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Between tradition and change

A review of recent research on online news production

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ABSTRACT

Online news media have become a key part of social, economic, and cultural life in many societies. Research about these media has grown dramatically, especially in the past few years, but there have been few reviews of this research and none of the most recent scholarship. This article reviews scholarship on online news production published since 2000. It examines research on five key topics: historical context and market environment, the process of innovation, alterations in journalistic practices, challenges to established professional dynamics, and the role of user-generated content. A tension between tradition and change emerges from this discussion and is evident at two levels. First, the world of practice seems to straddle the re-enactment of established forms and tinkering with alternative pathways. Second, the modes of inquiry oscillate between using existing concepts to look at new phenomena and taking advantage of these phenomena to rethink these concepts and come up with new ones. The article concludes by identifying shortcomings in the existing scholarship and suggesting avenues for future studies to overcome them. It suggests how scholarship on online news production could contribute to rethinking some of the fundamental building blocks of understanding communication and society in the contemporary media environment.

KEY WORDS ▪ journalism studies ▪ media production ▪ new media scholarship ▪ online journalism ▪ online news ▪ online news production

Media are key actors in the social, cultural, economic, and political lives of countries around the world (Bourdieu, 1998; Castells, 1996; Habermas, 1989; Horkheimer and Adorno, 1944; Luhmann, 2000; Thompson, 1995). Since the mid-1990s, the internet has been steadily incorporated into the daily routines of increasingly larger segments of the population. Thus, it is not surprising that, as part of this process, online news sites have grown in importance in the media systems of most countries. For instance, eight out of 10 Americans say the internet is a critical source of information in their lives (Project for

Excellence in Journalism, 2008). In a worldwide survey of newspaper editors, 44 percent of the respondents believed that, in 10 years, most people would be reading their news online (World Association of Newspapers, 2008).

As the internet has expanded and institutionalized as an alternative for the production and consumption of news, scholarship about online journalism has also increased and consolidated, especially in recent years. Yet, there have been few comprehensive assessments of what research has learned about online news production (Boczkowski, 2002; Kopper et al., 2000). Because these reviews examined studies that were published prior to 2000, this article discusses the major trends in scholarship about online news production since then.[1] This discussion of research on online news production has a dual purpose. The first is to update and revise this area of inquiry during these years of exponential growth in research output. The second is to reflect on where the field has been as a way to chart new directions of inquiry for the future.

This review of the literature indicates that the phenomenon of online news production and the study of it are at a kind of liminal moment between tradition and change. Online journalists are still influenced by remnants of past traditions, such as the prioritization of an information-gathering and provision orientation and a distrust of the internet as a source of knowledge. However, glimpses of a different future are already visible in the scholarship. For example, some journalists and members of the public have embraced relatively novel spaces and forms of content creation made possible by the online medium, such as blogging. Scholarship about online journalism seems also to be at the intersection of tradition and change; it still relies primarily on traditional conceptual lenses to make sense of emergent phenomena, but shows potential for theoretical renewal.

After a review of the scholarship is presented in the next section, the article concludes by identifying some critical gaps in the literature and proposing ways to overcome them in future research. It suggests how studies of online news production provide an opportunity to rethink some of the fundamental building blocks of the more general scholarship on media and society, such as the division between the spheres of production and consumption.

Literature review

This section is organized into five parts. The first examines research about contextual matters, such as the history and market environment of online news. The second part addresses analyses of the causes, dynamics, and

consequences of innovation. The third part looks into research about changes in journalistic practice. The fourth focuses on professional and occupational matters. The final part deals with the role of the user as a content producer and its implications for the public sphere.

The context of online news production

Historical topics have attracted far less attention than other issues among scholars of online news. The limited historical scholarship has often focused on how competitive and cultural dynamics have contributed to shape the evolution of online journalism. The influence of competitive dynamics has been analyzed by researchers who argue that mainstream media took up online news, motivated in part by their concern with the presence of new entrants into the digital arena (Allan, 2006; Carlson, 2003; Dennis, 2006; Gilbert, 2005; Herbert and Thurman, 2007; Salwen, 2005; Sousa, 2006). Furthermore, Boczkowski (2004a) argues that, in the case of the newspaper industry, the importance of these competitive dynamics for established news organizations has been related to a particular culture of innovation marked by reactive, defensive, and pragmatic traits. According to Boczkowski, newspapers developed online news operations as a reaction to prior moves by new competitors rather than proactively seeking new horizons. They also did so in a way that defended their existing territory rather than conquered new ones. Moreover, their actions were pragmatically centered on making a profit in the short term rather than more idealistically pursuing opportunities that could only pan out in the longer term. This culture of innovation embodies the tension between tradition and change mentioned above and highlights how consequential it has been for the industry. In a recent analysis of the evolution of American online newspapers from 1980 to 2005, Boczkowski (in press) concludes that these cultural factors have contributed to the more conservative and less successful path that these newspapers have had in comparison to sites not affiliated with traditional news firms.

