



# Seems stupid until you try it: press coverage of Twitter, 2006–9

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## Abstract

While critics of Twitter, the most popular microblogging application, dismiss the service as frivolous, proponents tout a variety of educational, political and commercial uses. Drawing from social construction theories of technology, this research uses the grounded theory approach to analyze press coverage of this emerging technology from 2006 through the first months of 2009. While the specifics of Twitter may be new, this research demonstrates that the public response to this web tool is similar to the public reaction to earlier communication technologies including the telegraph, radio and the internet. Despite vocal skepticism from some, the research shows newspapers, magazines and blogs have promoted and actively encouraged Twitter's diffusion.

## Key words

diffusion of innovations, microblogging, social construction of technology, Twitter

## Introduction

This is like the Seinfeld of the internet – a website about nothing. (Stone, 2006)

This statement typifies the dismissive attitude that many individuals have upon first encountering Twitter, the Web 2.0 phenomenon that combines elements of blogging, text messaging and broadcasting. Users write short messages of 140 characters or less, known as 'tweets', which are distributed to everyone who has elected to receive them. This relatively new communication practice is known as 'microblogging', and Twitter is the most popular (though not the only) application capitalizing on this growing trend (Red

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Herring, 2009). Twitter can be accessed from any device with internet access, including laptop and desktop computers, though the brevity of tweets makes the application particularly suited to mobile devices, with users providing a running commentary on their daily routines. Despite the continued growth of Twitter, many critics scoff at the value of such an application. 'How many ways do you really need to tell people what you ate for breakfast?' cry the nay-sayers.

Despite the skepticism that surrounds Twitter, evidenced by comical online videos and sneers from comedians, the application has attracted a significant number of users and the attention of major media outlets. Many companies and government agencies have also embraced the technology, using it for various marketing, publicity and customer service tasks. So many companies have already started using Twitter that academic studies of its use in this respect have already appeared (Jansen et al., 2009). Given its deceptively simple and inherently flexible nature, the service will no doubt be adapted to other uses in the future.

Drawing from theories of social construction (Bijker et al., 1987) and the diffusion of innovations (Rogers, 1995), this article explores the public response to this new form of communication by critically analyzing the press coverage of Twitter. The assumption of this research, as well as studies that have looked at public response to previous communication technologies, is that press coverage is not simply a transparent method to distribute information but can function as a force of change itself, influencing the ways these technologies are diffused, utilized and regulated. As famously stated by Marvin (1988: 8), media have 'no natural edges', and their function within society is not determined by inherent technical issues, but instead dependent upon a range of cultural, social, economic and political factors.

This current research into Twitter offers a chance to explore the social construction of a media technology as it occurs. It may very well be that Twitter turns out to be the *app du jour* that will fade from the limelight, or it could become a staple of daily life. Whatever may transpire, though, does not detract from the value of the present research. Analyzing press coverage of Twitter can tell us specifically about how the phenomenon of microblogging is being currently presented to the public, and more generally, it offers insight into the euphoria, confusion, skepticism and contested process of technological adoption that greet all new forms of media. This current research into one particular communications technology thus offers insight that may be generalizable to other technical and social practices, including blogs, social networks and forms of electronically mediated communication unforeseen at the time of this writing.

This research also supplements prior work by Castells (2000) regarding the growth of the network society, or what Wellman (2001) has labeled the rise of 'networked individualism'. The growth of the network society predates the growth of the internet and the concomitant development of online communities, though such developments exemplify the web of overlapping, specialized, non-geographic communities that now govern our daily lives. Wellman (1999) and Rheingold (1993) have studied how the internet encourages the formation of new types of communities, while others have researched the potential benefits and uses of online social networks (Schneider and Huber, 2008). No matter what the potential benefits of electronically mediated communication might be, such uses may never be realized if society perceives the accompanying technology in a negative light. While this current research is not specifically focused on *how* new forms of

communications technology (such as Twitter) are actually being used, the research does shed light on what the public thinks about these new forms of communication and their associated social practices.

