NORMALIZING TWITTER

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NORMALIZING TWITTER
Journalism practice in an emerging communication space

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This study examines how mainstream journalists who microblog negotiate their professional norms and practices in a new media format that directly challenges them. Through a content analysis of more than 22,000 of their tweets (postings) on the microblog platform Twitter, this study reveals that the journalists more freely express opinions, a common microblogging practice but one which contests the journalistic norm of objectivity (impartiality and nonpartisanship). To a lesser extent, the journalists also adopted two other norm-related microblogging features: providing accountability and transparency regarding how they conduct their work, and sharing user-generated content with their followers. The journalists working for national newspapers, national television news divisions, and cable news networks were less inclined in their tweets than their counterparts working for less "elite" news outlets, to relinquish their gatekeeping role by sharing their stage with other news gatherers and commentators, or to provide accountability and transparency by providing information about their jobs, engaging in discussions with other tweeters, writing about their personal lives, or linking to external websites.

KEYWORDS   content analysis; journalists; microblogging; norms; social media; Twitter

Introduction

The introduction of new communication technologies inevitably raises questions about the extent to which existing media work will change as a result (Lievrouw, 2002). This is particularly true in the case of journalism and newswork (Deuze and Marjoribanks, 2009). During the past century, audio, visual, and digital innovations have not by themselves redefined what it means to be a journalist, in the professional sense, but they have contributed to changing the way journalists think about and engage in their work, through a process of adaptation that is mutually shaped by socio-cultural and technological constraints and considerations (e.g., see Boczkowski, 2004a 2004b). A pertinent question is the extent to which media digitization—because it offers potentially transformative technological assets like hypertext, multimedia, and interactivity (Steensen, 2010)—has affected journalistic norms and practices (e.g., see Deuze, 2003, 2005; Lewis et al., 2010; Phillips, 2010; Phillips et al., 2009).

In a foundational study in this line of research, Jane Singer (2005) examined the blog platform as adopted by political journalists affiliated with mainstream media outlets. She concluded that the journalists generally "normalized" their blogs to fit old norms and practices. Even in this highly interactive and participatory format, she said, most journalists seek to remain gatekeepers. They did express opinions fairly frequently, which is a common characteristic of blogs, and they also used hyperlinks extensively, another characteristic, but they linked mostly to their host news organization and other

mainstream media. Thus, even while experimenting with a participatory form of communication, journalists mostly held fast to their traditional functions.

While blogging has become relatively common in media work and public life (Domingo and Heinonen, 2008; Rettberg, 2008; Rosenburg, 2009), a new variation on it—microblogging—has emerged in the form of Twitter. This social media service features short, instant bursts of information shared to one's followers, in a system designed for viral distribution. Twitter became famous as a primary means of disseminating updates, from journalists and amateurs alike, during major events such as the 2008 US presidential election (Huberman et al., 2009), the US Airways plane crash on the Hudson River (Kawk et al., 2010), the 2009 Iranian election (Grossman, 2009), and the 2011 Egyptian revolution (Crovitz, 2011). Even more, journalists increasingly are turning to Twitter as a form of engaging with audiences and sources, tracking the latest buzz on their beats, and promoting their work (Ahmad, 2010; Farhi, 2009; Hermida, 2010a).

Hermida (2010a, 2010b) argued that, in light of Twitter, scholars and professionals alike must reconsider the relationship between the audience and journalists (Braun and Gillespie, 2011), and that journalism itself has become "ambient"—omnipresent, often fragmented, and a collective effort involving the audience and journalists. Burns (2010, p. 7) extended Hermida's definition of ambient journalism, describing it as "an emerging analytical framework for journalists" that presses both professional journalists and citizen journalists "to observe and evaluate their immediate context" while emphasizing "novel information." Both Burns (2010) and Hermida (2010a, 2010b) suggest that scholars do more to understand how journalism and journalists are being affected by digital modalities such as Twitter.

Thus, the question becomes, *how* are journalists using microblogging? What content are they sharing on Twitter, and with what frequency? What distinctive patterns and features are emerging—and what might they suggest about changes to journalistic conventions?

This study takes up these questions. Based on a conceptual framework of professional normative constructs built around the requirements of democracy, this study builds upon Singer's (2005) blog normalizing hypothesis by considering it in the context of a different but related medium. We content-analyzed the "tweets," or discrete postings, of journalists who were identified as the most popular (by number of followers) on Twitter. The goal was to determine the extent to which microblogging may be changing journalistic norms or practices.