The success of online news ventures has also been the focus of research that examines a key element of the market environment, such as profitability (Ahlers, 2006; Chyi, 2005; Clemons et al., 2002; Greer, 2004; Pavlik, 2001). Several studies show that few online newspapers were making a profit by the early 2000s (Boczkowski, 2004a; He and Zhu, 2002; Singer, 2003a). Some scholars suggest that this initial lack of profitability resulted from the lack of an adequate business model (Cawley, 2008; Chyi, 2005; Chyi and Lasorsa, 2002; Chyi and Sylvie, 2001; Garrison, 2005; Stober, 2004). For instance, although 95 percent of the sites of major newspapers in the USA ran profitable online operations by 2005, measuring profitability has been premised in part

on complicated decisions about 'how much cost is attributed to the online site versus the old-media operations' (Project for Excellence in Journalism, 2007: section 6).

Issues of profitability are directly related to revenue models. Online news organizations have straddled between resorting to traditional sources of income, such as advertising and subscription, and relying on new revenue-generating strategies made possible by the internet, such as e-commerce and targeting advertising according to consumers' profiles. But research shows that advertising has become the primary source of revenue for the majority of online news sites (Bustamante, 2004; Chan-Olmsted and Ha, 2003; Herbert and Thurman, 2007). Chyi and Sylvie (2001: 245) conducted a survey of local, regional, and national online newspapers in California, Texas, Florida, and New York and found that 'online advertising served as a revenue source for almost 80% of the sites, fewer than 20% adopted e-commerce, and only 3% charged a subscription fee'. However, studies have found that the advertising model does not guarantee substantive profits (Chyi, 2005; Garrison, 2005; Singer, 2003a). One reason for this conclusion is the relatively low level of expenditure on online ads in comparison to other media. The top 50 advertisers spent only 3.8 percent of their budgets on online ads in 2007 (Project for Excellence in Journalism, 2007). In a discussion of news sites affiliated with incumbent media enterprises and tied to the cultural issues mentioned above, Greer (2004: 113) argues that another reason has to do with their image as lagging behind new entrants: 'The lack of major online advertisers found on the traditional media sites could be an indication of how these sites are viewed by the industry – as afterthoughts to the portals and other megasites that advertisers are clamoring to support.'

The importance of advertising revenues is underscored by several studies that show that users do not seem prepared to pay for content (AlShehri and Gunter, 2002; Bustamante, 2004; Chyi, 2005; Del Aguila-Obra et al., 2007). Herbert and Thurman looked into paid content strategies of British news sites and suggested that 'many newspapers feel that the revenue they could gain from content charging would be less than what they would lose in advertising' (2007: 214). Moreover, Gentzkow (2007) measured willingness to pay for access to the *washingtonpost.com* among residents of the Washington, DC area between 2000 and 2003 and found that the average person would be willing to pay $0.30 per day. However, he argued that the gain to the company would be eliminated at 2004 advertising levels, because profits from subscription would be offset by transaction costs and losses in advertising revenue due to the decrease in readership caused by charging for access to online content.

Some researchers have linked the growing importance of advertising revenue to concern about the increased blurring of commercial and editorial content in the online environment (Cassidy, 2005; Cohen, 2002; Hutchins, 2007; Nerone and Barnhurst, 2001; Quandt, 2008a; Schultz, 2000; Yang and Oliver, 2004). Singer (2003b: 154) argues that 'online media sites are integrating content that generates revenue from advertisers and marketers with content that ostensibly is intended to fulfill the professional obligation to provide information whose sole purpose is public service.' To some scholars, this is tied to a concern that the internet makes it easier to target advertisements. This could, in turn, lead to under serve certain groups, such as low-income and minority consumers (Klinenberg, 2005; Turow, 1997, 2005, 2006).

The historical conditions and market forces discussed above have influenced the development of online journalism. This development is also related to the process of innovation, shaped in turn by a host of social factors.

The processes of innovation in online journalism

This section focuses on research about the causes, dynamics, and consequences of innovation processes in online journalism.