## Twitter history

Twitter was founded in March 2006 in San Francisco, California and became public by August of that year (Radwanick, 2009). The number of users has grown dramatically over this time, and the company boasts of a 1382 percent increase year-on-year in unique users (McGiboney, 2009; Milian, 2009). As of July 2009, Twitter reached over 50 million unique visitors worldwide (Rao, 2009). Twitter has been a free service with no defined business model since its inception, though the company has announced various methods for raising revenue in the future, including advertising, the creation of paid accounts for businesses and licensing tweets to search engines (Red Herring, 2009; Smith, 2009). At the time of this writing, it is not clear if any of these (or other) methods will be successful, though it is clear that Twitter does hope to generate profits eventually.

Since its public debut, several key moments have established Twitter's reputation in the digital sphere. One of the first key moments was when the company won an award at the 2007 South by Southwest Interactive Festival in Austin, Texas (South by Southwest, 2007). Twitter also attracted press attention for breaking the news coverage of catastrophes, such as the massive earthquake that rocked the Sichuan province of China in May 2008, the terrorist attacks in Mumbai in November 2008, the crash of US Airways Flight 1549 on the Hudson River in January 2009 and the volatile protests after the Iranian election in June 2009 (BBC News, 2008; Beaumont, 2009; Grossman, 2009; Shachtman, 2008; Spencer and Moore, 2008). Aside from catastrophes, other high profile moments for Twitter over the past few years include the moment when James Karl Buck, a US graduate student, was arrested while protesting in Egypt in 2008. While in transit to the police station, he used his mobile device to send a tweet about his plight; his followers initiated a successful effort to win his release from jail (Simon, 2008). All these stories made national and international headlines with several users on Twitter providing first-hand accounts, maps, pictures and other relevant bits of information, utilizing the service as a form of citizen journalism (Beaumont, 2009).

## Historical precedents

Previous research into the public reactions to the earlier communications technologies, including the telegraph, the telephone, radio, television, the internet and mobile phones, indicates three different categories of response. These categories – positive becoming negative, continually positive and negative becoming positive – provide some framework against which the press coverage of Twitter may be evaluated.

### *Positive to negative*

Blondheim (1994) and Czitrom (1982) found that utopian hopes for the telegraph waned over time, a development partially spurred by the growing dominance of Western Union over the telegraph lines. Both scholars also cite Thoreau's condemnation of the useless

information transmitted via the telegraph. Cornish (2008) uncovered a similar pattern of positive reactions turning negative in a study of the internet; as the technology diffused to a wider base of users, vague fears crystallized into specific concerns over privacy, hackers, pornography and information overload.

Marvin's (1988) study of electronic media from the 19th century, Covert's (1984) study of early radio and Wellman's (1999) work into social networks provide some insight into the nature of such negative responses. Technologies, such as Twitter today and the telegraph in the past, inspire negative responses because they disrupt established concepts of communication, prevailing notions of space and time and the distinction between public and private spheres. In Covert's analysis, critics of early radio could be characterized as grieving, since they were mourning the older forms of communication. Wellman (1999) has made a similar observation in relation to the community question; namely, that new forms of electronically mediated communication are not as authentic as older, romanticized notions of face-to-face interaction. According to Wellman, concerns over community have existed since the Industrial Revolution, with the internet serving as a recent scapegoat for such critics. For these critics, the internet does not connect disparate individuals but instead alienates users from 'real' social relationships.

### *Continually positive*

Some studies of the public response to new communications technologies, by contrast, found press coverage that remained extremely favorable. Cogan's (2005) study of press coverage of personal computers from 1982 to 1984 found an overwhelming reliance on positive frames. Rossler's (2001) study of German magazine coverage of the internet similarly found a preponderance of positive frames. One possible explanation for this pattern is that for journalists, the personal computer and the internet are particularly valuable tools, so they are more prone to adopt the technology.

### *Negative to positive*

Other studies have found instances in which a skeptical public became more positive and accommodating over time. Fischer's (1992) study of the telephone, for example, as well as Arceneaux's (2005) study of mobile phones found that established rules of etiquette were initially opposed to both devices. As the technologies diffused, both became more acceptable and issuing invitations via the phone or speaking in public on a handheld device were no longer violations of social protocol. This pattern suggests that widespread diffusion encourages tolerance, and the technology is perceived as simply another aspect of modern life.