Theoretical Context

Because this study closely builds on Singer's (2005) work, this literature review begins with a brief reflection on her seminal study and its theoretical linkage to the "normalizing" hypothesis of politics, communication, and journalism. This is followed by an explanation of Twitter as a social medium, and its increasing use among journalists. Finally, this literature section concludes with a return to examining those journalistic norms that are particularly challenged in the process of microblogging.

Normalizing New Media

The premise of Singer's (2005) study of 20 j-blogs during the 2004 US election cycle was to explore a problem that had emerged for journalism. The blog format, by its

inherently participatory nature, offers a chance for journalists to achieve greater accountability and transparency (a normative goal of professionalism)—and yet, at the same time, the opinionated and sometimes freewheeling nature of blogging challenged the nonpartisan gatekeeping of information that is so central to journalism's identity and purpose (Carlson, 2007; Lowrey and Mackay, 2008; Robinson, 2006; Singer, 2007).

This challenge for journalism was set against a backdrop of the "normalization" of digital media in politics and communication. As Singer (2005) describes and as other scholars have noted since (Hindman, 2009), the expansion of the Internet during the past two decades, from the small domain of technologists to the billions connected by networks today, has been greeted with grand hopes for a revitalization and expansion of democratic discourse and political engagement (for an overview of this phenomenon, see Dahlgren, 2005). This envisioned "digital democracy" would flatten old hierarchies, remove barriers to public input, and encourage greater transparency and accountability. Of course, such hype about impending radical change is the familiar story of communication innovations (Steensen, 2010), driven by early impulses to view such potential transformations through the lens of technological determinism (Boczkowski, 2004a, 2004b).

Instead, the real story of political communication during the first decade online was one of normalization (Margolis and Resnick, 2000), in which the Internet became a new site for old activities, such as the traditional campaign functions of mobilizing supporters or gathering donations. What is more, the Internet was a new space mainly dominated by existing political actors and other elites. It was politics as usual. In like manner, there was evidence to suggest that the political role of journalists had changed little during this first decade online (Singer, 2005). Indeed, this was true of *most* online journalism in general: at the start of the twenty-first century, the digital efforts of traditional media were largely conducted in the one-way publishing model of "we write, you read" (Deuze, 2003, p. 220), with little adoption of or adaptation to the affordances of multi-way communication online (for a historical perspective on this period, see Steensen, 2010).

This narrative of normalization both informed and was reflected in Singer's (2005, pp. 192–3) examination of political journalists engaging the blog format on their mainstream news organization's websites. She found that j-blogs were institutionalized as an extension of traditional journalistic norms and practices. Journalists tended to maintain control over information, even in their use of links, and while opinions were more prevalent, they appeared more frequently on j-blogs written by columnists, whose primary mode was opinion in offline formats. In other words, journalists were "rationalizing the form" of blogging as a "high-tech outgrowth" of their existing approach, as opposed to allowing it to change the way they produced the news.

In the five years since Singer's study, however, much has changed about digital media and its culture, particularly with the rise of Web 2.0 sites that facilitate user-generated content and user-centered control over information flow (Bruns, 2008; Harrison and Barthel, 2009; Jenkins, 2006). This raises fresh questions about the extent to which journalists still "normalize" new media forms to suit existing routines. It is in this context that this study examines how journalists are using a medium as novel as Twitter.

Twitter and Journalism

Introduced in 2006 as a short message system meant primarily to serve as a cell phone application, Twitter has grown into a vast news and information network used

across multiple platforms by millions of people globally (Morris, 2009). Twitter is a free social networking site that allows users to post micro-blog messages known as "tweets," comprised of no more than 140 characters. Messages are deployed on the user's personal site and to the user's list of "followers," other users who have opted to receive those messages. Users have the capability to send messages directed to other users (i.e., @username), to "retweet" (or re-broadcast) messages originally posted by others, and to follow or engage in trending topics (i.e., #trendtopic). Twitter users may also be incorporated into lists of popular topics, and may choose to engage in discussions using various kinds of media—text, links, and even images (Williams, 2009).

Twitter represents one of the fastest growing social networking sites in terms of audience, gaining more than 190 million global users who post 65 million tweets each day (Wauters, 2010).[1] Social network sites—which are synonymous with the more broad-based term "social media"—have been defined as "web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system" (Boyd and Ellison, 2008, p. 211). Java et al. (2007) noted that people may be using Twitter for four main reasons: daily chatter, conversation, sharing information and reporting the news (cf., Marwick and Boyd, 2011). As such, some news organizations actively encourage their journalists to use Twitter (Gleason, 2010), resulting, at least for some news media outlets, in large audiences. For example, as of March 2011, the New York Times[2] had 2.9 million followers on Twitter; Time[3] had 2.4 million, and CNN[4] had 1.7 million. Professional journalists appear to believe that the advantages of Twitter (i.e., audience outreach) outweigh its disadvantages (i.e., extra work), as evidenced by the increasing numbers opening accounts (Hermida, 2009b). Such a rise may also indicate that news media organizations are now asking reporters to incorporate Twitter into their daily routines.