Scholars provide various interpretations of the role of technological change in the adoption of innovations in online journalism. For instance, Pavlik focuses on how technology influences journalism and asserts that 'journalism has always been shaped by technology' (2000: 229), because 'for journalism, function has often followed form' (2001: 203). But the emerging consensus is to reject deterministic explanations and instead propose that technological innovations are mediated and shaped by initial conditions and contextual characteristics (Boczkowski, 2004c; Conboy and Steel, 2008; Haas, 2005; He and Zhu, 2002; Sousa, 2006; Stober, 2004; Ursell, 2001). Thus, in an analysis of how journalism has changed in the digital environment, Deuze (2007: 153) proposes, 'Technology is not an independent factor influencing journalistic work from outside, but must be seen in terms of implementation, and how it extends and amplifies previous ways of doing things.' The interplay between technology and local contingencies is illustrated by Boczkowski's study of three online newspapers, which shows that 'variations in organizational structures, work practices, and representations of users are related to different ways in which newsroom workers adopt these technologies' (2004c: 198).

Research on the dynamics of innovation highlights the importance of the organizational and institutional contexts that shape how the process unfolds in different journalistic settings (Boczkowski and Ferris, 2005; Klinenberg, 2005; Nicholas et al., 2000; Singer, 2004; Thurman, 2008). For

instance, Gilbert (2005) looks into online ventures of print newspaper organizations and proposes that a strong perception of outside threat from newcomers in the media industry helped incumbent media companies change their investment patterns. But, at the same time, and in yet another expression of how tradition shaped change, they failed to modify organizational processes that could have taken advantage of those resource investments in an innovative way. Furthermore, in their analysis of how Chinese journalists use the internet for sourcing purposes, Chan et al. (2006: 941) conclude that, although there is a tendency among journalists 'to see (or perhaps wish for) online media as an alternative institution … government control of the internet undermines the potential of such online media to truly constitute an "alternative journalistic institution".'

Scholars also examine the consequences of innovation for the media industry and society at large (Bolaño et al., 2004; Bustamante, 2004; Deuze, 2006; Lagerkvist, 2008; Pavlik, 2001). Some studies have found that established journalistic operations have tended not to realize the potential of new technologies, thus affecting limited change across the industry (Boczkowski, 2004a; Cohen, 2002; Deuze, 2003; García, 2008; Garrison, 2005; Quandt, 2008a; Quinn, 2005). Domingo conducted an ethnographic study of four Spanish online newsrooms and found that, although online media made users' participation possible, 'the fact that interactivity (was) counterintuitive with the principles of traditional journalistic culture tended to diminish the willingness to explore audience participation' (2008a: 698). The tension between the established ways of producing news, and the changes in journalistic practice that the online medium affords play out in distinct ways in different social, political, and cultural settings (Deuze, 2008; Dimitrova et al., 2005; Weber and Jia, 2007). For instance, Semetko and Krasnoboka (2003: 94) argue that citizens in Russia and Ukraine 'turn to the online sources to obtain more information than is available in offline media, as well as uncensored or, as some political observers say, less censored, information about political developments in these societies.' In addition, studies of the popular citizen journalism site, *OhmyNews*, maintain that it has changed the South Korean media and political landscape (Allan, 2006; Gillmor, 2004; Song, 2007). However, Kim and Hamilton looked into the sociopolitical conditions for the emergence of *OhmyNews* and suggested that they are 'far from being a portable template transferable to any setting and country. It [the site]… can only be fully understood, not as a generalized model, but as a particular response to, and enabled by, very specific conditions' (2006: 547).

These causes, dynamics, and consequences of innovation have, in turn, been tied to transformations in the practices of gathering, producing, and publishing news.

The practices of online news production

Four aspects of changes in journalistic practices have attracted most of the attention of scholarly research on online news: modifications in editorial workflow, alterations in news-gathering practices, acceleration of temporal patterns of content production, and the convergence of print, broadcast, and online operations.

Scholars have argued that online news has increased the pressure on journalists to carry out multiple tasks and combine news-gathering and story-telling techniques in different media formats (Cawley, 2008; Lawson-Borders, 2006; Ursell, 2001; Zavoina and Reichert, 2000). This pressure blends long-standing workflows with novel demands, and expresses what Bromley (1997) calls 'multiskilling'. In his study of news production in several organizations in the USA, Klinenberg (2005) found that journalists complained that additional labor and speed pressures undermine their ability to undertake their craft. Deuze (2004: 144) argues that news producers are concerned because they are expected to carry out additional tasks for 'the same salary as before'. These workflow changes are tied to what Boczkowski calls the 'de-reification of media options'. 'Rather than taking the medium for granted, the Web's multimedia potential moves media selection processes one step earlier by requiring journalists to choose what medium or media to use for a particular story' (2004a: 123). Singer surveyed journalists in four multimedia news operations, and they acknowledged that the platforms have become less important than before. 'We're reporters. It doesn't matter which platform we're a reporter for' (2004: 11). This assessment echoes the words of a Norwegian editor interviewed by Quinn: 'I'm not working in a newspaper; I'm working in news' (2005: 36).

