



City Research Online

City St George's, University of London

Citation: Singer, J. (2018). Theorizing Digital Journalism: The Limits of Linearity and the Rise of Relationships. In: Eldridge II, S. A. & Franklin, B. (Eds.), *The Routledge Handbook of Developments in Digital Journalism Studies*. (pp. 487-500). London: Routledge. ISBN 9781138283053

This is the accepted version of the paper.

This version of the publication may differ from the final published version. To cite this item please consult the publisher's version.

Permanent repository link: <https://openaccess.city.ac.uk/id/eprint/18704/>

Copyright and Reuse: Copyright and Moral Rights remain with the author(s) and/or copyright holders. Copies of full items can be used for personal research or study, educational, or not-for-profit purposes without prior permission or charge, unless otherwise indicated, provided that the authors, title and full bibliographic details are credited, a hyperlink and/or URL is given for the original metadata page and the content is not changed in any way. For full details of reuse please refer to [City Research Online policy](#).

Copyright information

The final and definitive version of this manuscript has been accepted for publication as a chapter in: *The Routledge Handbook of Developments in Digital Journalism Studies* © 2018; all rights reserved, Routledge. ISBN: 9781138283053.

Please cite as:

Singer, J. B. (forthcoming). "Theorizing Digital Journalism: The Limits of Linearity and the Rise of Relationships." In *The Routledge Handbook of Developments in Digital Journalism Studies* (S. Eldridge II and B. Franklin, editors). New York: Routledge.

Theorizing Digital Journalism: The Limits of Linearity and the Rise of Relationships

Jane B. Singer
City, University of London

For more than 50 years, our understanding of journalism drew on theories that emerged in an environment in which the components of a mediated message could be isolated well enough to measure and track. Yet today we live in a media world that is simultaneously immersive and interconnected, instantaneous and iterative, and individualized to an extent unimaginable a generation ago. In this environment, theories positing 'media effects' are considerably less practical or meaningful than they once were, a topic explored in the first half of this chapter. Some of the ways that contemporary journalism scholars are actively recontextualizing the field are then outlined, followed by consideration of the proposition that our best hope for understanding the "effects" of digital journalism may be to focus on the diversity of relationships it engenders. Looking at connections and interactions can profitably guide our study of this fluid, holistic media world.

Digital media pose conceptual and methodological challenges for journalism studies scholars. Our effects-oriented theoretical approaches, which traditionally dominated attempts to conceptualize how journalism works, rest on an inherently linear view of the communication process, positing that messages are delivered (mostly by journalists) to audiences who are affected by and responsive to them. And our methods tend to require, or at least to work best with, a fixed object of study.

But the digital environment is in some ways like Heraclitus' river: It can never be stepped in twice, for it is constantly changing, and so are those it touches. Unlike the river, though, it also flows in all directions at once, along uncontrollable courses and with unpredictable ripples.

This chapter begins with a closer look at why the value of concepts that were so fruitful in an analogue past has diminished in our digital present.¹ It then explores how journalism studies scholars are moving the field forward in the 2010s, concluding with a call for new concepts around "relationship effects."

Limited Effects

Defining exactly what we mean when we talk about journalists or journalism has never been easy and gets harder by the day. Even a definition of what constitutes "news" is difficult to nail. News could once be identified as part of an institutionally sanctioned information package, produced by people who worked within the occupational space of a

newsroom to make it available at regular intervals to readers, viewers and listeners (Singer, 2016). Although such a definition suggested considerable complexity, it did enable the constitutive elements to be isolated and examined productively (Wahl-Jorgensen and Hanitzsch, 2009). Doing so has become far trickier in a contemporary media environment that is dramatically less bounded – in time, in place and in the nature of communication itself – and more interlaced.

A closer look at one set of theories relied on by communication scholars for more than 50 years illustrates the challenges. Particularly in the United States, “effects theories” dominated attempts to explain how communication worked through much of the 20th century, a time when the media industry commanded considerable social, political, economic and even moral power. Scholars sought to understand how the messages produced by such influential and ubiquitous entities were affecting consumers of those messages, which at the time meant nearly everyone (Singer, 2016).

They did so primarily through observation and measurement of the components of a communication process conceptualized as rooted in the transmission of a message from a sender to a receiver, who then assimilated and acted (or not) on that message in discernible ways (Westley and MacLean, 1957). A look at four of these effects theories, each widely and productively applied in the late 20th century, helps demonstrate why their utility has diminished in a digital news environment. The earlier use of each theory is summarized, followed by an overview of recent applications.