In addition to a technological infrastructure that affords greater information sharing, the rise in the use of Twitter has created more opportunities for user-generated content-sharing—including increased opportunities for news-sharing by journalists. Because Twitter users must select a news outlet or individual reporter to follow, they may be guided by a process of preferential attachment, whereby news outlets or reporters who have been deemed useful in the past receive increasing attention from existing and incoming network participants, in a "rich get richer" fashion (Tremayne et al., 2006). Skoler (2010) noted that today's culture emphasizes connections and relationships, which fuels social networking sites and promotes information-sharing, new experience, new knowledge and new friendships. Through this, users can create and exchange self-generated content while discovering information sources that best fit their interests (Kaplan and Haenlein, 2009).

Social network sites such as Twitter have helped the audience to become active in the news-creation process (Hermida, 2010a), where messages move back and forth and where users have a chance to interact with information (Stassen, 2010). In an analysis of 150,000 microblog postings, Jansen et al. (2009, p. 2186) found that consumers increasingly use such platforms for "trusted sources of information, insights, and opinions." Users also increasingly share hyperlinks with each other (Hughes and Palen, 2009; Java et al., 2007) and engage in the coverage of breaking news by relaying messages from other Twitter users and providing live coverage of events (Farhi, 2009; Kawk et al., 2010). Hermida (2009a, p. 4) maintained that microblogs "are creating new forms of

journalism, representing one of the ways in which the Internet is influencing journalism practices and, furthermore, changing how journalism itself is defined." Hayes et al. (2007) contended that journalists on social networking platforms provide insight into how stories are crafted, offer personal takes on news events, and provide context for the development of news coverage. Further, there is a certain element of transparency required on social networking platforms such as Twitter to maintain the trust of audiences (Hayes et al., 2007; Karlsson, 2010). Hermida (2009a, p. 3) expanded on the issue of trust, noting that news media outlets have struggled with how to best present validity to the public and how to integrate social networking platforms such as Twitter into "established journalism norms and values."

Given the opportunity to share information rapidly with large audiences through Twitter, journalists have the ability to include or exclude information as they see fit, filtering news and information frequently without going through traditional means such as section editors (Farhi, 2009; Hermida, 2010a). Given this fluid and evolving gatekeeping role, and noting that research into the relationship between journalists and Twitter has been focused largely on the concept of influence (Cha et al., 2010; Hagen, 2010; Leavitt, 2009), this study focuses on the behaviors of journalists on Twitter, exploring how they are sharing information (and what kind of information), engaging with fellow users, and otherwise enacting journalism via a new medium.

Challenges to Journalistic Norms

This study's conceptual framework is based on normative professional routines and outlooks in journalism, especially as they relate to microblogging practices. What Singer (2005, p. 174) said about journalists who blog also applies to journalists who microblog: they confront "challenges to professional norms as a nonpartisan gatekeeper of information important to the public. But the format also offers journalists the potential for expanded transparency and accountability." Much of what Singer (2005) noted regarding potential effects of blogging on the professional norms and practices of journalists affiliated with mainstream news media applies as well to "j-tweeters," journalists who microblog. Journalists working for mainstream news media have found that microblogging can encourage them to diverge from their traditional professional roles in a number of ways. As Singer observed when speaking of blogs, these include (1) deviating from their role as nonpartisan information providers by expressing personal opinions, (2) sharing their gatekeeping role by including postings from others in their microblogs, and (3) providing a semblance of accountability and transparency to their professional work by offering their audiences links to external websites that background the information they provide. This study considers and tests each of these three elements.

First, on the question of partisanship and personalization, professional norms are clear: journalists are expected to keep their politics and personal opinions to themselves (Kovach and Rosenstiel, 2007). Even while the nature of online media challenges this normative and enduring construct of journalism (Robinson, 2007), it is nonetheless true that objectivity—or, at least, the pursuit of objectivity—remains one of the most salient features of journalism's professional character (Schudson and Anderson, 2008). Secondly, journalistic gatekeeping (Shoemaker and Vos, 2009) long has afforded power and prestige to the press, as it determined what information "qualified" as news and therefore was worthy to fill a scarce "news hole"; this function undeniably changes in a digital