The existing technological capabilities and how journalists appropriate them contribute to shape information-gathering practices (Millen and Dray, 2000; O'Sullivan and Heinonen, 2008; Pavlik, 2000; Salwen, 2005). Already in 1999, 92 percent of journalists in the USA gathered news online (Garrison, 2001). However, use of the internet for information-seeking has not been homogenous across national contexts. Nicholas et al. found that nearly one-third of journalists in the United Kingdom surveyed in 2000 had no access to the internet, only a handful used news groups, and 'the idea that journalists spent their time surfing the internet [looking for story ideas] was laughed at by more than one journalist' (2000: 104). Distrust of the

internet as a source of news appears to be widespread. Thus, Shin and Cameron conducted a survey of South Korean and American journalists and found that, although journalists depend on the web for background information and story ideas, 'the majority of journalists remain skeptical about most websites' (2003: 259). In another survey, Cassidy (2007: 492) found that, although internet news received higher credibility ratings from online journalists than from their print counterparts, online news producers 'only perceived online news information as moderately credible overall'. This may be explained by the fact that reporters, particularly when they are working against the clock, are susceptible to misinformation, and 'media organizations are learning that the same digital systems that improve journalists' ability to do research in the office can also have perverse effects' (Klinenberg, 2005: 56).

Studies about online news production have also focused on the increased speed of communications in journalistic work. Many scholars propose that online journalism has contributed to the collapse of the twice-a-day news cycle (Boczkowski, 2009; García, 2008; Lawson-Borders, 2006; Williams and Delli Carpini, 2000), leading to the ascendancy of 'high-speed news' (Pavlik, 2000: 232). An examination of the period of data collection of various studies that address the acceleration of news work suggests that it has deepened over time. Boczkowski (2004a) conducted ethnographic research on the *New York Times on the Web* in 1998 and reported that editors at its technology section published stories daily towards the end of the day, following the publishing cycle of the print *Times*. A few years later, Klinenberg (2005) examined news production at a large metropolitan daily in the USA and argued that temporal patterns had accelerated so drastically that they amounted to a 'news cyclone'. Recently, Rosenstiel (2005) argues that this acceleration has become a key feature of the contemporary news industry in the USA, and Boczkowski and De Santos (2007) show that constant publication of new stories during the day has become an institutionalized norm among leading online news sites of Argentina. Quandt conducted ethnographic work in five German news sites, and argues that the move towards constant publication leads to '[news] agency dependent and "secondhand" journalism' (2008b: 89), due to the lack of the time for research, cross-checking, and original writing. Thus, online news producers seem to have adopted one of the practices that online media make possible, constantly publishing new information, which in turn has led to changes in their traditional way of producing news.

Scholars have examined the organizational integration among print, broadcast, and online operations, usually under the rubric of 'convergence' (Dennis, 2006; Deuze, 2007; Dupagne and Garrison, 2006; Quinn, 2005). Lawson-Borders (2006: 4) characterizes convergence as 'the realm of possibilities when cooperation occurs between print and broadcast media for

the delivery of multimedia content through the use of computers and the Internet.' Research indicates that the trend towards convergence has not been uniform across organizations, industries, and countries as a result of different patterns in the merging of the old and new logics of content production that mark the various media involved (Boczkowski and Ferris, 2005; Klinenberg, 2005; Kopper et al., 2000; Meier, 2007). This lack of uniformity is related in part to the presence of different research approaches to this subject. Deuze notes that quantitative studies 'are generally upbeat and sometimes even utopian in their conclusions' (2004: 144), whereas qualitative scholars find that outcomes are mixed at best, because technological and organizational changes following the introduction of the internet into news work might cause stress and frustration. Studies about journalists' reaction to convergence also report heterogeneous outcomes. For instance, American journalists surveyed by Singer (2004) stated numerous advantages of convergence over traditional newsrooms, including external competition, public service, and personal career growth, but they expressed concern about the compatibility of different newsroom cultures and approaches to news.

These changes in news production practices are related to shifts in the professional identity of journalists.

Professional and occupational matters of online news production

Research about professional and occupational dynamics has concentrated on three key issues: the identity of journalism as a profession or occupation and its continued relevance in a networked society; the self-reflection of journalists about possible changes to their professional identities; and the challenges posed by user-authored content to the jurisdictional space that news workers occupy as gatekeepers of information.

