites

Alfred Hermida and **Neil Thurman**

Downloaded By: [University Of British Columbia] At: 21:20 29 September 2010

This study examines how national UK newspaper websites are integrating user-generated content (UGC). A survey quantifying the adoption of UGC by mainstream news organisations showed a dramatic increase in the opportunities for contributions from readers. In-depth interviews with senior news executives revealed this expansion is taking place despite residual doubts about the editorial and commercial value of material from the public. The study identified a shift towards the use of moderation due to editors' persistent concerns about reputation, trust, and legal liabilities, indicating that UK newspaper websites are adopting a traditional gate-keeping role towards UGC. The findings suggest a gate-keeping approach may offer a model for the integration of UGC, with professional news organisations providing editorial structures to bring different voices into their news reporting, filtering and aggregating UGC in ways they believe to be useful and valuable to their audience. While this research looked at UGC initiatives in the context of the UK newspaper industry, it has broad relevance as professional journalists tend to share a similar set of norms. The British experience offers valuable lessons for news executives making their first forays into this area and for academics studying the field of participatory journalism.

KEYWORDS blogs; British newspaper websites; citizen journalism; online journalism; participatory journalism; user-generated content

Introduction

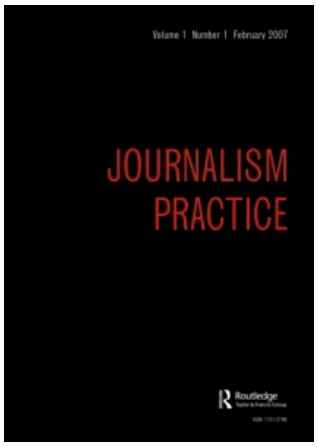
The Internet is increasingly being defined by new digital technologies that empower users to develop, create, rate, and distribute Internet content and applications (O'Reilly, 2005). Websites such as YouTube, MySpace, and Wikipedia provide platforms for so-called user-generated content (UGC), where citizens can publish their own comments, photos, videos, and more online. According to Paul Saffo (quoted in the *Economist*, 2006), in this new media culture the public is no longer a passive consumer of media, but an active participant in the creation of the media landscape.

2006 saw the purchase of MySpace by Rupert Murdoch's News Corporation for US$580 million and Google's acquisition of YouTube for US$1.65 billion, leading some commentators to state that UGC was the "paramount cultural buzz phrase of 2006" (Pareles, 2006). Indeed, such quantitative evidence as exists does seem to show that websites based on user participation generate significantly more usage than sites not based on this concept.[1]

The response of the British public to the 7 July 2005 underground and bus bombings in London showed how visitors to online news sites were ready and willing to

Journalism Practice, Vol. 2, No 3, 2008
ISSN 1751-2786 print/1751-2794 online/08/030343-14
© 2008 Taylor & Francis DOI: 10.1080/17512780802054538

This article was downloaded by: *[University Of British Columbia]*
On: *29 September 2010*
Access details: *Access Details: [subscription number 917249060]*
Publisher *Routledge*
Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



Journalism Practice
Publication details, including instructions for authors and subscription information:
http://www.informaworld.com/smpp/title~content=t762290976

THE BLOGGING BBC

Alfred Hermida

First published on: 27 May 2009

To cite this Article Hermida, Alfred(2009) 'THE BLOGGING BBC', Journalism Practice, 3: 3,, First published on: 27 May 2009 (iFirst)
To link to this Article: DOI: 10.1080/17512780902869082
URL: http://dx.doi.org/10.1080/17512780902869082

PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: http://www.informaworld.com/terms-and-conditions-of-access.pdf

This article may be used for research, teaching and private study purposes. Any substantial or systematic reproduction, re-distribution, re-selling, loan or sub-licensing, systematic supply or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

THE BLOGGING BBC
Journalism blogs at ''the world's most trusted news organisation''

Alfred Hermida

Blogging has shifted from an activity largely taking place outside established media to a practice appropriated by professional journalists. This study explores how BBC News has incorporated blogging in its journalism, looking at the internal debates that led to the adoption of blogs and charting how they became a core part of the corporation's news output. Using a case study approach, it examines the impact of blogging on BBC editorial values and considers how journalists have sought to maintain their authority in a digital media environment by integrating a new form of journalism within existing norms and practices. The BBC offers a unique case study as its long-standing editorial values of accuracy, impartiality and fairness appear at odds with the notion of blogs as immediate, uncensored and unmediated. The research reveals that blogs emerged initially as an activity peripheral to the main newsgathering functions of the organisation and were rapidly transformed into key mechanisms for communicating analysis and commentary to the public. It contends that, for now, blogging has had a greater impact on the style, rather than substance, of BBC journalism. While the systems whereby journalists deliver information have evolved, the attitudes and approaches have, so far, remained relatively static.