environment where scarcity is no longer a concern, and where audiences may easily share in the filtering process (Bruns, 2005; Harrison, 2010; Singer, 2010). Thirdly, norms dictate that journalists rely on knowledgeable sources for their information (Carlson, 2009), although the process of referencing original source material has not always been easily facilitated in traditional media formats; however, the hyperlinks that are endemic to blogging—and microblogging—present an opportunity for journalists to be more transparent, and thus more accountable, in the course of their work (cf., Karlsson, 2010; Phillips, 2010). An even more direct indicator of accountability and transparency might be tweeting about one's job. Other indicators include holding public discussions with other tweeters, and tweeting about one's personal life. Discussions with other tweeters sometimes touch upon the journalist's work and the news production process, and even tweets about the journalist's personal life can shed additional light.

As Singer (2005, 2007) and others (e.g., Domingo and Heinonen, 2008; Hermida, 2009a) have explored at length, the blog format and its cultural context (Rosen, 2008; Rosenberg, 2009) has challenged each of these three journalistic norms. However, the platform and culture of Twitter presents, to an even greater degree, the possibility for changes to journalistic norms—i.e., for journalists to be more open with opinions, more liberal in sharing their gatekeeping role, and more thorough in being transparent about the news process. For example, whereas j-blogs appear within the framework of a given organization's news site, and thus are often edited to meet standards and protocols, j-tweeters operate on a neutral platform (via Twitter.com), and so do not face the same level of oversight nor the same necessity to stay on-topic journalistically. In an emerging communication space like Twitter, which can be used for everything from breaking news to banality, journalists have far greater license to write about whatever strikes their fancy—including the mundane details of their day-to-day activities. Such life-sharing on Twitter is significant in part because it is so public (by default), and therefore far more accessible to the outside world, beyond friends and family connected to an individual journalist on a social networking site like Facebook. In this sense, Twitter offers a unique environment in which journalists are free to communicate virtually *anything to anyone*, beyond many of the natural constraints posed by organizational norms or social networking "friendship" barriers. Therefore, it is important to understand the content of journalists' tweets: to what extent do they reflect traditional modes of being a journalist and doing journalism?

Problem Statement

This leads us to the following research questions relating to how microblogging might be affecting the professional norms and practices of journalists affiliated with mainstream news media.

RQ1: Do journalists who microblog deviate from their role as nonpartisan, impartial information providers by expressing personal opinions through their microblog postings?

RQ2: Do journalists who microblog share their gatekeeping role with others by including postings from them in their microblogging (i.e., retweets)?

RQ3: Do journalists who microblog provide accountability and transparency by tweeting about their jobs, by engaging in discussions with other tweeters, by tweeting about their personal life, or by linking to external sources?

Method: Content Analysis of Journalists' Tweets

To answer the research questions, an effort was made to locate journalists who use Twitter. A random sample would have been ideal but the population being unknown that was impossible. Fortunately, a list of the 500 most-followed journalists on Twitter was made available from the developers of *Muck Rack* (see muckrack.com). Since its founding in April 2009, *Muck Rack* has become one of the most prominent sites for aggregating the tweets of professional journalists, mostly (but not exclusively) those in the United States. It has a database of thousands of journalists on Twitter, and organizes these reporters and editors by their news organization and beat expertise (Seward, 2009). Encouraging visitors to its homepage to "discover what's happening right now in the world of journalism," *Muck Rack* offers a running stream of journalists' tweets and related trends. Therefore, our sample of the 500 most-followed journalists, while not representative of all journalists on Twitter, represents perhaps the most comprehensive collection available.

The original sample derived from *Muck Rack* included each journalist's organizational affiliation and number of followers as of September 2009. At that time, George Stephanopoulos of ABC News was atop the list with 1,224,118 followers, while Andy Newman of the *New York Times* was No. 500 with 690 followers. The number of followers of any Twitter user at any given time can be found on the right side of the user's Twitter homepage (e.g., Twitter.com/Maddow is the homepage of Rachel Maddow of MSNBC). Any time a Twitter user chooses to follow a journalist—or stop following—the number of followers is updated for that journalist. Two-thirds (67 percent) of the journalists were male. Of these 500 journalists, 27 percent worked for national newspapers, 21.8 percent for local newspapers, 15.2 percent for magazines, 10.8 percent for national television broadcast networks, 9.8 percent for cable news networks, 9.4 percent for online news sites, 2.2 percent for radio stations, 2 percent for wire services, and 1.8 percent for other news outlets. Since some journalists closed or changed their Twitter accounts after September 2009, and others did not use Twitter during the time frame of this study, the actual number of journalists studied was 430.