Some authors maintain that there is an unresolved debate about who is a journalist that has been exacerbated by the fact that what counts as journalism in the contemporary media environment is more open to negotiation than before (Allan, 2006; Kopper et al., 2000; Singer, 2003a). Deuze suggests that realizing the full potential of online journalism 'challenges perceptions of the roles and functions of journalism as a whole' (2003: 216). Furthermore, scholars suggest that challenges to professional identity could eventually lead to the demise of journalism as it was known during the better part of the 20th century (Boczkowski, 2004b; Deuze, 2007). Sousa examines the development of online journalism in Portugal and argues that 'the economic and political conditions that brought journalism into existence will soon cease to prevail, and journalism, at least in its traditional form, with them' (2006: 379).

Scholarship about the self-perceptions of journalists, conducted mostly through surveys and interviews of journalists who work in the USA and Europe, has yielded varying results. Deuze and Paulussen surveyed online journalists in the Netherlands and Belgium and found that they believe that their profession is developing as a new type of journalism premised on ideas of speed and immediacy, hypertext and multimedia, and that 'more traditional roles of journalism, such as gate keeping and agenda-setting, are becoming less important' (2002: 243). However, Quandt et al. (2006) found that American and German journalists continue to prioritize traditional information-oriented functions. Moreover, Cassidy (2005) conducted a survey of print and online journalists in the USA and concluded that internet news producers rated getting information to the public quickly as their most important role. This discrepancy might be an expression of the evolution of changes over time. For instance, in a survey of editors of the online operations of major American newspapers about online coverage of the 2000 elections, Singer found that when journalists move online, 'a "normalization" process seems to be occurring: information-oriented functions, particularly related to getting news out quickly, remain key components of their self-perceptions, especially in the political context of furthering democracy' (2003a: 50). But, in a later study about the online coverage of the 2004 elections, Singer concludes that journalists appear to re-imagine at least part of their role towards a partnership with consumers in the construction of information for individual use or public consumption. The author argues that this presents an 'opportunity to create a "new normal" that is still based on information but conceptualizes its production as a shared rather than an exclusive endeavor' (2006b: 276).

Since White's (1949) pioneering study, gate keeping has been considered the foremost marker of occupational jurisdiction in journalism. However, scholars have argued that this jurisdictional claim might be challenged by the growing presence of users as content producers in the new media environment (Bruns, 2008; Gillmor, 2004; Lowrey, 2006; McCoy, 2001; Robinson, 2007; Ruggiero and Winch, 2005; Singer, 2006b; Williams and Delli Carpini, 2000). In his account of the Community Connections initiative pursued by New Jersey Online in the late 1990s (which enabled free publishing within the online newspaper site by nonprofits in New Jersey), Boczkowski (2004a) found that news workers engaged in 'gate opening', with practices that fostered user participation rather than the kind of content selection associated with the traditional gate-keeping tasks. More recently, Wall conducted a rhetorical analysis of American blogs by military personnel in Iraq, American citizens, and an Iraqi citizen about the war. She concludes that blogs 'appear to

be a form of postmodern journalism here: one that challenges elite informa-
tion control and questions the legitimacy of mainstream news' (2005: 167).

The demise of the gate-keeping role could lead audiences to challenge
the authority of journalism, as Lowrey and Anderson found in a survey of
news consumers in the Baton Rouge area in the USA. More than two-thirds
of the respondents sought news on non-news websites, and nearly half beli-
eved they could easily become journalists themselves. The authors suggest
that these findings signal future questioning of 'the ability of the occupation
to define the already fuzzy boundaries of what constitutes news' (2005:
9). However, some scholars argue that it might be too early to anticipate
the demise of gate keeping (Allan, 2006; Hujanen and Pietikainen, 2004;
Ruggiero and Winch, 2005). Schiffer (2006) looked into the relationship
between information published in blogs and mainstream media about the
'Downing Street Memos' scandal and found that blogs influence op-ed pages
but not news. Moreover, in their comparative study of audience participation
opportunities in 16 European and American newspapers, Domingo et al.
reported that professional news workers kept the decision-making power at
each stage of news production, and concluded that 'journalists are retaining
the traditional gate-keeping role in adopting user content in their websites'
(2008: 340). These various studies suggest that the gate and the gatekeeper
role neither remain intact nor are fully replaced but have become a hinge
between tradition and change.