Spiral of Silence Theory

Traditional environment: Spiral of silence theory posits that the media have a significant effect on audience behavior. Noelle-Neumann (1993) proposed that we respond to coverage of a major event or issue by assessing public opinion on the topic; that assessment then shapes our actions. If we believe our own views are not widely held, we are likely to remain silent in order to avoid social isolation. By doing so, we contribute to public opinion as others perceive it, resulting in a spiraling effect in which seemingly dominant views gain even more ground while alternatives retreat further. The news media thus pack a one-two punch: Their initial coverage creates awareness, and they then are instrumental in shaping impressions about which views are dominant and which in decline – impressions that in turn inform individuals’ decisions about what is safe to say in public without being ostracized.

The theorized effect, though, proved difficult to isolate and measure; repeated tests yielded mixed and culturally distinctive results ((Donsbach, Tsfati and Salmon, 2014; Scheufele and Moy, 2000). The effect seems to vary depending on mitigating circumstances such as attitude certainty (Matthes, Rios Morrison and Schemer, 2010), the nature of conflict around an issue, the interaction of majorities and minorities over time, the role of reference groups (Price and Allen, 1990), and the interplay between local and national opinion climates (Salmon and Neuwirth, 1990). A meta-analysis of 17 studies, published in 1997, identified only a very small, though statistically significant, relationship between the degree to which a person believes others hold similar opinions and the willingness to speak out (Glynn, Hayes and Shanahan, 1997).

Digital environment: Does the theory hold up in a world of unfettered information and uninhibited discourse? Not consistently. Studies investigating a potential spiral of silence effect in online discussion around contentious issues such as abortion (McDevitt, Kioussis and Wahl-Jorgensen, 2003) and same-sex marriage (Ho and McLeod, 2008) found that subjects in the minority did not seem to feel inhibited in expressing their views. But other studies have found support for the theory online, for instance in relation to discussion of genetically modified food (Kim, 2012) or nuclear power (Miyata, Yamamoto and Ogawa, 2015).

Additional work that tests the theory in relation to social media highlights the importance of individual characteristics in willingness to speak out on such platforms as Facebook or Twitter. For instance, the national opinion climate on gay bullying was found to be somewhat related to willingness to speak out on social media, but individual characteristics such as willingness to self-censor also were key (Gearhart and Zhang, 2014). Individual differences also were central to LGBT individuals' willingness to self-disclose on Facebook: Those in the closet seemed silenced by a perceived heteronormative majority, while those who were "out" used the site's affordances for vocal empowerment (Fox and Warber, 2014).

In general, Schulz and Roessler (2012) suggest the hybridity of the Internet so greatly expands available information choices that the theory becomes of limited value. They also reference the role of subjectivity in assessing the climate of opinion in such an environment, a suggestion in line with growing awareness of the ways in which fake news and filter bubbles misinform civic decisions (Tsfati, Stroud and Chotiner, 2014).

Cultivation Theory

Traditional environment: In the 1960s, as television became a household fixture and television news a dominant source of civic information as well as entertainment, scholars sought to measure its effect. Cultivation theory posits that watching television affects our world view, typically leading to a heightened sense of risk and insecurity (Gerbner and Gross, 1976). It is among the most widely cited – and widely challenged – of mass media theories. As early as the 1980s, an intensive period of cultivation theory testing (and defending), numerous caveats were offered. The notion of "mainstreaming," for instance, suggests that heavy television viewing leads to converged outlooks across social groups, yet "resonance" suggests nearly the opposite, with attitudinal effects varying among population sub-groups (Gerbner et al., 1980). Effects of television viewing turned out to be neither uniform nor universal: Other variables can and do intervene, and controlling for them significantly lessens any remaining effect (Hirsch, 1981).

Over the years, however, evidence has grown that while the effects of TV viewing in general may be elusive or even negligible, particular types of televised content do seem to have an impact on attitudes about such topics as racism, crime, violence and victimization, as well as on feelings of alienation and anomia (Potter, 1993). Bryant and his colleagues (1981) found that heavy viewing of action-adventure programs increased fearfulness and anxiety levels, especially if justice was not shown to prevail. Oliver and Armstrong (1995) found higher levels of racial prejudice, as well as punitive attitudes about crime, associated with frequent viewing and greater enjoyment of reality-based programming. More recently, Kahlor and Eastin (2011) found that large amounts of rape-related content in soap operas and crime dramas cultivate perceptions related to sexual assault, with viewers of those genres more likely to accept rape myths and overestimate false accusations.

Digital environment: In some ways, cultivation theory is well-suited to digital media; indeed, many challenges stemmed from its tough-to-test premise of immersion in television rather than selective viewing (Morgan, Shanahan and Signorielli, 2009) and its view that messages are systems rather than discrete variables (Morgan and Shanahan, 2010). Moreover, its underlying concern is with the cultural effects of storytelling, certainly of ongoing relevance in a digital world (Morgan, Shanahan and Signorielli, 2015). Yet it is hard to get around the fact that cultivation is inherently a theory developed to explain the effects of the historically and culturally specific phenomenon of television (Livingstone, 2004).