KEYWORDS BBC; blogs; journalism; online; professional practices; public service broadcasting

Downloaded By: [University Of British Columbia] At: 21:20 29 September 2010

Introduction

The BBC has long enjoyed a privileged position in the mainstream mediascape for its adherence to the highest ideals of truthful, objective and fair journalism. It is, according to its mission statement, ''the world's most trusted news organisation: independent, impartial and honest'' (BBC, 2005a). Notwithstanding its rapid adoption of blogging over the past four years and the fact that an economics blog by a senior editor in October 2008 broke one of the biggest media stories on the 2008 financial crisis, this notion of the BBC's news values prevails. This, despite the fact that blogging is challenging the authority of the BBC's traditional news norms and practices by integrating unmediated, subjective commentary in its traditional news. Indeed, some commentators question whether the BBC should let its reporters blog as ''its form chips away at the corporation's remit to be objective and neutral'' (Glover, 2008), with suggestions that blogging was ''very dangerous territory for the Beeb'' (Londoner's Diary, 2008).

The hyperbole reached its height in October 2008 when a blog posting by BBC economics editor Robert Peston revealed that the UK's leading banks were seeking a government bailout: ''The Gang of Three of Barclays, RBS and Lloyds TSB told Darling to pull his finger out and finalise whatever it is he's eventually prepared to offer on taxpayers' behalf'' (Peston, 2008). The news shook the UK financial markets, wiping millions off the value of the banks. The posting led some commentators to speculate whether ''we've

Journalism Practice, 2009, iFirst Article, 1–17
ISSN 1751-2786 print/1751-2794 online
© 2009 Taylor & Francis DOI: 10.1080/17512780902869082

Let's talk: How blogging is shaping the BBC's relationship with the public

Alfred Hermida

In Garrett Monaghan and Sean Tunney (Eds.) *Web Journalism: A New Form of Citizenship*, Sussex Academic Press.

Introduction

Auntie, as the BBC is affectionately known, has been Britain's national instrument of broadcasting since its creation in the 1920s (Blumler 1992). Over its 80-year history, it has earned "a place in hearts and minds of British viewers and listeners by being a great cultural institution, a patron and purveyor of information, education and popular entertainment" (Grade, quoted in Barnett & Curry 1994: 5). Yet it has grappled with the issue of accountability. This chapter examines how the world's largest journalism organisation, BBC News, has sought to incorporate blogging as a platform for greater accountability and transparency. This research spans seven years, from 2001 to 2008, when the BBC came under intense scrutiny over its editorial and ethical standards. After a period of experimentation with elements of blogging and an internal debate over the role of blogging in its journalism, the BBC launched its first blog in December 2005. Within a year, the number of blogs across the corporation had risen to 50 (Hamman 2006).

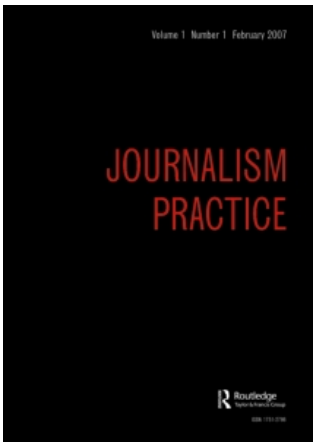
The role of blogs

Blogs are of particular interest to researchers in the field of online journalism, as they are unique to the web and provide an example of how the established media adapts to a new context (Matheson 2004). While blogging developed largely outside the mainstream, traditional media has increasingly adopted the blog format. Research shows that 95 percent of the top 100 newspapers in the United States offered at least one reporter blog in 2007, up from 80 percent in 2006 (Duran 2007). There has been a similar expansion of blogging in the British news media, with the number of blogs at the leading newspaper websites jumping to 118 in 2006 from seven in 2005 (Hermida & Thurman 2008).