Scholars disagree on how best to characterize the broader societal con-
sequences of these challenges to the occupational jurisdiction of journalists.
On the one hand, some authors argue that these challenges could be beneficial
for society (Deuze and Dimoudi, 2002; Pavlik, 2000). For instance, Russell
(2001) analyzed newspaper articles and Zapatista postings about a failed cease
fire in Chiapas and concluded that, in the online environment, journalism
may replace the need to establish credibility through adherence to profes-
sional codes with the credibility that results from sharing a common concern.
On the other hand, other studies raise concerns about the broader societal
significance of these challenges (Salwen, 2005; Singer, 2001; Williams and
Delli Carpini, 2000). Thus, in their analysis of online newspapers, Nerone and
Barnhurst (2001: 471) argue that the loss of journalists' gate-keeping function
could replace 'the benign dictatorship of the editor' with 'the tyranny of the
mouse'. This, in turn, leads directly to issues of user-authored content.

The user as a content producer

The notion of the user as a regular content contributor to news sites, and
one who occupies an increasingly larger proportion of the content featured

on those sites, has captured the imagination of scholars who study online journalism. Analysts often argue that the internet allows a change in the relative position of journalists and audiences, from a one-way, asymmetric model of communication to a dialogical kind of journalism, through which news production becomes a collective endeavor (Benkler, 2006; Bentley et al., 2007; Boczkowski, 2004a; Deuze, 2003; McCoy, 2001; Pavlik, 2000; Tremayne, 2007). Furthermore, Deuze et al. (2007) argue that citizen-journalism websites emerged to fill a void left by established media organizations. Other scholars have found coincidences between user-generated content and partisan news production before the emergence of journalism as an established occupation (Hendrickson, 2007; Lowrey, 2006; Nerone and Barnhurst, 2001; Russell, 2001; Singer, 2006b).

Research has examined how journalist- and user-generated content become combined on different sites. Some scholars suggest that most news organizations are not enthusiastic about allowing audience members to become co-authors of content (Boczkowski, 2004a; Cohen, 2002; Ekstrand, 2002; Schultz, 2000; Thurman, 2008). Ye and Li analyze readers' discussion forums in 120 American newspapers and conclude that 'online newspapers might view interactive forums merely as "readers' playgrounds"' (2006: 255). In his ethnography of online newsrooms, Domingo finds that, although journalists usually mentioned interactivity when they discussed the differences between the internet and traditional media, 'in daily routines, there was a tendency towards reproducing mass media models, in which … users were regarded as a rather passive audience, consumers of the stories' (2008a: 691). In another dimension of the integration of journalist- and user-generated content, research shows that bloggers and citizen journalists rely heavily on journalists for information (Daniels, 2006; Deuze et al., 2007; Lowrey, 2006; Reese et al., 2007). For instance, Haas analyzed postings on *Indymedia* and *Slashdot* and found that 'not only do few weblog writers engage in any independent news reporting, most weblog writers cover the same topics as mainstream news media and, perhaps more significantly, rely on them for information on those topics' (2005: 393).

Some studies have examined the extent to which members of the public might be interested in contributing content to online news sites. Thurman (2008) and Ye and Li (2006) report a generally low level of user involvement in forums. Hujanen and Pietikainen (2004) conducted a survey of young media users in Finland and found that only 14 percent of the respondents had ever voiced their opinion through letters to the editor or online forums. More-over, some studies have found that most blogs do not feature news content or commentary about public affairs and resemble the personal journal format (Herring et al., 2005; Lowrey and Latta, 2008; Papacharissi, 2007).

For example, Trammel et al. reported that in a random sample of Polish blogs, 80 percent of them 'primarily contained discussion of feelings or thoughts' (2006: 2), whereas only 2 percent addressed news or current events. Ornebring analyzed users' blogs in Swedish and British tabloids, and found that 'blogs mostly function as an online diary where the most popular topics are everyday life things such as love, work, children, etc.' (2008: 780).

Studies have also analyzed professional and organizational issues related to user-generated content. Some researchers emphasize that users differ from journalists because their contributions are not necessarily guided by established editorial norms, such as objectivity and expertise (Carlson, 2007; Kim and Hamilton, 2006; Rutigliano, 2007). The differences between users and reporters could be due to organizational factors. Reich conducted interviews with professionals and citizen journalists in Israel, and found that citizen reporters have limited access to news sources and thus, 'are hampered by a set of undeniable weaknesses' (2008: 751). Lowrey also stresses organizational differences: 'The organization of production is the most fundamental distinction between journalism and blogging. Differences in content, work processes, tone, values, and format are symptoms of this underlying structural difference' (2006: 480). Boczkowski maintains that when established news organizations incorporate user-generated content into their editorial material, it leads to the emergence of an organizational logic of 'distributed construction'. A new regime of information creation 'emerges from tying together an artifact configuration inscribing users as co-producers and enacting a multiplicity of information flows … and coordination resources supporting the relationship of interdependence between newsroom workers and users-turned-producers' (2004a: 143).