Despite the ubiquity of digital and mobile media use in Western society, few have even tried to apply cultivation theory directly to digital media other than video games (Chong et al., 2012; Williams, 2006). Most contemporary work remains focused on television and its

effects on perceptions of such matters as materialism (Shrum et al., 2010), immigration (McKay Semmler, Semmler and Kim, 2014), and of course violence (Jamieson and Romer, 2014). Arguably, Putnam (2000) and those who build on his work take their cue from cultivation theory in claiming that increased use of digital technologies decreases trust in social institutions and participation in society; however, empirical testing suggests the presumed online impact on socializing with others is “limited or nonexistent” (Vergeer and Pelzer, 2009: 202). Particularly in the early days of the Internet, connections between its use and social capital, social trust and well-being were repeatedly tested. No cultivation effect was identified; many findings suggested minimal and even mildly positive impacts.

Theories of behavioral and attitudinal effects of the media, then, served to instigate tests and advance knowledge, but ultimately showed that a seemingly simple linear process was neither simple nor linear. Media messages do influence behaviors and attitudes – but so do lots of other things, and attempts to isolate effects are rarely definitive (Singer, 2016).

Cognitive effects theories, which tend to posit weaker or less direct effects, generally hold up better. Two such theories directly tied to journalistic output have enjoyed considerable support over the years, particularly as applied to political information: the knowledge gap hypothesis and agenda-setting theory.

The Knowledge Gap Hypothesis

Traditional environment: The knowledge gap hypothesis states that as more information enters a social system, “segments of the population with higher socioeconomic status tend to acquire this information at a faster rate than the lower status segments, so that the gap in knowledge between these segments tends to increase rather than decrease” (Tichenor, Donohue and Olien, 1970: 159-160). This initial proposition suggested effects are most evident in areas of general knowledge, such as public affairs and health, rather than areas of niche interest. Subsequent research found support for the hypothesis though also contradictions of it; clear evidence of a health-related knowledge gap has been particularly elusive (Hwang and Jeong, 2009).

Extended theory testing suggests that effects, which not infrequently go in a direction opposite to the one predicted, are at least partially contingent on the impact of interpersonal communication and individual motivation. Early on, controversy over a local issue was found to decrease the knowledge gap effect within the affected community (Donohue, Tichenor and Olien, 1975); subsequent work illuminated the role of powerful local groups, community pluralism, and promotional efforts (Viswanath and Finnegan, 1996). Personal motivation to gain knowledge, group membership and other factors play a part in health knowledge acquisition (Ettema, Brown and Luepker, 1983; Viswanath et al., 1993).

In short, as Gaziano (1983) detailed in an early overview of knowledge gap studies confirmed by a second meta-analysis a quarter-century later (Hwang and Jeong, 2009), potential intervening variables are numerous, and findings are all over the conceptual map. As early as 1980, Dervin was on to one likely reason why. The knowledge gap hypothesis, she said, is based on the paradigm of communication as transmission: A source sends a message to a receiver. Long before the rise of the Internet, she called for a conceptual shift to user-constructed and -defined information, emphasizing an individual’s need for sense making (Derwin, 1980, as cited in Severin and Tankard, 2001).

Digital environment: Applications of this theory at the start of the Internet era explored the “digital divide” between those with and without online access (Bucy, 2000; Hindman, 2000). As digital technologies have diffused within and across societies, attention has shifted from access to use of digital information (van Deursen and van Dijk, 2014). Findings suggest that gaps persist even when availability is not an issue (Jeffres, Neuendorf and Atkin, 2012; Tran, 2013). For example, Wei and Hindman (2011) found Americans with

higher SES were more likely to use the Internet for informational purposes than their lower SES counterparts, accentuating and extending gaps in political knowledge; Bonfadelli's (2002) earlier findings in Switzerland were similar. Gaps seem to remain in connection with the kinds of activities people pursue online to "improve their human, financial, political, social and cultural capital" (Hargittai and Hinnant, 2008: 615).

Social media use has been posited as one potential solution to the knowledge gap because of its ability to provide incidental access and thus passive learning opportunities even to people uninterested in civic information (Bode, 2016). Measurable effects, however, have been underwhelming for those not already engaged in politics. In the experimental component of her study, Bode found that social media users were not more likely to be politically informed than non-users. A meta-analysis by Boulianne (2015) suggested that causality is unclear; by itself, social media use seems to have minimal impact on political participation. In fact, despite their potential to narrow knowledge gaps, such sites as Facebook and Twitter actually may amplify or reinforce inequality of political engagement (Yoo and Gil de Zúñiga, 2014).