## **Methodology**

The grounded theory approach was the method we used in this study to review and analyze the content sampled. Glaser and Strauss (1967) developed this approach to help with the coding of qualitative data. In the grounded theory approach, data are coded (in this study via open-coding format) into as many categories as possible with continual

adjustments as the researchers go through the process. Theoretical memos are created during this stage to inform the researcher of the coding before they go onto the stages of integration and dimensionalization. This stage includes the researchers reshaping the categories originally developed earlier in the coding and making connections between the categories identified. Finally, the researchers then construct and interpret the findings (Lindlof and Taylor, 2002: 218–22).

### *Process*

Using the grounded theory approach, the stories were coded according to categories that developed during the theoretical memo stage, informed by Rossler's (2001) study of the media coverage of the internet in Germany. Rossler's work used a different methodology, content analysis, but the characterization of the various frames used by German media to explain the internet was used as a rough guideline for the present research. Rossler identified four generally positive ways of framing the internet, with each frame emphasizing a different result; better political communication or improved business performance, for example. Similarly, the critical stories were classified according to a specific flaw with the technology: the hype of the internet exceeded reality or it was bad for businesses, for example. This method of categorization *only* provided guidance for the current research as the researchers adjusted their categorization of the data as the coding continued when they entered the integration and dimensionalization stage that showed connections between categories of positive, enthusiastic, ambivalent and antagonistic opinions that were leveled at Twitter.

### *Selection*

This study examined a purposeful sampling of newspapers and news wires, magazines and weblogs to determine how the media explained and characterized Twitter between 1 March 2006 and 31 March 2009. March to March was selected as the timeframe since Twitter was founded in March 2006 and the researchers wanted to make sure this study was comparable by full 12-month periods. This selection of media was chosen because it is representative of the different forms of media consumed by the general population in the USA on a daily basis. Weblogs were included in this study, even though they do not have the same level of readership as some of the newspapers and magazines sampled, as they are nonetheless a common form of information for news consumers in the media landscape (Pew Research Center, 2008). In recent years, blogs have also become part of news organizations' routines making them a recognized and professional outlet for the media and journalists (Singer, 2005). The researchers also selected blogs so they could provide a perspective distinct from the newspapers and magazine articles since blogs are recognized as having a different writing style and convention from other journalistic work.

### *Content*

The LexisNexis Academic database was used to identify the content sample. The content consisted of news wires, newspaper articles, magazine articles and blogs from the

**Table 1.** 'Twitter and microblogging' content by media type and year (March–March)

Media type and year	Population of content	Sampled content
Newspapers, news wires		
2006–7	1	1
2007–8	37	10
2008–9	273	53
Magazines		
2006–7	1	1
2007–8	28	7
2008–9	137	26
Weblogs		
2006–7	23	6
2007–8	69	12
2008–9	602	121

database. LexisNexis has identified blogs as an additional news source since 2006 when it began to incorporate them into their system.<sup>1</sup> The search string of 'Twitter and microblogging' was used to find articles between 1 March 2006 and 31 March 2009 across the different media groups. Based on the search, articles had any of the following keywords in the text – 'Twitter and microblogging', 'Twitter' or 'microblogging'. These searches yielded about 1171 items. As shown in Table 1, there is a steady increase of content on the topic between 2006 and 2009. By 2008, weblogs were shown to have the highest increase over any other media type, with a total of 694 blog posts found that had the keywords of Twitter and microblogging.

### *Sampling strategy*

Based on the overall population of content received, the researchers took a purposeful sample of the content based on the year and media group. In qualitative studies, purposeful sampling is a recognized method that helps to identify a critical aspect to what is being studied and elaborate its application to the theoretical construct identified: 'Because social phenomena are studied for their unique qualities, the question of whether they are normally distributed is not an issue' (Lindlof and Taylor, 2002: 122). For this study, the sample consisted of 20 percent of the population or in terms of an actual number, 237 items of newspaper and news wire articles, magazine articles and weblog posts.