Scholars contend that new media technologies such as blogs have the potential to change the way news is covered and reported (Barnhurst and Nerone 2001; Singer 2001). Advocates argue that bloggers are changing journalism by adopting a more conversational and decentralised form of news **(**Delwiche 2005; Sullivan 2004) and offering multiple, subjective perspectives in contrast to the institutional nature of news (Bruns 2005; Gallo 2004; Hass 2005). Scholars have begun to contend that new forms of journalism could emerge online (Landow 1997; Murray 1997, Wall 2005). Some, like Gillmor (2004), have suggested that blogging can alter the nature of the relationship between journalists and audiences by creating a conversation between them. Scholars contend that transparency between the news industry and the audience can lead to a more equal and communicative relationship between the two (Andrews 2003; Singer 2003).

Blogs have been described as "evidence of journalism's attempts to rethink its values and relations with its publics" (Matheson 2004: 462). Historically, journalists have been reticent about letting the public see the inner workings of the profession, while, at the same time, holding others to account. There is some evidence to suggest that the mainstream media is experimenting with the blog format as a way of providing an insight into internal editorial discussions (Glaser 2004). However there are also indications that established media are seeking to normalise this emergent format within existing practices. Singer (2005) suggests that journalists are normalising blogs by maintaining a traditional gatekeeper function, while others consider that "news organisations may be more

This article was downloaded by: *[University Of British Columbia]*
On: *29 September 2010*
Access details: *Access Details: [subscription number 917249060]*
Publisher *Routledge*
Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



Journalism Practice
Publication details, including instructions for authors and subscription information:
http://www.informaworld.com/smpp/title~content=t762290976

TWITTERING THE NEWS

Alfred Hermida

First published on: 08 July 2010

To cite this Article Hermida, Alfred(2010) 'TWITTERING THE NEWS', Journalism Practice, 4: 3, 297 — 308, First published on: 08 July 2010 (iFirst)
To link to this Article: DOI: 10.1080/17512781003640703
URL: http://dx.doi.org/10.1080/17512781003640703

PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: http://www.informaworld.com/terms-and-conditions-of-access.pdf

This article may be used for research, teaching and private study purposes. Any substantial or systematic reproduction, re-distribution, re-selling, loan or sub-licensing, systematic supply or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

TWITTERING THE NEWS
The emergence of ambient journalism

Alfred Hermida

This paper examines new para-journalism forms such as micro-blogging as "awareness systems" that provide journalists with more complex ways of understanding and reporting on the subtleties of public communication. Traditional journalism defines fact as information and quotes from official sources, which have been identified as forming the vast majority of news and information content. This model of news is in flux, however, as new social media technologies such as Twitter facilitate the instant, online dissemination of short fragments of information from a variety of official and unofficial sources. This paper draws from computer science literature to suggest that these broad, asynchronous, lightweight and always-on systems are enabling citizens to maintain a mental model of news and events around them, giving rise to awareness systems that the paper describes as ambient journalism. The emergence of ambient journalism brought about by the use of these new digital delivery systems and evolving communications protocols raises significant research questions for journalism scholars and professionals. This research offers an initial exploration of the impact of awareness systems on journalism norms and practices. It suggests that one of the future directions for journalism may be to develop approaches and systems that help the public negotiate and regulate the flow of awareness information, facilitating the collection and transmission of news.

KEYWORDS awareness systems; Internet; journalism; micro-blogging; social media; Twitter

Downloaded By: [University Of British Columbia] At: 21:20 29 September 2010

Introduction

Twitter is one of a range of new social media technologies that allow for the online and instant dissemination of short fragments of data from a variety of official and unofficial sources. The micro-blogging service emerged as a platform to help organize and disseminate information during major events like the 2008 California wildfires, the 2008 US presidential elections, the Mumbai attacks and the Iranian election protests of 2009 (Lenhard and Fox, 2009). Twitter's emergence as a significant form of communication was reflected in the request by the US State Department asking Twitter to delay routine maintenance during the Iranian poll as the service was an important tool used by Iranians to coordinate protests (Shiels, 2009). Media restrictions led websites of *The New York Times*, the *Guardian* and others to publish a mix of unverified accounts from social media as "amateur videos and eyewitness accounts became the de facto source for information" (Stelter, 2009).