Agenda-Setting Theory

Traditional environment: All the effects theories used as examples so far are relevant to journalism studies scholars, but none is as intertwined with news production and consumption as agenda-setting theory – along with its offspring, such as second-level agenda setting, and its close or distant cousins, such as framing or priming (Singer, 2016). The theory evolved from the observation that the press "may not be successful much of the time in telling people what to think, but it is stunningly successful in telling its readers what to think about" (Cohen, 1963: 13). This role of providing salience cues, particularly about political issues, was systematically explored by McCombs and Shaw (1972), who found that voters did indeed tend to share the media's overall definition of which issues mattered most. Over the next two decades, hundreds of agenda-setting studies tackled everything from the conditions that might enhance or limit the effect, to the standards used in making judgments, to just how "the media" formulate an agenda at all.

Agenda setting and its conceptual kin put forward more modest claims about the impact of media messages than do such powerful effects theories as spiral of silence or cultivation, and they have fared relatively well under exhaustive testing, across time and in diverse national contexts. It seems the media do make certain issues or aspects of issues easier for people to recall, thus affecting public attitudes about candidates and political matters (Scheufele and Tewksbury, 2007). Agenda-setting effects have been identified in virtually every U.S. election since the 1970s.

But this is not to say that the effects have been either uniform or unambiguous. On the contrary, political agenda setting turns out to be contingent on a host of conditions, including the kinds of issues covered; the types of media outlets involved and the sort of coverage they provide (Walgrave and van Aelst, 2006); the salience of issues to a given audience (Erbring, Goldenberg and Miller, 1980); and the degree of individual motivation and engagement (McLeod, Becker and Byrnes, 1974). The effect seems strongest for relatively unobtrusive issues that do not directly affect most people, such as foreign policy (Weaver, McCombs and Shaw, 2008).

Digital environment: Popularity of the agenda-setting concept has not abated in the digital era. By the mid-2000s, it had amassed more than half a million citations (Bennett and Iyengar, 2008). But some of those citations come from scholars demonstrating challenges to the theory as initially proposed. For example, a study of political blogs suggested that the agenda-setting power of traditional media was "no longer universal or singular" as those media became "just one force among many competing influences" (Meraz, 2009: 701).

Online citizens themselves can, in theory, participate directly in setting the public agenda, both by producing their own content and “by rendering the agenda-setting processes of established professional media outlets radically provisional, malleable and susceptible to critical intervention” (Goode, 2009: 7).

Theory testing has continued with social media, notably in explorations of its role in setting the legacy media agenda. In a study of social media activity around the 2015 Belgian elections, Harder and his colleagues (2017) found that although Twitter political activity can be influential, media actors on Twitter have far more agenda-setting influence than other actors do. In a U.S. presidential primary context, Conway, Kenski and Wang (2015) found a reciprocal or symbiotic relationship between political players and journalists at leading legacy outlets: although they followed candidates, journalists continued to set the agenda on many issues. But social media may open up other avenues of influence: A case study of cable news host Rachel Maddow’s Facebook page indicated a positive correlation between stories discussed on the social networking platform and the subsequent inclusion of similar stories on television (Jacobson, 2013).

In short, ambiguity pervades even our most robust media effects theories. Of course, such is the nature of theories: Their strength lies not only in their ability to provide answers but also, perhaps primarily, in their ability to stimulate questions. That is how knowledge expands (Singer, 2016). Yet undeniably, mass media effects that already were difficult to extricate from other variables during a time when we could more or less pinpoint what we meant by “mass media” are virtually impossible to isolate in the media world we now inhabit.

The “Five I’s”

Effects theories benefit not only from an effect that is measurable but also from the presence of a distinct and identifiable communicator, communications act or product, channel and recipient. Although those components characterized 20th century news media, the pieces were always harder to define precisely and assess than they sound – and they are far harder now. Contemporary digital journalism is, among other things:

* *Immersive*. The “media” today constitute a communicative space in which we live constantly rather than a separate thing that we use occasionally and whose impact we therefore can reasonably hope to isolate and measure. “The uses and appropriations of media can be seen as fused with *everything* people do, *everywhere* people are,” Deuze writes in his introduction to *Media Life*. “We can only *imagine* a life outside of media” (2012: x, *emphasis in original*).

* *Interconnected*. Linear models do posit a (limited) amount of communication that swims upstream – from, rather than to, media audiences. But that conceptualization, typically with a steadfast gatekeeper directing the flow of traffic at the model’s core, is laughably inadequate in today’s interactive world (Singer, 2016). Producers and consumers of all manner of mediated content, including “news,” are interchangeable, with any given individual filling both roles all but simultaneously. Moreover, in a structure that seemed fantastical at mid-century (Bush, 1945) and remained just barely conceivable a generation ago to anyone not, literally, a rocket scientist (Berners-Lee, 1999), every one of those communicators is linked to every other one – well over 3 billion and growing – in an incomprehensibly complex global network.