For each journalist, their first 10 tweets posted each day were coded, starting at 12 a.m. (midnight) and ending at 11:59 p.m., for two weeks, starting on October 5, 2009, and ending on October 18. On Twitter, each tweet is stamped with the time it was posted, using the local time of the tweeter. If a journalist posted fewer than 10 tweets in a given day, those that they did post were coded. The journalists sent an average of 5.6 tweets per day. However, the journalists varied widely, with some sending no tweets at all and one sending 810 during the two-week period—an average of almost 60 a day. Only the first 10 tweets per day were coded mostly for logistical reasons, in order to conserve resources. This also may have helped keep inordinately loquacious journalists from overly influencing the results. In the end, 22,248 tweets were coded.

The large differences in tweeting activity among the journalists is partly due to one use of Twitter which journalists particularly employ, compared to other Twitter users: *live-tweeting* news events in which the journalist shares up to dozens of tweets in a single day. Because of the wide variation on the part of journalists' tweeting activity, each journalist's

total number of tweets posted over the coding period was taken into account. Not only did the journalists vary widely in the number of tweets they posted over the two-week period but there also were a few journalists who tweeted much more than their colleagues. Controlling for total tweets also minimizes the impact of these outliers.

Nonpartisanship and Impartiality

To determine the extent to which journalists who microblog express personal opinions, each tweet was coded for its primary purpose, whether to convey information, seek information, or convey opinion. Tweets which were judged as *primarily* conveying opinion were labeled as cases of "*major opining*." For example, the following tweet would be regarded as major opining: "Need a quick sugar rush: expect Sen. Smith's speech this morning to be a real yawner." The intent here appears to be to state an opinion about an upcoming speech. In addition, tweets which did not primarily opine but instead primarily conveyed information were coded in terms of whether they nonetheless contained a secondary element of opinion. Such tweets were labeled as "*minor opining*." Here's an example: "Covering Sen. Smith's speech today on the war in Afghanistan. Hope he says something newsworthy." Here, unlike in the previous tweet, the intent *primarily* is to convey information about what the journalist is doing. The second sentence, though, injects a hint of opinion.

Gatekeeping

To determine the extent to which journalists who microblog share their gatekeeping role by including postings from others in their microblogging, each tweet was coded for whether or not it was a "retweet," a special type of tweet consisting of the verbatim posting of another tweeter's message, plus the identification of the original source. When journalists relay to their followers the unedited messages of others, they give them access to their audience, thereby sharing the stage with them. In this way, *retweeting* is an indication of a journalist's "opening the gates" to allow others to participate in the news production process.

Accountability and Transparency

To determine the extent to which journalists who microblog provide accountability and transparency in their postings, four indicators of accountability and transparency were examined. These indicators vary in how closely they indicate accountability and transparency; perhaps the most direct measure relates to journalists' tweets that specifically relate information about their job. Tweets were coded for those which primarily convey information about the journalist's job (but excluding self-promotion), what might be called "*job talking*." Information that is primarily about the journalist's job might well figure directly into the journalist's accountability and transparency. Excluded here are tweets that primarily self-promote, that is, those tweets which publicize a story the journalist produced or another story from the journalist's news organization. Some journalists heavily self-promote on Twitter. We found that 19.1 percent of all the journalists' tweets we studied were essentially promotional tweets. Indeed, Twitter can be an effective way to market one's work, which helps explain its overall popularity. Such

tweets, however, do not advance accountability or transparency in any meaningful way, so self-promoting tweets were excluded from "job talking."

A second element of microblogging that might contribute to professional accountability and transparency include tweets which primarily involve a discussion between the journalist and another specified Twitter user. Discussing is a special type of tweet activity designated by the words "in reply to," representing an exchange shared between the duo but in a public fashion. In discussions, journalists may answer specific questions about their work or elaborate upon it. Like job talking tweets, discussions often involve information about how the journalist is doing his or her job, and thus may reflect upon the journalist's accountability and transparency.

In addition, all tweets were coded for their topic, such as politics and government, economy and business, and entertainment and celebrities. Given that the authors of these tweets are journalists, their tweets often are about news topics. However, the topic of some tweets is only the journalist's personal life. Such "personalizing" tweets may contain information about the journalist's job and therefore also might play a part in providing accountability and transparency. Furthermore, even non-job-related information about the journalist's personal life can contribute to accountability and transparency.

Finally, the fourth indicator of journalistic accountability and transparency is linking. Each tweet was coded for whether or not it contained an external link, that is, a hyperlink to another website. If so, the link was coded for the type of external website to which the tweet linked: (1) the journalist's own news organization; (2) another news medium; (3) an outside blog; or (4) another link. External links elaborate upon the journalist's original tweet and often provide evidence to support the original tweet or other relevant information about how and where the journalist obtained the information in the original tweet. As Singer (2005) recognized in the case of blogging, linking is only a partial indicator of accountability and transparency. Nevertheless, linking can provide some indication of accountability and transparency.