The micro-blogging service illustrates what Hayek described years before the invention of the Internet as "the knowledge of particular circumstances of time and place" (1945, p. 519). He proposed that ignorance could be conquered, "not by the acquisition of more knowledge, but by the utilisation of knowledge which is and remains widely dispersed among individuals" (Hayek, 1979, p. 15). At that time, he could not have predicted the development of a system that has created new modes of organising

Journalism Practice, Vol. 4, No 3, 2010, 297–308
ISSN 1751-2786 print/1751-2794 online
© 2010 Taylor & Francis DOI: 10.1080/17512781003640703

2

Mechanisms of Participation

How audience options shape the conversation

Alfred Hermida

Reader participation in journalism has a long history. It dates at least to eighteenth-century England, when newspapers regularly left space at the end of the third page for reader comments, with a blank fourth page so that the paper might be folded and addressed like an ordinary letter (Wiles 1965). Readers of newspapers such as *The Evening General-Post* were able to add their own observations – complete with spelling and grammatical mistakes, erroneous facts and inane comments – before sending the paper on to friends or relatives; indeed, a copy of the *General-Post* kept at Oxford University includes a long hand-written letter in unprinted space on page 3.

The first newspaper in the American colonies adopted a similar approach. Benjamin Harris' *Publick Occurrences* was printed on three pages, with the fourth page blank so readers could add their own news before passing it on to someone else (Martin and Hansen 1998). The *Publick Occurrences*' experiment in reader participation was short-lived, however, as was the paper itself: After the first issue appeared on September 25, 1690, British authorities shut the publication down because Harris lacked the required license.

These early forays into enabling readers to contribute to the newspaper after it was published came to an end with the professionalization of journalism.

Participatory Journalism: Guarding Open Gates at Online Newspapers, First Edition.
Jane B. Singer, Alfred Hermida, David Domingo, Ari Heinonen, Steve Paulussen, Thorsten Quandt, Zvi Reich, and Marina Vujnovic.
© 2011 Jane B. Singer, Alfred Hermida, David Domingo, Ari Heinonen, Steve Paulussen, Thorsten Quandt, Zvi Reich, and Marina Vujnovic. Published 2011 by Blackwell Publishing Ltd.

This article was downloaded by: [The University of British Columbia]
On: 23 October 2012, At: 14:44
Publisher: Routledge
Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK

Journalism Studies
Publication details, including instructions for authors and subscription information:
http://www.tandfonline.com/loi/rjos20

SHARE, LIKE, RECOMMEND

Alfred Hermida, Fred Fletcher, Darryl Korell & Donna Logan

Version of record first published: 22 Mar 2012.

To cite this article: Alfred Hermida, Fred Fletcher, Darryl Korell & Donna Logan (2012): SHARE, LIKE, RECOMMEND, Journalism Studies, 13:5-6, 815-824

To link to this article: http://dx.doi.org/10.1080/1461670X.2012.664430

PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: http://www.tandfonline.com/page/terms-and-conditions

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae, and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand, or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

SHARE, LIKE, RECOMMEND
Decoding the social media news consumer

Alfred Hermida, Fred Fletcher, Darryl Korell, and **Donna Logan**

This study examines the impact of social media spaces on news consumption, based on an online survey of 1600 Canadians. News organizations are rushing into social media, viewing services like Facebook and Twitter as opportunities to market and distribute content. There has been limited research outside the United States into the effects of social media on news consumption. Our study found that social networks are becoming a significant source of news for Canadians. Two-fifths of social networking users said they receive news from people they follow on services like Facebook, while a fifth get news from news organizations and individual journalists they follow. Users said they valued social media because it helped them keep up with events and exposed them to a wider range of news and information. While social interaction has always affected the dissemination of news, our study contributes to research that suggests social media are becoming central to the way people experience news. Networked media technologies are extending the ability of users to create and receive personalized news streams. Investigating how networked publics are reframing the news and shaping news flows would contribute to our understanding of the evolving relationship between the journalist and the audience.

KEYWORDS Canada; Facebook; journalism; social media; social networks; Twitter

Downloaded by [The University of British Columbia] at 14:44 23 October 2012

Introduction

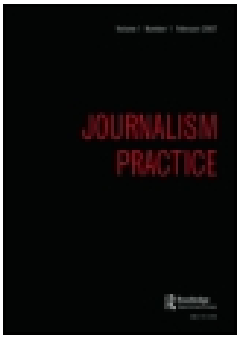
Social networking has become a ''global phenomenon'' (Pew, 2010, p. 1). In countries such as the United States, Poland, the United Kingdom and South Korea, almost half of adults say they use social networking sites (Pew, 2010). Media organizations have embraced social media as a way to distribute news and connect with audiences, providing a range of mechanisms for users to share and recommend news content (Singer et al., 2011), and individual journalists have incorporated social media into daily routines as a way to share content, develop relationships and build community (Farhi, 2009).