* *Individualized*. Yet at the same time, our mediated environment is unique to each of us to an unprecedented degree. Each of those 3 billion online users puts the even-larger billions of available pieces together in a different way, with the number of possible combinations stretching nearly to infinity. It’s true that “mass media” outlets reach more people than ever thanks to the Internet. But in comparison with the pre-Internet era, those

brands are a much-diminished fraction of our daily information diet; moreover, any particular brand may fail to penetrate our personal filter bubbles (Flaxman, Goel and Rao, 2016).

* *Iterative*. Traditional media are finite and definitive. Once the newspaper is published, it becomes a self-contained and unchangeable product, and tomorrow's paper will be a wholly new (self-contained and unchangeable) product. Once the news broadcast is over, it's over (Singer, 2016). Not so with online news, which even before the rise of social media was characterized by ongoing conversation and contestation (Boczkowski, 2004). Online messages are perpetually fluid constructions in the contemporary "liquid" information environment (Widholm, 2016).

* *Instantaneous*. Immediacy has always been a core attribute of digital information technologies. This "speed fetishism" (Correia, 2012: 109) has created considerable angst for journalists concerned about accuracy, as well as other less predictable effects such as increasing homogeneity of news products (Boczkowski, 2010; Phillips, 2012). More broadly, the continual flood of new content makes it hard to assess the impact of more than the minuscule percentage of messages fished out of the current and caught, briefly, in the net of collective attention (Singer, 2016).

These "Five I's" do not constitute a comprehensive list of the characteristics of our contemporary media world. But even a partial litany of challenges to effects theories in a digital age highlights the inadequacy of a set of theories premised on distinct communication actors producing messages whose effects can be isolated, observed and measured. How are we to understand the impact of any news item when message senders and recipients are interchangeable; when messages in disparate forms continuously arrive and are then instantly reshaped and redistributed in myriad ways by myriad people and programs; and when everyone's information diet is wildly diverse and uniquely personal (Singer, 2016)?

Alternative Responses

Not surprisingly, calls for a rethink are increasing (Jeffres, 2015; Steensen and Ahva, 2015; Weimann et al., 2014). How, theorists wonder, might researchers best respond to the shortcomings of a traditional effects-based approach? This section offers preliminary empirical clues to how contemporary journalism studies scholars are answering that question.

The data described below were gathered by sampling 10 articles focused on digital journalism from each of a dozen leading journals that publish journalism studies scholarship. The selected articles, published between January 2010 and June 2017, were assessed to identify their theoretical or conceptual framework, as well as the method used if the article was empirical in nature.² Although dominated by work in Europe and the United States, the sample included scholarship from more than two dozen countries on five continents. Obviously, the results of this exploratory inquiry can only be indicative. But they offer intriguing insights into how journalism scholars are moving the field well beyond a consideration of mediated effects in a social and digital age.

Two observations stand out. One is that most of the published work in our field today rests on empirical data; of the 120 sampled articles, only 17 (14.2%) were non-empirical, and five of those were published in *Communication Theory*, which of course is devoted to theoretical concerns.

The second is that explicit theory-testing is something of a rarity. Three journals – *Communication Research*, the *Journal of Computer-Mediated Communication*, and *Mass Communication and Society* – published a total of 21 sampled articles that explicitly tested a theory; the other nine journals published only 14 such articles among them. Overall, 70.8% of the sample consisted of items either descriptive or loosely conceptual in nature.

Methodologically, traditional quantitative approaches remain prominent. The 103 empirically based articles, 55 of which drew on multiple methods, included 26 content

analyses, 19 surveys and 15 experiments. Another 20 articles rested wholly or in part on interviews, while 15 were categorized as case studies, and 13 as textual or discourse analyses. A range of other methods, from focus groups to semiotic analysis, were employed, but only a handful seemed tailored to the nature of digital content, such as analysis of links or search data. The sample contained only a single network analysis.

Authors were more creatively eclectic in applying theoretical and conceptual frameworks, however. Among the 21 articles that set out to test a theory, two dealt with agenda setting and two more with inter-media agenda setting; two with gatekeeping theory; and another three with the knowledge gap hypothesis or digital divide. In each, the theorized effects were identified. For example, agenda-setting effects were found to hold across generations (Lee and Coleman, 2014); US newspapers appeared to maintain their gatekeeping role in reporting on natural disasters around the world (Yan and Bissell, 2015); and gender, race and age are factors in a “usage gap” related to the likelihood to create content online (Correa, 2010). Other sampled theories based on measuring media effects that received empirical support included cognitive dissonance, hostile media effects and exemplification effects, which relate to perceptions about the typicality of sources.