Research shows that some mainstream news organizations have been trying to redefine or co-opt the blogging movement (Allan, 2006; Hermida and Thurman, 2008; Lowrey and Anderson, 2005; Reese et al., 2007). Singer analyzes blogs written by journalists and suggests that professional news-makers are 'normalizing' blogs by 'sticking to their traditional gatekeeper function even with a format that is explicitly about participatory communication' (2005: 192). However, others argue that efforts to co-opt and normalize blogging could change the nature of mainstream journalism (Lowrey, 2006; Robinson, 2006). For example, Matheson examines a blog produced by journalists in the *Guardian*, a British newspaper, and argues that even a blog hosted by a traditional medium allows journalists 'to produce texts outside the dominant tradition' (2004: 456). Attempts to include blogging as part of the content offered by traditional media online underscore the tension between maintaining the one-way orientation of journalism and experimenting with novel dialogical forms of communication.

Authors have often resorted to the notion of the public sphere to conceptualize the implications of user-generated content for dialogue and participation in the polity (Benkler, 2006; Hutchins, 2007; Owens and Palmer, 2003; Paparachissi, 2002, 2004; Reese et al.; 2007; Rutigliano, 2007; Singer, 2006a). Research has been premised on the idea that online technologies afford participation in public dialog more conveniently than other media artifacts (Allan, 2006; Al-Saggaf, 2006; Cohen, 2002; Ghareeb, 2000; Scheufele and Nisbet, 2002; Semetko and Krasnoboka, 2003; Singer, 2005). Thus, scholars argue that online journalism has significant potential to reinvigorate civic engagement (Boczkowski, 2004a; Deuze et al., 2007; Rutigliano, 2007; Schultz, 2000; Singer and Gonzalez-Velez, 2003; Thurman, 2008).

But research shows that the potential of online tools to foster an online public sphere has not always been realized. Some attribute this outcome to inequality of access (Bustamante, 2004; Ghareeb, 2000; Tremayne, 2007). Paparachissi (2002: 14) concludes that:

> … the fact that online technologies are only accessible to, and used by, a small fraction of the [world] population contributes to an electronic public sphere that is exclusive, elitist, and far from ideal – not terribly different from the bourgeois public sphere of the 17th and 18th centuries.

For other scholars, a different factor that has limited the realization of the public sphere potential of the online media is that public participation is often not in the form of rational, critical deliberation (Al-Saggaf, 2006; Schultz, 2000; Thurman, 2008). Constantinescu and Tedesco analyzed forum posts about the kidnapping of three Romanian journalists in Iraq and found that 'a high level of interaction between the online readers may produce a cynical outlook' (2007: 460).

Concluding remarks

This article has discussed five key research streams about online news production since 2000: the historical context and market environment; the process of innovation; the role of professional dynamics; the modifications of journalistic practices; and the role of user-generated content. From this review, it becomes obvious that, as news producers re-enact journalism in the networked environment, they live out in their everyday practices a tension between tradition and change. This tension also characterizes scholarly endeavors; most studies continue to apply existing lenses to look at new phenomena, but the potential for theoretical renewal is becoming increasingly evident. The remainder of this section takes advantage of this discussion to

reflect on avenues for future work in each of these streams and on the broader contributions that scholarship about online news production could make to media and society research.

Historical matters have not figured prominently in the scholarship about online news production. This leaves a void in recording the evolution of this emerging area of editorial work. It also runs the risk of overemphasizing novelty and gives a sense of shallowness to the empirical findings and associated theoretical conclusions of many studies. It might overemphasize novelty by failing to recognize historical antecedents and evolutionary paths of contemporary practices. For instance, contemporary, user-authored content manifestations, such as blogs and citizen journalism, resonate with past forms of audience participation in content creation in other media and with various online precursors (Boczkowski, 2004a; Butsch, 2008; De Sola Pool, 1983; Douglas, 1987; Jenkins, 1992; Rheingold, 1994). This historical neglect, in turn, endows the findings of many studies with a kind of empirical and conceptual shallowness because they are unable to disentangle patterns of continuity from more discontinuous trends. The study of online news production would benefit greatly from more research on the similarities and differences between past and present, as well as longitudinal accounts of current developments.

Studies of the market environment of online content production illuminate the role of profitability, business models, and the growing importance of advertising. However, absent from these considerations is an examination of the role that labor processes and conditions play in online news enterprises. In his study of organizations within the News Corporation, Marjoribanks (2000a, 2000b) shows that labor dynamics can play a critical part in the process of technological change. Future scholarship might examine how the composition of the off- and online journalistic labor market, the structuring of career paths, the various levels of unionization in different contexts, and labor regulations in various countries shape who gets to produce online news, how that production takes place, and what stories result from these dynamics.