### **Findings**

Within the press coverage sampled, the most dominant theme discovered was that of Explanation. Given the relative novelty of Twitter, it is not surprising that a great many writers felt compelled to explain the basic functions of this application before providing further details on its use. This theme was divided into two subthemes; Brevity (which

emphasized the 140-character limit of tweets) and Speed (which focused on the instant dissemination of messages).

For stories that provided some kind of subjective judgment of the application, the sample overwhelming favored Positive themes, as very few of the stories failed to mention at least some benefit. Within this theme, three subthemes were identified: New Sensibility, Commercial Use and Civic Use.

While few stories could be categorized as purely Negative, analysis did uncover a range of skeptical or pessimistic descriptions of Twitter. This theme was subdivided into the categories of Information Overload (pertaining to the flow of ostensibly trivial information), Acceptable Practices (pertaining to the disruptive nature of the service) and Unanticipated Consequences (pertaining to problems which only became apparent after use of the service).

### *Explanation theme*

**Brevity.** The brevity of tweets was by far the most discussed feature. Several writers used the character limit as an opportunity for humor. Writing in the *Atlanta Journal-Constitution*, Jim Auchmutey defined tweets as ‘short blog entries limited to 140 characters, which this entry just exceeded’ (Auchmutey, 2008). In a story about the growing use of Twitter by businesses, a young woman who had just landed a PR job quipped that ‘the new resume is 140 characters’ (Baker and Green, 2008).

For some writers, the extreme brevity of posts was a drawback, as the format encourages the kind of cryptic, condensed language associated with text messaging in general. Blogger Seth Godin, for example, stated ‘if you’ve got 140 characters to make your point, the odds are you are going to be misunderstood (a lot)’ (Seth’s Blog, 2008). Several others, though, saw some educational value to the requirement. Discussing an online debate over this specific feature, the blog Digital Digs wrote: ‘the general consensus . . . was that there was a potential to teach concision in the 140 character limitation of the tweet. There was also extensive comparison to the haiku’ (Digital Digs, 2008). In this perspective, Twitter could actually improve one’s writing ability, rather than corrupt it.

**Speed.** The other feature that was discussed frequently was the near-instantaneous speed with which information can now be disseminated. Recalling the amazement that was bestowed upon the telegraph, which was said to deliver news at the speed of lightning, Twitter proponents boasted of its superiority to traditional news outlets. One blogger stated that news of a bomb blast in Manila was circulated via Twitter even before the local news got the story, while a writer at *PC Magazine* emphasized that the first news of the Chinese earthquake came via Twitter (A Feed is Born, 2008; Ulanoff, 2008). Associated Press writer Sam Dolnick (2008) made the same observation in relation to the terror attacks in Mumbai (and even made the same lightning analogy):

The lightning-quick updates of the attacks that killed 174 people read like a sketchy but urgent blow-by-blow account of the siege, providing further evidence of a sea change in how people gather their information in an increasingly Internet-savvy world.

## Positive themes

*New sensibility.* For stories that contained any kind of qualitative, as opposed to merely descriptive, characterization of Twitter, most of them described the service in positive terms. For proponents, the steady stream of posts that some critics see as a detriment is precisely the benefit of the service. In *Technology Review*, the director of a social-computing lab compared a single tweet to a single pixel. Taken individually, such minutia are essentially meaningless, but ‘when you see all of those little pieces together, it gives a much richer portrait’ (Greene, 2007: 44). Writing for *The New York Times Magazine*, Clive Thompson (2008) included the same observation from a Twitter user. Initially, the flow of incoming tweets was confusing, ‘but as the days went by, something changed. [He] discovered that he was beginning to sense the rhythms of his friends’ lives in a way he never had before’ (Thompson, 2008: 42). Thompson characterizes this new form of social awareness as ‘ambient intimacy’ through which we acquire a greater awareness of many individuals, a group far larger than what we could keep up with through personal contact.