Aside from effects-based research, the sampled articles suggest additional attention to concepts perhaps better-suited to the fluid and interconnected nature of digital media. Theories related to social capital, social presence and strong / weak ties all turned up, as did others related to path dependence, structuration, substitutability and temporality. Most scholars found at least moderate levels of support for these and other theories; more intriguing than the empirical results, however, is evidence of the productive expansion of frames of reference for understanding the contemporary media space.

Still more support is offered by the bulk of sampled items that were conceptual in nature but did not rise to the level of theory testing. Space does not permit exploring the hundreds of diverse ideas explored even within this limited sample – most articles encompassed at least two concepts – but suffice to say that substantive knowledge generation about digital journalism is well under way. A few broad themes emerge:

* The shifting nature of media “audiences” – including roles filled, content created and interactions with journalists – is an area of active conceptual exploration. Sampled articles dealt with citizen reporters (Al-Ghazzi, 2014; Davis, 2015), user comments (Erjavec and Kovačič, 2012; Prochazka, Weber and Schweiger, 2016) and other forms of “participatory journalism” (Karlsson et al., 2015; Scott, Millard and Leonard, 2015), as well as the evolving relationships among diverse actors in the contemporary journalism arena (Lewis, Holton and Coddington, 2014; Marchionni, 2013). In a related vein, scholars are revisiting notions of civic engagement (Kaufhold, Valenzuela and Gil de Zúniga), activism (Liu, 2016) and digitally enabled public discourse (Rinke, 2016).

* Normative theories and their relation to journalistic practice in the digital and social era also are getting a fresh look. In addition to exploring shifting journalistic boundaries (Carlson, 2016; Shanahan, 2011), scholars seem particularly attentive to credibility (Kruikemeir and Lecheler, 2016), transparency and accountability (Kampf and Daskal, 2014; Revers, 2014), and authority (Burroughs and Burroughs, 2012).

* The interplay between technological affordances and journalistic products and practices also was well-represented. Topics ranged from news liquidity (Widholm, 2016) to the role of digital intermediaries (Nielsen and Ganter, 2017) to the rise of digitally enabled fact checkers (Graves, Nyhan and Reifler, 2016) and of other new or newly adapted storytelling forms (Hiippala, 2017; Norris, 2017).

A Call for “Relationship Effects”

As the study of “journalism” increasingly encompasses the study of “digital journalism,” the constrictions imposed by a linear conception of the communication process are more and more discomfiting for theorists. But if that’s the bad news, the preliminary data just summarized offer plenty of good news to offset it. Journalism studies scholars and colleagues in other communication disciplines, are identifying and applying an impressive range of conceptual frameworks that are better suited to a digital media environment and that promise to broaden and deepen our understanding of how this world works.

That said, there is considerable work to be done. One inescapable finding from these preliminary data is that few new theories are as yet emerging from the swirl of ideas surrounding journalism in a digital space. Indeed, this little study identified exactly ... none. Relatively few of the sampled articles attempted theory testing; those that did sought to identify whether, and if so how, existing theories work today. This concluding section offers one suggestion about where we might fruitfully build.

What we may need is, in fact, a new effects theory – one that expressly encompasses “relationship effects.”

Relationships between journalists and “audiences” were included in the 1957 Westley-MacLean model, though given a subsidiary, dotted-line notation as feedback loops. And they are fundamental in other disciplines in both the social sciences and the humanities, which intimately link communication and culture (Carey, 1989). An immersive media universe invites melding the linear effects tradition with the intellectually rich understanding of how humans interact and create social and cultural connections (Singer, 2016)

Although much contemporary work already points in this direction, it typically falls into the category of practitioner studies, focusing on the effects on journalists themselves of inherently mutual formats. How do journalists use Twitter (Lasorsa, Lewis and Holton, 2012; Vis, 2013)? How do they see user contributions affecting what happens inside the newsroom (Lewis, Kaufhold and Lasorsa, 2010; Paulussen and Ugille, 2008)? How do these contributions challenge journalists’ ethical practices and normative constructs (Singer and Ashman, 2009)?

Other scholars already have persuasively argued for a more holistic and culturally situated approach to journalism studies (Hanitzsch, 2007; Zelizer, 2004) and for consideration of “journalism as process” (Robinson, 2011) – that is, a view of news not as a discrete product but as a shared, distributed action with multiple actors engaged in shifting interactions.

But the concept of relationships has not always been explicit, nor has the idea been adequately connected to the particular characteristics of the digital media environment. These traits open up new opportunities to apply our extensive understanding of media effects to journalism today. What are the effects of immersion, interconnectedness and role interchangeability on journalists and on journalism – journalism understood as a fluid, iterative process in which “messages” are ubiquitous and multi-directional, and the roles of “senders” and “receivers” are perpetually reciprocal? What are the effects of a wholly non-linear media system in which everyone is a participant in an unbounded and ongoing communicative endeavor (Hjarvard, 2013)? What might we learn when we shift from seeing journalistic relationships as finite, discrete and readily depicted by unidirectional black arrows to seeing them as ubiquitous, multi-directional and continually in dotted-line flux (Singer, 2016)?