Much of the research into the impact of social media on news flows and media consumption has focused on how mainstream media are responding to changes in technology, consumer preferences, and cultural habits (Harrison and Barthel, 2009; Hermida and Thurman, 2008; Newman, 2009; Singer et al., 2011). There are also scholarly studies about how journalism practices are being influenced by social media platforms such as Twitter (Hermida, 2010; Holton and Lewis, 2011; Lasorsa et al., 2012). Yet surveys suggest that for a growing number of citizens, sharing and discussing news takes place through social media (Purcell et al., 2010). Olmstead et al. suggest that ''if searching for news was the most important development of the last decade, sharing news may be among the most important of the next'' (2011, p. 10).

This paper looks at how social media are affecting the flow of news and information, based on a survey of online Canadians that examined the interaction between audiences, social media and the news. Our findings indicate that a significant number of social media

Journalism Studies, Vol. 13, Nos 5–6, 2012, 815–824
ISSN 1461-670X print/1469-9699 online
© 2012 Taylor & Francis http://dx.doi.org/10.1080/1461670X.2012.664430

This article was downloaded by: [Professor Alfred Hermida]
On: 11 April 2012, At: 13:24
Publisher: Routledge
Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



Journalism Practice
Publication details, including instructions for authors and subscription information:
http://www.tandfonline.com/loi/rjop20

TWEETS AND TRUTH

Alfred Hermida

Available online: 27 Mar 2012

To cite this article: Alfred Hermida (2012): TWEETS AND TRUTH, Journalism Practice, DOI:10.1080/17512786.2012.667269

To link to this article: http://dx.doi.org/10.1080/17512786.2012.667269

PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: http://www.tandfonline.com/page/terms-and-conditions

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae, and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand, or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

TWEETS AND TRUTH
Journalism as a discipline of collaborative verification

Alfred Hermida

This paper examines how social media are influencing the core journalistic value of verification. Through the discipline of verification, the journalist establishes jurisdiction over the ability to objectively parse reality to claim a special kind of authority and status. Social media question the individualistic, top-down ideology of traditional journalism. The paper considers journalism practices as a set of literacies, drawing on the theoretical framework of new literacies to examine the shift from a focus on individual intelligence, where expertise and authority are located in individuals and institutions, to a focus on collective intelligence where expertise and authority are distributed and networked. It explores how news organizations are negotiating the tensions inherent in a transition to a digital, networked media environment, considering how journalism is evolving into a tentative and iterative process where contested accounts are examined and evaluated in public in real-time.

KEYWORDS journalism; professional identity; social media; Twitter; verification

Downloaded by [Professor Alfred Hermida] at 13:24 11 April 2012

Introduction

Facts, truth and reality are what Zelizer (2004) describes as the ''god terms'' in journalism. As a profession, journalists have established their jurisdictional authority to claim them. The discipline of verification is at the core of this structural claim to statement of authority, setting journalism apart from other forms of communication. This paper discusses how socialized or communalized media (Jenkins, 2006) are reshaping the discipline of verification in journalism. Through the discipline of verification, journalists determine the truth, accuracy, or validity of news events, establishing jurisdiction over the ability to objectively parse reality to claim a special kind of authority and status. Social media question the individualistic, top-down ideology of traditional journalism, subverting journalism's claim to a monopoly on the provision of everyday public knowledge.

Digital media technologies such as Twitter facilitate the instant, online dissemination and reception of short fragments of information from sources outside the formal structures of journalism. Open, networked digital media tools challenge the individualistic, top-down ideology of traditional journalism (Deuze, 2008), while services like Twitter question a news culture based on individual expert systems over knowledge-sharing (Singer, 2003). The impact of social media on the definition of authority is not just affecting the profession of journalism, but also the fields of academic knowledge (Lih, 2004) and medicine (Boulos, 2006).