Bloggers also spoke of Twitter as a new form of communication with its own sensibility and distinct benefits. To this end, blogger Seth Godin stressed that ‘the medium has to be appropriate for the message. Using microblogging . . . to share your quarterly review or to fire someone or to make an important, nuanced announcement is just sort of dumb. Using it for keeping in contact with an ever-widening circle of friends and colleagues is brilliant’ (Seth’s Blog, 2008). Along this same line of reasoning, Mark Evans did not believe that microblogging would replace traditional blogging, because ‘it complements . . . by providing a forum for blog bursts as opposed to blog thoughts’ (Evans, 2008).

For proponents, however, Twitter can do more than simply help maintain online relationships, and a handful of articles praised the practice of the ‘tweet-up’. In these events, a group of users congregate in a physical space, using microblogging as something of a party planner. One user who had moved to a new city commented on the benefit that such an event had on helping him establish himself; ‘It was definitely nice to put faces to screen names, and I’m sure these offline gatherings are only going to tighten the relationships between people’ (*Patriot News*, 2008). Another user observed that people could make valuable business contacts or find jobs, though he emphasized the casual, informal nature of the interactions and stressed that it was not networking, as the term (for him) implied ‘just people handing out business cards. . . . It’s not that at all’ (Colon, 2009). Reed (2005) has written about similar face-to-face meetings organized by networks of bloggers. In these ‘blog meets’, individuals who had never met in person could immediately jump into in-depth conversations since they already had some general acquaintance with these otherwise strangers from personal information posted online.

*Commercial use.* In terms of commercial uses, there were a great many examples in which Twitter was used for promotional offers, advertisements, press releases, or to answer questions from customers. One variation of ‘explanation’ stories were those that went beyond outlining the basics of Twitter, and provided instructions on using the service for specific business goals. An article in *PR Week*, for example, that appeared just one year

after Twitter's launch urged public relations professionals to adopt the service (Bush, 2007). Companies could use it to update consumers and the media, to announce promotions, or to conduct off-the-cuff polls. To this end, an account supervisor said that 'someone can send out a quick question and find out in minutes if the idea is good or bad' (Bush, 2007). Later that same year, the Online Marketing Blog provided even more detailed, and enthusiastic, instructions regarding Twitter's use in marketing and customer service campaigns (Odden, 2007). By following the right Twitter stream you could even pick up timely stock tips, as outlined in the aptly titled blog post 'Covestor's Twitter notifications could make you rich (if you follow the right people)' (Ostrow, 2008).

*Civic use.* The other benefit to the public from Twitter lay in the realm of politics. Both John Edwards and Barack Obama use Twitter, and these two were the most frequently cited politicians within the stories sampled. Edwards and Obama were held up not only as notable public figures who have adopted the service, but also symbolized the increased access to political information that Twitter allowed. The inauguration of President Obama also appeared in the coverage (Holloway and Gallaga, 2009). This fact is not surprising, given that this event was covered more extensively online than perhaps any previous event in American politics. Embracing the vision of an expanded participatory democracy (a hope which has been bestowed upon all previous forms of electronic media), the *St. Paul Pioneer Press* also detailed how citizens could use Twitter to pose questions to the Republican National Committee (Ojeda-Zapata, 2008). Outside of benefits to the traditional, two-party system, another variation of the political theme dealt with the ways various groups could use Twitter to mobilize around specific causes. The pain reliever Motrin, for example, inadvertently triggered a backlash when one of its ads made negative claims about carrying a baby in a sling; angry sling-wearing moms organized their protests via Twitter (Havenstein, 2008).

A number of stories in all the outlets characterized Twitter as more than simply a tool for personal or professional use, as it could be used to distribute information, news and emergency updates to the public. For example, the Food and Drug Administration used Twitter to inform the public about food recalls associated with the salmonella outbreak of 2008 (Shute, 2009). Another repeated example was the California wildfires in 2007, with news organizations such as the *Los Angeles Times* using the service to distribute up-to-date information (Stratton, 2008). In other cases, Twitter was praised for its life-saving role in terms of law enforcement, such as the Boca Raton police department using it to inform citizens of crimes and to solicit tips from the public (Canfield, 2009). Aside from solving cases, the press also covered how Twitter served as a tool in traffic management as the Department of Transportation in Topeka, Kansas sent tweets about accidents and road closures (Atkins, 2009).