Let’s find out.

Further Reading

Numerous scholars have adeptly summarized attempts to theorize the effects of digital journalism. Excellent resources include “Mass communication theories in a time of changing technology” by Leo Jeffres (2015); an introduction to a special 2015 issue of *Mass Communication and Society*; and “Theories of journalism in a digital age,” by Steen Steensen and Laura Ahva (2016), introducing a special issue of *Digital Journalism*. Their fine essays should encourage readers to further explore the timely and topical articles that the editors highlight. An introduction to the Routledge *Handbook of Journalism Studies*, by editors Karin Wahl-Jorgensen and Thomas Hanitzsch (2009), considers methodological as well as theoretical matters and is another strong entry point not only to the volume but also to the subject in general. Finally, Hanitzsch’s 2007 article in *Communication Theory*, “Deconstructing communication theory: Toward a universal theory,” is a key reference for journalism studies scholars seeking ideas for conceptualizing their complex and constantly changing field.

Notes

¹ Portions of this section of the chapter, as well as the sections on the “five I’s” and on “relationship effects” at the end, are drawn from “Transmission creep: Media effects theories and journalism studies in a digital era.” A link to the article, published in *Journalism Studies* in 2016, is available from:

<http://www.tandfonline.com/doi/abs/10.1080/1461670X.2016.1186498>.

² Details about the method used to draw and analyse the sample are available from the author.

References

- Al-Ghazzi, O. (2014) "Citizen journalism in the Syrian uprising: Problematizing Western narratives in a local context." *Communication Theory* 24 (4), 435-454.
- Bennett, W. L., and Iyengar, S. (2008) "A new era of minimal effects? The changing foundations of political communication." *Journal of Communication* 58 (4), 707-731.
- Berners-Lee, T. (1999) *Weaving the Web: The original design and ultimate destiny of the World Wide Web by its inventor*. New York: Harper Collins.
- Boczkowski, P. J. (2004) *Digitizing the news: Innovation in online newspapers*. Cambridge: MIT Press.
- Boczkowski, P. J. (2010) *News at work: Imitation in an age of information abundance*. Chicago: University of Chicago Press.
- Bode, L. (2016) "Political news in the news feed: Learning politics from social media." *Mass Communication and Society* 19 (1), 24-48.
- Bonfadelli, H. (2002) "The Internet and knowledge gaps: A theoretical and empirical investigation." *European Journal of Communication* 17 (1), 65-84.
- Boulianne, S. (2015) "Social media use and participation: A meta-analysis of current research." *Information, Communication and Society* 18 (5), 524-538.
- Bryant, J., Carveth, R. A., and Brown, D. (1981) "Television viewing and anxiety: An experimental examination." *Journal of Communication* 31 (1), 106-119.
- Bucy, E. P. (2000) "Social access to the Internet." *Harvard International Journal of Press/Politics* 5 (1), 50-61.
- Burroughs, B. and Burroughs, W. J. (2012) "The Masal Bugduv hoax: Football blogging and journalistic authority." *New Media and Society* 14 (3), 476-491.
- Bush, V. (1945, July) "As we may think." *Atlantic Monthly*. Retrieved from <http://www.theatlantic.com/magazine/archive/1945/07/as-we-may-think/303881/>
- Carey, J. W. (1989) *Communication as culture: Essays on media and society*. London: Unwin Hyman.
- Carlson, M. (2016) "Metajournalistic discourse and the meanings of journalism: Definitional control, boundary work, and legitimation." *Communication Theory* 26 (4), 349-368.
- Chong, Y. M. G., Teng, K. Z. S., Siew, S. C. A., and Skoric, M. M. (2012) "Cultivation effects of video games: A longer-term experimental test of first-and second-order effects." *Journal of Social and Clinical Psychology* 31 (9), 952-971.
- Cohen, B. C. (1963) *The press and foreign policy*. Princeton, NJ: Princeton University Press.