The development of social networks for real-time news and information, and the integration of social media content in the news media, creates tensions for a profession based on a discipline of verification. This paper suggests that social media services such as Twitter provide platforms for collaborative verification, based on a system of media that

Journalism Practice, 2012, iFirst Article, 1–10
ISSN 1751-2786 print/1751-2794 online
© 2012 Taylor & Francis http://dx.doi.org/10.1080/17512786.2012.667269

This article was downloaded by: [Professor Alfred Hermida]
On: 19 September 2013, At: 11:51
Publisher: Routledge
Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK

Digital Journalism
Publication details, including instructions for authors and subscription information:
http://www.tandfonline.com/loi/rdij20

#JOURNALISM

Alfred Hermida [a]
[a] Graduate School of Journalism, University of British , Columbia , Canada
Published online: 21 Jun 2013.

To cite this article: Alfred Hermida (2013) #JOURNALISM, Digital Journalism, 1:3, 295-313, DOI: 10.1080/21670811.2013.808456

To link to this article: http://dx.doi.org/10.1080/21670811.2013.808456

PLEASE SCROLL DOWN FOR ARTICLE

Taylor & Francis makes every effort to ensure the accuracy of all the information (the "Content") contained in the publications on our platform. However, Taylor & Francis, our agents, and our licensors make no representations or warranties whatsoever as to the accuracy, completeness, or suitability for any purpose of the Content. Any opinions and views expressed in this publication are the opinions and views of the authors, and are not the views of or endorsed by Taylor & Francis. The accuracy of the Content should not be relied upon and should be independently verified with primary sources of information. Taylor and Francis shall not be liable for any losses, actions, claims, proceedings, demands, costs, expenses, damages, and other liabilities whatsoever or howsoever caused arising directly or indirectly in connection with, in relation to or arising out of the use of the Content.

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden. Terms & Conditions of access and use can be found at http://www.tandfonline.com/page/terms-and-conditions

#JOURNALISM
Reconfiguring journalism research about Twitter, one tweet at a time

Alfred Hermida

Scholarship about social media in general, and Twitter in particular, has increased dramatically in recent years as adoption by individuals and institutions has burgeoned; especially by journalists and media organisations. Much of the journalism research on Twitter has focused on the dynamics of professional news practices on the social media platform, with journalism considered as a cultural field of production. This paper considers Twitter as a networked communication space that results in a hybridity of old and new frames, values and approaches. It highlights research that points to the hybrid and innovative forms of news production on open, networked platforms, suggesting new paradigms of journalism at play that break with classic narrative structures and deviate from long-held and fiercely defended norms.

KEYWORDS journalism; journalism research; news; social media; Twitter

Downloaded by [Professor Alfred Hermida] at 11:51 19 September 2013

Introduction

On the night of November 6, 2012, the most powerful man on Earth was waiting to hear which direction his future would take. A closely fought battle for the presidency was nearing its climax as US voters decided whether to give Barack Obama another four years. When the US president realised he had won, his team commemorated his success on Twitter, tweeting the words, "Four more years," together with a photo of him hugging his wife, Michelle (Obama 2012). The post spread instantly to become the most retweeted message of 2012. It was retweeted more than 810,000 times by users in more than 200 countries (Twitter 2012). The decision by Obama's team to mark his re-election on Twitter is emblematic of how the service has become part of the media landscape since it was launched in March 2006 in San Francisco.

Initially designed as a messaging system for cell phones, Twitter has developed into a platform for networked flows of information, facilitating the collaborative creation and curation of news content. By its seventh birthday in March 2013, Twitter said it had more than 200 million active users, with 400 million messages sent daily (Wickre 2013). It has been in the spotlight for its role as a news source during major breaking news events such as disasters, uprisings and prominent deaths, as well as during more frivolous occasions such as teen heartthrob Justin Bieber on a skateboard (Project for Excellence in Journalism 2011). In its short lifespan, Twitter has developed as a digital network for real-time news, affecting news production and online consumption (Bruns and Highfield 2012; Hermida et al. 2012; Newman 2011; Newman, Dutton, and Blank 2012),

Digital Journalism, Vol. 1, No. 3, 2013, 295–313
http://dx.doi.org/10.1080/21670811.2013.808456
© 2013 Taylor & Francis

BEA
Educating for Tomorrow's Media

Routledge
Taylor & Francis Group

Content Analysis in an Era of Big Data: A Hybrid Approach to Computational and Manual Methods

Seth C. Lewis, Rodrigo Zamith, and Alfred Hermida

Massive datasets of communication are challenging traditional, human-driven approaches to content analysis. Computational methods present enticing solutions to these problems but in many cases are insufficient on their own. We argue that an approach blending computational and manual methods throughout the content analysis process may yield more fruitful results, and draw on a case study of news sourcing on Twitter to illustrate this hybrid approach in action. Careful combinations of computational and manual techniques can preserve the strengths of traditional content analysis, with its systematic rigor and contextual sensitivity, while also maximizing the large-scale capacity of Big Data and the algorithmic accuracy of computational methods.