### *Negative themes*

While negative stories were a distinct minority of the sampled coverage, blogs were found to contain the most such stories (see Apple Matters, 2009; Williams, 2009). A partial explanation for this finding is that blogs, in general, contain a wider variety of opinions on all subjects. Negative comments from bloggers were relatively scarce, and the

most surprising discovery of this research was the limited number of stories that could be classified as entirely negative. A great many of the stories had disparaging comments, but only a handful failed to contain at least one positive statement about Twitter. A 2008 article in *Information Today* discussed both positive and negative attributes of Twitter, before concluding that ‘you cannot understand how it can be useful until you try it’ (*Information Today*, 2008). Some variation of this sentence appeared in a great many of the stories sampled, as writer after writer would make some comical critique of micro-blogging, and then outline some decidedly beneficial use of Twitter, such as providing crucial information during a natural disaster. Blogger Mark Evans, for example, wrote that Twitter is ‘more than just a tool to tell people what you had for breakfast or ate for lunch, although an awful lot of people use it that way’ (Evans, 2008).

Some criticisms were specific to the Twitter service, as opposed to microblogging in general. The lack of revenue, for example, was mentioned in a few stories, as during the timeframe of analysis Twitter had not yet identified how the service planned to generate money (see Dumenco, 2008; also May, 2008). Another recurring complaint was that the servers that run Twitter have frequently gone down, temporarily shutting down the flow of messages (A Feed is Born, 2008).

*Information overload.* The most common critique from detractors was that the service unleashed a torrent of useless information upon users. One columnist, for example, lamented the fact that so many musicians had adopted Twitter, and mocked the efforts of those who saw the service as a shortcut to success. According to this argument, artists who released a novel or album every few years could carefully craft their message as opposed to publicly airing updates about every step in the artistic process: ‘Twitter floods the market with private thoughts of public figures, most of which aren’t really worth articulating’ (Kroth, 2009).

Regarding such thoughts that ‘aren’t worth articulating’, tweets relating to a user’s latest meal were a frequent target. If the press coverage sampled is to be believed, a great many Twitter users post details about what they are eating, and there were repeated references to such ‘food tweets’. In one particularly negative article, *Advertising Age* endorsed the ‘information overload’ theme, referenced food tweets and laughed at those who saw business opportunities with the application (Simon, 2007):

What could be more annoying and less useful than a site where thousands of people are given 140 characters to shout out about what they’re doing at every moment of the day? The amazing thing is that enough people out there think this mindless stream of ephemera (‘I’m eating a tangerine’, ‘I’m waiting for a plane’, ‘I want a Big Mac’) is interesting enough to serve as the basis for a viable advertising platform.

In the same vein, two bloggers within the sample referred to Twitter as ‘TMI’, a colloquial acronym for ‘too much information’ (jkOnTheRun, 2006; Weil, 2007).

*Acceptable practices.* A number of other stories, while not completely negative, addressed some of the problems that Twitter presented for pre-established norms and protocols. In the court system, for example, jurors are warned about relying on outside sources of

information or discussing case particulars with others. While the technologies of the internet and Twitter would seem to be prime suspects in relation to these activities, the courts have been slow to include specific mentions of these technologies when instructing jurors. If a juror discusses a case on Twitter, is this reason enough for a mistrial (Black, 2009)?

While lawyers and judges deal with the potential Twitter issues, society is similarly seeking to establish the acceptable etiquette for microblogging. Whereas the *Rocky Mountain News* thought it acceptable to provide continuous updates from a child's funeral, *Advertising Age* blasted this feat as 'one of the most idiotic and shameful moments in "journalism" this year' (Dumenco, 2008). The most detailed etiquette article in the sample appeared in February 2009 and dealt explicitly with the growing popularity of Twitter among politicians (Coller, 2009). This story, which appeared in the *St. Paul Pioneer Press*, quoted an etiquette expert on this issue. She thought it was 'disrespectful' to send tweets during a meeting, especially one with the president, noting that 'something has to be kept sacred'. In the same article, an expert on technology and politics offered a more welcoming perspective. For politicians in particular, there could be a very real value in sending real-time updates during a legislative session: 'When you're sitting in a detailed meeting going over information that's of interest to thousands of people you represent, it doesn't seem incongruous to allow some of them to look over your shoulder as you participate'.