Coders were students in an undergraduate mass communication theory course who received course credit for their work. These 60 coders engaged in extensive practice sessions that involved all coders coding the same tweets both as class exercises and homework assignments, which then were discussed in class. In addition, six graduate students engaged in supplemental coding to fill gaps left by the undergraduate coders. Intercoder reliability was determined by selecting a subset of 488 pairs of tweets that were independently coded by two different coders. Cohen's kappa was used to estimate intercoder reliability (Cohen, 1968). This statistic is a more conservative measure of reliability than some other measures, including percent of agreement, because it does not give credit for chance agreement. Thus, a kappa value of 0.80 represents very high intercoder reliability and a value of 0.60 represents acceptable intercoder reliability (Viera and Garrett, 2005). The reliability estimates for the variables used in the analyses are: discussing, 0.86; linking, 0.66; job talking, 0.71; minor opining, 0.67; major opining, 0.77; personalizing, 0.62; and retweeting, 0.80. Given that some of the reliability estimates are not high, the results based on them should be interpreted with caution. Fortunately, the variables with the lowest reliability estimates (personalizing and linking) were two of a total of four variables used as indicators of accountability and transparency and, in addition, these other two variables (job talking and discussing) both attained significantly higher reliability and are more direct measures of accountability and transparency.

Results

Table 1 presents a descriptive profile of the journalists in the sample as of March 2010. As can be seen, the journalists differed widely in every regard, from their number of followers to how long they have been using Twitter to the extent to which they have been included on a Twitter ''list'' (i.e., been noted on a user-created list of tweeters usually organized by a theme).

Evidence of the general growth of Twitter and, in particular, the attraction of its users to follow journalists, can be seen in the large increase in the maximum number of their followers in the six months from September 2009 to March 2010. How different the journalists are in their Twitter participation is evident from the total number of tweets they sent during the coding period, as well as the total number of tweets they ever posted. It is notable that a journalist who only sent eight tweets was among the most-followed journalists on Twitter. This says something about the meaning of number of followers on Twitter. It takes an almost effortless click to decide to follow someone on Twitter. When one opens an account, Twitter offers suggestions for users one might follow. Then, as one starts to follow others, Twitter provides information about who those followed are following, suggesting others one might follow. Consequently, some Twitter users have ''followers'' who rarely if ever read their tweets. As studies of influence on Twitter have found, number of followers is not a particularly meaningful measure of true audience size or influence (Cha et al., 2010; Leavitt, 2009; Solis, 2010).

As Table 2 shows, the journalists diverged from their traditional roles as nonpartisan information providers by offering a considerable number of opinions in their tweets.

Nearly 16 percent of the journalists' tweets primarily offered opinions, and an additional 27 percent of the tweets that primarily conveyed information also contained at least an element of opinion. The journalists also shared their gatekeeping role to some extent by including postings from others in their microblogs. More than 15 percent of the journalists' microblogs were retweets. Likewise, the journalists also used Twitter as an opportunity to provide accountability and transparency—at least to some extent. Nearly 9 percent of the tweets *primarily* conveyed information about the journalist's job, an additional 14.9 percent were discussions, and 20.2 percent dealt only with the journalist's personal life. Furthermore, 42 percent of the tweets contained an external link, another possible indicator of accountability and transparency. While half of these were to the journalist's own host news organization and an additional quarter were to other mainstream news organizations, 7.2 percent of these j-tweets were to outside blogs

TABLE 1
Descriptive profile of most-followed journalists on Twitter

	N	Minimum	Maximum	Mean	SD
Followers (March 2010)	489	504	1,666,443	52,132.98	237,062.98
Followers (September 2009)	500	690	1,224,118	32,259.51	159,876.63
Following	489	0	45,985	1,113.65	3,377.35
Appearances on Twitter lists	489	19	11,333	475.41	1,102.53
Total tweets ever posted	488	8	31,498	2,883.61	3,643.65
Tweets in two-week coding period	420	0	810	78.96	103.13
Total days on Twitter	487	120	1,327	590.42	273.59

Except as indicated, all data were recorded in March 2010.