Studies about innovation have made contributions about the causes, dynamics, and consequences of technological change in online news production. However, two limitations of most of this scholarship are its relatively narrow focus on online news and the low level of attention it devotes to placing the empirical findings in the context of comparable processes in other industries. That is, making sense of the similarities and differences between innovation processes in online news and in other settings would help to ascertain what might be unique to the journalistic field and what might be shared across other domains of work. A recent example of the benefits of adopting a multi-area approach is Deuze's (2007) account of changes in work

practices across different creative and cultural industries. An extension of this approach outside the space of symbolic work could add depth and breadth to our understanding of online news.

A comparative perspective, albeit of a different kind, could strengthen knowledge about online news production by contrasting practice and professional matters across countries and regions of the world. The review section of this article shows that studies of these matters have largely been about organizations and workers located in the USA. Moreover, research in other countries has 'usually followed theoretical and methodological proposals as they evolved in the American Literature on the topic' (Domingo, 2008b: 15). Recently, there have been accounts of phenomena taking place in other parts of the world. Although this is a positive trend, more could be done to compare whether issues of practice and professional dynamics vary across different locales and to explain the sources and patterns of variance. The burgeoning development of comparative analyses of news, media systems, and political communication (Esser and Pfetsch, 2004; Hallin and Mancini, 2004; Shoemaker and Cohen, 2006) illustrates the heuristic power of looking at phenomena across nations and regions.

Studies about user-authored content have promoted an understanding of the factors that affect one of the most fundamental shifts in the architecture of contemporary media systems: the redrawing of the boundaries between the spheres of production and consumption. However, this stream of research has been limited, at least in part, by its overwhelming reliance on data gathered through surveys of contributors and content analysis of their contributions and by a shocking dearth of ethnographic and field research. The pioneering ethnographic accounts of journalistic work in the 1970s and 1980s helped to generate novel understandings of the practice and experience of content creation within newsrooms (Epstein, 1973; Fishman; 1980; Gans, 1980; Sigal, 1973; Tuchman, 1978). In the same way, complementary studies of the practices, interpretations, and experiences of bloggers, citizen journalists, and occasional forum contributors are needed to better grasp the processes and politics of distributed forms of content creation in the contemporary media environment.

In addition to identifying possible avenues for future scholarship within already established areas of research about online news, we conclude by suggesting a more radical path for future work. Emerging areas of inquiry in media studies often develop from a desire to make sense of new phenomena. For the most part, studies about online journalism have been no different. They have focused on what seems to be distinctive about these phenomena in comparison with traditional media and how they might relate to established theoretical constructions or both. Thus, Deuze (2008: 199) notes that

'the literature in the field of journalism studies is largely informed by the standards of research, education, routines, rituals, and practices set by print journalism.' For instance, much has been written about interactivity and user-authored content or the contribution of the media to the public sphere (Habermas, 1989), or the categorization of journalists as gatekeepers (White, 1949). Although useful in mapping a new territory, this dominant stance falls short of using the emerging world of online news production to explore some of the fundamental theoretical organizers in the study of journalism and the media. Rather than continuing to adopt a phenomenon-centered or a theoretically tributary stance, 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.

Two of the most consequential theoretical organizers of media scholarship over the past half century have been the division between production and consumption (and the subsequent division of labor between scholars who study either one or the other) and debates about the effects of media messages in relation to whether audiences are passive or active recipients of these messages. The scholarly division between studies of production and consumption has been tied to the one-way, unidirectional information architecture that dominated print and broadcast media during the 20th century. Furthermore, this very separation has made it difficult to ascertain the nature and form of media effects. This is because audiences have had limited opportunities to express their agency, not only as readers of media texts but also as their producers. However, the transformed information architecture of online environments and the increased options for audiences to become content producers provide scholars with opportunities to undertake research projects about the division between production and consumption that can shed new light on the character and determinants of audience agency. At stake in this type of inquiry would be not just understanding the dynamics of online journalism, but probing critical intellectual foundations and unresolved dilemmas in the larger field of communication and media studies.

Note

1   The scholarship included in this review was identified by three mechanisms. First, databases such as the Social Sciences Citation Index were searched for relevant journal articles. Second, the reference lists of these articles revealed additional works, including books and book chapters and technical reports. Third, the references lists of these additional works were also used to identify other relevant sources that did not surface through the first two mechanisms.

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