*Unanticipated consequences.* Negative characterizations of Twitter, which remained a minority of the sample, did grow over time, with new complaints surfacing after the process of diffusion was further along and third-party services had appeared. Using the terminology of Rogers' diffusion of innovations model, these second-stage criticisms can be classified as 'unanticipated consequences', a term that describes effects which were not intended by the original creators of the service (Rogers, 1995: 419). The difficulty in keeping up with tweets from a large number of individuals, for example, was perceived to be a problem. It was not that these critics saw the service as trivial, but acknowledged that following the posts of a large number of people was impossible. In *PC Magazine*, Lance Ulanoff wrote that following too many users was akin to 'standing in the middle of New York City's Grand Central Terminal and having every single person pause to tell you, in 140 characters or less, exactly what they're doing' (Ulanoff, 2008).

Another unanticipated consequence was the rise of Twitter-spam, a problem that could not have existed before marketers began to exploit the application. Blogger Mark Hopkins pointed out the problem of 'Twitter-spammers' in 2008: those individuals and corporations who acquired a vast number of followers, but offered nothing of value in their tweets (Hopkins, 2008). In January 2009, blogger Tish Grier wrote a colorful critique of Twitter-spammers, 'for whom every tweet is a promotion for their latest get-rich-quick scheme' (Grier, 2009). These users had figured out how to exploit the 'auto-follow' feature of Twitter, a potential loophole that allows unscrupulous users to unwittingly enlist others to follow their tweets. As her diatribe continued, Grier then moved into the 'acceptable practices' theme as she outlined the specific things that journalists did on Twitter, in contrast to spammers, that made them models of protocol. In a similar vein, *Black Enterprise* magazine offered its readers advice in January 2009 on how to use

Twitter as a business tool (Beckwith, 2009). One of the specific suggestions was not to use the service as a method for blasting out unfocused advertisements. Though the article does not mention any company by name, the advice was likely inspired by those early adopters who were not so judicious in the content they disseminated.

Another unanticipated consequence addressed the issue of identity fraud and dealt with the Twitter version of cybersquatting. Given that users can sign up for any user-name, without independent verification, a few individuals have established deceptive aliases. One story, for example, detailed an impersonator of hockey legend Wayne Gretzky; a ruse that at the time had attracted over 200 followers (TechWeb, 2008). A similar story explained that the Exxon Mobil company had also been impersonated by a user named simply 'ExxonMobilCorp' (Prange, 2008). In a story about celebrity Twitterers, *The New York Times* did not directly address the issue of identity theft, but did stress that user-names did not necessarily correspond with a 'real' person (*The New York Times*, 2009).

## Discussion

Based on the press coverage during Twitter's first three years of existence, the evidence indicates that journalists have been primarily positive in relation to this particular microblogging service. While a great many jokes and derogatory comments have circulated online and among professional comedians, articles in newspapers, magazines and blogs suggest a largely supportive tone.

The stories classified as expressing the New Sensibility theme echo Covert's (1984) argument about the introduction of radio broadcasting. For Covert, radio signaled a new way of understanding and comprehending the world, and the early critics of radio can be seen as grieving the loss of the older sensibility. Proponents of Twitter, by analogy, put forth a similar argument, arguing that microblogging is more than simply a weak substitute for older methods of communication. This argument also recalls Wellman's (1999: 336) characterization of online communities: 'Such groups are a technologically supported continuation of a long-term shift to communities organized by shared interests rather than a shared place . . . or shared ancestry.' Few proponents of Twitter made this argument quite so explicitly, but a recurring theme within the positive coverage was the claim that the increasingly digitized world of the 21st century required new methods for maintaining social bonds.

The stories classified as expressing the Acceptable Practices theme also reveal similarities to the public response to earlier technologies. The debates about the appropriate places and times to use Twitter, for example, evoke debates regarding the use of telephones and mobile phones, as discussed by Fischer (1992) and Arceneaux (2005). These devices altered the accepted notions of public and private behavior. As these devices became more common in daily life, social restrictions about their use gradually lessened. Similarly, the etiquette governing the proper way to use Twitter is currently changing, and microblogging during a meeting, for example, is no longer looked down upon by everyone.