TABLE 2
Microblog activities of most-followed journalists on Twitter

Microblogging activity	Number of tweets	Percentage of tweets
Major opining	3,521	15.7
Minor opining	6,049	27.0
Retweeting	3,400	15.2
Job talking	1,988	8.9
Discussing	3,340	14.9
Personalizing	4,524	20.2
Linking	9,414	42.0

$N = 22,248$ tweets.

and 18 percent were to other external websites, indicating that some amount of accountability and transparency may be occurring in the microblogging activities of journalists.

To get a sense of whether journalists working for different news media might differ in their microblogging activities, journalists affiliated with national newspapers, the news divisions of the major television broadcasters, and the cable television news channels (47.6 percent) were roughly grouped together as "elite" news media, and they were compared to those working for the other news outlets. As Table 3 shows, the "elite" journalists generally engaged in the activities indicative of (1) opining, (2) allowing others to participate in the news production process, and (3) providing accountability and transparency less than did their counterparts at the other news outlets.

However, not all of these differences were meaningful. The statistical significance of the differences is reported in Table 4. Regarding the question whether j-tweeters are using this new medium to deviate from the professional norms of nonpartisanship and impartiality, an independent samples t-test shows that the two groups differed significantly in their amounts of both major and minor opining. The less "elite" journalists were more willing to deviate from traditional norms and practices—and act more like other non-journalist Twitter users—by posting their opinions on Twitter.

TABLE 3
Mean microblog activities for elite and non-elite j-tweeters

	Medium	N	Mean	SD	SEM
Major opining	Non-elite	220	0.2866	0.19691	0.01328
	Elite	210	0.2338	0.19739	0.01362
Minor opining	Non-elite	220	0.2914	0.20114	0.01356
	Elite	210	0.2338	0.19739	0.01362
Retweeting	Non-elite	220	0.1367	0.14824	0.00999
	Elite	210	0.1185	0.16549	0.01142
Job talking	Non-elite	220	0.0849	0.13030	0.00878
	Elite	210	0.0959	0.17465	0.01205
Discussing	Non-elite	220	0.1513	0.17234	0.01162
	Elite	210	0.1033	0.15171	0.01047
Personalizing	Non-elite	220	0.2220	0.21982	0.01482
	Elite	210	0.1648	0.17956	0.01239
Linking	Non-elite	220	0.5774	0.25724	0.01734
	Elite	210	0.5025	0.30244	0.02087

TABLE 4
t-Test of microblog activities for elite and non-elite j-tweeters

			Independent samples t-test		
	t	df	Significance (two-tailed)	Mean difference	SE difference
Major opining	2.778	428	0.006	0.05283	0.01902
Minor opining	2.994	428	0.003	0.05757	0.01923
Retweeting	1.207	428	0.228	0.01827	0.01514
Job talking	−0.744	428	0.457	−0.01102	0.01482
Discussing	3.055	428	0.002	0.04792	0.01569
Personalizing	2.949	428	0.003	0.05724	0.01941
Linking	2.771	428	0.006	0.07491	0.02703

$N = 430$ journalists.

A second way that microblogging might be changing journalists' professional norms and practices is by giving a participatory voice to other Twitter users by retweeting these users' tweets. However, there was no statistically significant difference in the two groups' retweeting behavior.

Regarding the third way that microblogging by journalists might be changing their norms and practices by providing accountability and transparency in their tweets, there were no substantial differences regarding the most direct indicator, posting tweets that primarily convey information about one's job. However, the "elite" journalists entered into discussions with other Twitter users less, they tweeted less about their personal life, and they linked less to external websites.

Analysis and Discussion

Microblogging brings a major new way for people to communicate, and journalists have found it to be a particularly useful tool in their profession. However, journalists vary widely in the extent to which they use Twitter and also in the microblog activities in which they engage. Similarly, scholars continue to debate exactly how the definition of journalism is changing in light of digital platforms such as Twitter (Burns, 2010; Hermida, 2010b). Even in this new mass medium that is still evolving, some patterns and trends are appearing.

As was found with political j-bloggers by Singer (2005), j-tweeters appear both to be adopting features of Twitter in their microblogging and adapting these features to their existing norms and practices. Specifically, much like other Twitter users, j-tweeters are offering opinions quite freely in their microblogs, which deviates from their traditional professional conventions. Perhaps j-tweeters opine because microblogging generally encourages it. Because microblogs are so short, they leave little room for nuance, less opportunity for on-the-one-hand and on-the-other-hand kind of balance. The j-tweeters did not opine as often as the political j-bloggers Singer (2005) observed: 61 percent of the blog posts contained expressions of personal opinion. Nonetheless, the amount of opining in the microblogs of these journalists is somewhat surprising. Nearly 43 percent of the tweets contained at least an element of opinion and nearly 16 percent of the tweets were *primarily* opinions. Some j-tweeters are columnists who are expected to express their opinions, but that does not account for the substantial amount of opining taking place in

journalists' microblogging. (From a cultural standpoint, it is worth noting that the definition of opinion in journalism may vary beyond the US context that is dominant in this study. What has been categorized here as expressions of personal opinion, for example, may well be considered a form of professional judgment, as Hermida (2009a) found in his study of blogs at the BBC.)