The term *Big Data* is often invoked to describe the overwhelming volume of information produced by and about human activity, made possible by the growing ubiquity of mobile devices, tracking tools, always-on sensors, and cheap computing storage. ''In a digitized world, consumers going about their day—communicating, browsing, buying, sharing, searching—create their own enormous trails of data'' (Manyika et al., 2011, p. 1). Technological advances have made it easier than ever to harness, organize, and scrutinize massive repositories of these digital traces; computational techniques for large-scale data analysis that once required supercomputers now can be deployed on a desktop computer (Manovich, 2012). This development has created new opportunities for computational approaches to social

Seth C. Lewis *(Ph.D., University of Texas at Austin) is an assistant professor in the School of Journalism & Mass Communication at the University of Minnesota–Twin Cities. His research explores the social implications of information technology and digital media for the dynamics of media work and media innovation, particularly in the context of journalism.*

Rodrigo Zamith *is a doctoral student in the School of Journalism & Mass Communication at the University of Minnesota–Twin Cities. His research interests include computational research methods in content analysis, journalism and new media technologies, and the interplay between issue framing, media, and policy.*

Alfred Hermida *is an associate professor in the Graduate School of Journalism at the University of British Columbia. His research interests include online journalism, social media and emerging genres of journalism.*

This research was supported by the Office of the Vice President for Research at the University of Minnesota and the Social Sciences and Humanities Research Council of Canada.

© 2013 Broadcast Education Association
DOI: 10.1080/08838151.2012.761702
Journal of Broadcasting & Electronic Media 57(1), 2013, pp. 34–52
ISSN: 0883-8151 print/1550-6878 online

JOURNAL OF COMPUTER-MEDIATED COMMUNICATION

Sourcing the Arab Spring: A Case Study of Andy Carvin's Sources on Twitter During the Tunisian and Egyptian Revolutions*

Alfred Hermida

Graduate School of Journalism, University of British Columbia, 6388 Crescent Road, Vancouver, B.C. V6T 1Z2, Canada

Seth C. Lewis

School of Journalism & Mass Communication, University of Minnesota–Twin Cities, 111 Murphy Hall, 206 Church Street SE, Minneapolis, MN 55455, USA

Rodrigo Zamith

School of Journalism & Mass Communication, University of Minnesota–Twin Cities, 111 Murphy Hall, 206 Church Street SE, Minneapolis, MN 55455, USA

News sourcing practices are critical as they shape from whom journalists get their information and what information they obtain, mostly from elite sources. This study evaluates whether social media platforms expand the range of actors involved in the news through a quantitative content analysis of the sources cited by NPR's Andy Carvin on Twitter during the Arab Spring. Results show that, on balance, nonelite sources had a greater representation in the content than elite sources. Alternative actors accounted for nearly half of the messages. The study points to the innovative forms of production that can emerge with new communication technologies, with the journalist as a central node trusted to authenticate and interpret news flows on social awareness streams.

Key words: Andy Carvin, Arab Spring, gatekeeping, journalism, sourcing, Twitter.

doi:10.1111/jcc4.12074

This paper presents a case study on the use of sources by National Public Radio's Andy Carvin on Twitter during key periods of the 2011 Tunisian and Egyptian uprisings. Carvin, a social media strategist at NPR in the US, emerged as a key broker of information on Twitter during the Arab Spring.[1] Through Twitter, Carvin would often link to images from demonstrators, curate a range of discussion and opinion about events, and frequently ask his followers (then about 50,000 strong) to help him make sense of the bits of information he encountered. This study examines the different actor types on the social media platform to reveal patterns of sourcing of information used by Carvin in order to further an understanding of how sourcing is evolving in an era of networked digital media—a space that, by its nature, allows for new research possibilities in tracking the influence of sources.

*Accepted by previous editor Maria Bakardjieva