There was some evidence in the press coverage sampled of positive stories becoming negative, following the similar pattern outlined in the Historical Precedents section. As

the service has grown, Unanticipated Consequences, along with other negative themes, grew over time. This observation is consistent with the prior research on earlier technologies: once a new technology becomes more diffused, vague criticisms become more focused and specific. Bloggers expressed such criticism more often than newspaper and magazine writers, though these criticisms were often rooted in their familiarity with the service rather than ignorance.

Two particular criticisms that surfaced in the press coverage sampled could also be interpreted as somewhat positive statements. The complaints about frequent server-outages, for example, attest to the importance of Twitter for some users, who cannot bear to live without it for even short periods of time. The repeated observations that the company lacks a viable business model also suggest that the service's enormous popularity must be able to be monetized in some way. Given the ongoing growth of the service and the company, it is likely that these two particular criticisms will diminish.

## **Conclusion**

Every major form of electronic communication, from the telegraph to the internet, has been greeted with ambivalence, though the preponderance of positive press coverage revealed by this research suggests that the skepticism over Twitter will not slow its diffusion and commercial adoption. The concurrent growth of mobile media applications, for which Twitter is particularly suited, is also likely to contribute to the application's growth. If Twitter's proposed plans for generating revenue should fail (and we are by no means suggesting that they will), the void will no doubt be filled by some rival service that offers a similar capability. For those Americans for whom email itself is an overly casual and impersonal means for communication, and for whom the entire phenomenon of social networking is something of a mystery, microblogging will likely remain a maligned activity. For other Americans, though, particularly those accustomed to sharing personal information and interacting through such Web 2.0 platforms as YouTube, Facebook, Flickr and MySpace, microblogs like Twitter will become just one of the many communication tools at their disposal. In sharp contrast to the quote that begins this article, Twitter users would have us believe that the application is indeed about something.

This study does have limitations. First, this study only focused on the media that could be measured in text form, such as magazines, newspapers and weblogs. Other forms of media such as radio, television and digital media are also potential measures of public response to Twitter, but were not the focus of this study. The sampling method was also reliant upon the publications that LexisNexis includes within its database, and the 'newspaper' category of this database includes trade publications and material geared toward the business community. Given that many companies have already begun to use microblogging as part of the marketing and advertising efforts, it is possible that this portion of the sample overrepresented positive discussions of the application. The study was also limited by the timeframe in which the content was sampled. The sample end date of March 2009 omitted the protests in Iran pertaining to the disputed election results of June 2009, with Twitter providing one of primary tools used by protestors to disseminate information.

Future research into this topic could address these identified limitations. Non-textual sources, such as online videos and the jokes of late-night comedians, could be analyzed to uncover how Twitter is characterized by these sources. Additional research could also be done to discover if the coverage of the dramatic events after the Iranian election was an anomaly or if these events did lead to an identifiable shift in the press coverage of Twitter. By separating Twitter-users from non-Twitter-users, future research could also test the veracity of one of the notable claims uncovered during this current research, namely that the value of microblogging is not apparent until one tries it out first-hand. Do users actually have different perceptions of this service compared to non-users? A related research project could focus specifically on media practitioners and journalists. Since these individuals are devoted to acquiring and disseminating information, is it possible that they have a 'pro-microblogging' bias that is not truly representative of the larger public perception?

Stepping away from the perceptions of Twitter and into the arena of actual practice, other research could explore the various ways in which different industries and different outlets have utilized the service. Network analysis could be conducted with specific media professionals that could provide insight into what types of conversations are occurring on this platform, how often, and what networks it is creating and developing. Additional methodologies could be employed to explore these topics further through focus groups, in-depth interviews, surveys and content analysis of tweets themselves. The possibilities to explore the phenomenon of microblogs and their use is a fruitful and beneficial area to study for understanding another part of today's changing new media landscape.

## Note

- 1 The LexisNexis Academic representative could not disclose the specifics of how they review and select blogs that are chosen for their database.

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