Less impressive perhaps is the extent to which j-tweeters are using Twitter's tweeting, retweeting and linking features either to open the gates to non-professional participants in the news production process or to offer information that could contribute to their accountability or transparency. Nevertheless, in their microblogging some of these journalists do retweet, talk about their jobs, engage in discussions with others, provide information about their personal lives, and link to external websites. As Singer (2005) found with journalists who blog, j-tweeters appear to be normalizing microblogs to fit into their existing norms and practices but, at the same time, they appear to be adjusting these professional norms and practices to the evolving norms and practices of Twitter.

Those working for major national newspapers, broadcasting networks and cable news channels generally appear to be changing less than their counterparts at other news media, suggesting perhaps that those vested the most in current professional conventions may be the least willing or able to change. Perhaps the more "elite" media are less inclined to share opinions, engage readers, and so forth, because they believe they have so much vested in business as usual. This admittedly is a crude categorization scheme, but we think that differences observed between the two groups might indicate something about how Twitter is changing professional norms and practices. Specifically, we wondered whether those working for these more well-known news organizations with large audiences might obtain more celebrity merely for their association with such organizations and, as a result, might take less advantage of the opportunities Twitter offers to change business as usual. In other words, would they, as Singer (2005) observed with j-bloggers, normalize this social medium to fit the entrenched professional norms and practices of their stalwart host organizations? Journalists working for more prestigious news organizations might believe that they have relatively more vested in the existing system. Having been socialized into the nation's leading news organizations, they may be more inclined to keep the status quo than their counterparts at news organizations with possibly less reach and influence. The latter, meanwhile, might have to struggle more to make themselves heard. Thus, a reporter affiliated with the New York Times, CNN or ABC News might attract some Twitter followers merely because of that affiliation. In contrast, those working for a local newspaper or the news department of a local TV channel might have to be more active and interesting on Twitter to obtain and keep followers. Part of that work might involve using Twitter in ways that other non-journalist users tend to use Twitter, and to explore other innovative ways to attract an audience.

This study represents a first-of-its-kind large-scale quantitative content analysis of journalists' uses of a major new means of communication. More than 22,000 individual tweets were examined in considerable detail. Even while Twitter patterns are likely to change as the application evolves, this provides a snapshot of a profession trying to make sense of itself in a new domain. On the downside, the study is limited in a number of important ways. Because there is no known way to obtain a random sample of only journalists who use Twitter, we relied on a list of the j-tweeters with the most followers. It is unlikely that these journalists are typical of all journalists who microblog. Perhaps a better way to identify j-tweeters will be found that will allow for a more representative

sample; ideally, such a sampling method would more inclusively capture a range of journalists beyond the United States and United Kingdom, including non-English-speaking journalists in both the developed and developing world. Also, in order to conserve resources, not all of the tweets of these j-tweeters were analyzed. While it would be preferable to code a random sample of each journalist's tweets, the logistics of doing so is challenging because the tweets need to be examined by coders in their online setting (to examine external links and ''in reply to'' discussions, for instance), and locating and identifying them is difficult and invites errors. Further, as the definition of journalism evolves to include individuals who may not necessarily consider themselves practicing journalists, their contributions nonetheless add to news conversations on digital platforms such as Twitter. Their interactions with news and information, audiences, and practicing journalists should not be ignored. In addition, the nature of Twitter raises questions about the logic of randomly sampling single tweets as the unit of analysis. Tweets often are written in a series which can range in length from a single pair to, in the case of live-tweeting, dozens or more. The meaning of a tweet may well depend upon previous posts. Future content analyses of microblogs should consider these sampling issues.

Despite its limitations, we believe this study sheds light on how journalists are using Twitter, how they are normalizing it to fit their existing professional norms and practices, and how it is changing those norms and practices. This is an exciting time to be a journalist, with challenges to and new methods for doing their jobs being developed at accelerated rates. Studying these challenges and methods can help journalists and those they serve understand better the evolving role of journalism in a swiftly changing world.

NOTES

1. For additional background on Twitter, and for an examination of how journalists have framed it in the press, see Arceneaux and Schmitz Weiss (2010).
2. See http://twitter.com/nytimes.
3. See http://twitter.com/time.
4. See http://twitter.com/cnn.

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