- Conway, B. A., Kenski, K. and Wang, D. (2015) "The rise of Twitter in the political campaign: Searching for intermedia agenda-setting effects in the presidential primary." *Journal of Computer-Mediated Communication* 20 (4), 363-380.
- Correa, T. (2010) "The participation divide among 'online experts': Experience, skills and psychological factors as predictors of college students' web content creation." *Journal of Computer-Mediated Communication* 16 (1), 71-92.
- Correia, J. C. (2012) "Online journalism and civic life." In E. Siapera and A. Veglis (eds.), *The Handbook of Global Online Journalism* (pp. 101-118). Malden, MA: Wiley-Blackwell.
- Davis, S. (2015) "Citizens' media in the favelas: Finding a place for community-based digital media production in social change processes." *Communication Theory* 25 (2), 230-243.
- Dervin, B. (1980) "Communication gaps and inequities: Moving toward a reconceptualization." *Progress in Communication Sciences* 2, 73-112.
- Deuze, M. (2012) *Media life*. Malden, MA: Polity.
- Donohue, G. A., Tichenor, P. J., and Olien, C. N. (1975) "Mass media and the knowledge gap: A hypothesis reconsidered." *Communication Research* 2 (1), 3-23.
- Donsbach, W., Tsifti, Y., and Salmon, C. T. (2014) "The legacy of spiral of silence theory: An introduction." In W. Donsbach, C. T. Salmon and Y. Tsifti (eds.), *The spiral of silence: New perspectives on communication and public opinion* (pp. 1-18). New York: Routledge.
- Erbring, L., Goldenberg, E. N., and Miller, A. H. (1980) "Front-page news and real-world cues: A new look at agenda-setting by the media." *American Journal of Political Science* 24 (1), 16-49.
- Erjavec, K., and Kovačič, M. P. (2012) "'You don't understand, this is a new war!' Analysis of hate speech in news web sites' comments." *Mass Communication and Society* 15 (6), 899-920.
- Ettema, J. S., Brown, J.W., and Luepker, R. V. (1983) "Knowledge gap effects in a health information campaign." *Public Opinion Quarterly* 47 (4), 516-527.
- Flaxman, S., Goel, S., and Rao, J. M. (2016) "Filter bubbles, echo chambers, and online news consumption." *Public Opinion Quarterly* 80 (1), 298-320.
- Fox, J., and Warber, K. M. (2014) "Queer identity management and political self-expression on social networking sites: A co-cultural approach to the spiral of silence." *Journal of Communication* 65 (1), 79-100.
- Gaziano, C. (1983) "The knowledge gap: An analytical review of media effects." *Communication Research* 10 (4), 447-486.

- Gearhart, S., and Zhang, W. (2014) "Gay bullying and online opinion expression: Testing spiral of silence in the social media environment." *Social Science Computer Review* 21 (1), 18-36.
- Gerbner, G., and Gross, L. (1976) "Living with television: The violence profile." *Journal of Communication* 26 (2), 172-199.
- Gerbner, G., Gross, L., Morgan, M., and Signorielli, N. (1980) "The 'mainstreaming' of America: Violence profile no. 11." *Journal of Communication* 30 (3), 10-29.
- Glynn, C. J., Hayes, A. F., and Shanahan J. (1997) "Perceived support for one's opinions and willingness to speak out: A meta-analysis of survey studies on the 'spiral of silence.'" *Public Opinion Quarterly* 61 (3), 452-463.
- Goode, L. (2009) "Social news, citizen journalism and democracy." *New Media and Society* 11 (8), 1-19.
- Graves, L., Nyhan, B. and Reifler, J. (2016) "Understanding innovations in journalistic practice: A field experiment examining motivations for fact-checking." *Journal of Communication* 66 (1), 102-138.
- Hanitzsch, T. (2007) "Deconstructing journalism culture: Toward a universal theory." *Communication Theory* 17 (4), 367-385.
- Harder, R. A., Sevenans, J., and van Aelst, P. (2017) "Intermedia agenda setting in the social media age: How traditional players dominate the news agenda in election times." *The International Journal of Press/Politics*. Retrieved from <http://journals.sagepub.com/doi/abs/10.1177/1940161217704969>
- Hargittai, E., and Hinnant, A. (2008) "Digital inequality: Differences in young adults' use of the Internet." *Communication Research* 35 (5), 602-621.
- Hindman, D. B. (2000) "The rural-urban digital divide." *Journalism and Mass Communication Quarterly* 77 (3), 549-560.
- Hiippala, T. (2017) "The multimodality of digital longform journalism." *Digital Journalism* 5 (4), 420-442.
- Hirsch, P. M. (1981) "Distinguishing good speculation from bad theory: Rejoinder to Gerbner et al." *Communication Research* 8 (1), 73-95.
- Hjarvard, S. (2013) *The mediatization of culture and society*. New York: Routledge.
- Ho, S. S., and McLeod, D. M. (2008) "Social-psychological influences on opinion expression in face-to-face and computer-mediated communication." *Communication Research* 35 (2), 190-207.
- Hwang, Y., and Jeong, S.-H. (2009) "Revisiting the knowledge gap hypothesis: A meta-analysis of thirty-five years of research." *Journalism and Mass Communication Quarterly* 86 (3), 513-532.

- Jacobson, S. (2013) "Does audience participation on Facebook influence the news agenda? A case study of the Rachel Maddow Show." *Journal of Broadcasting and Electronic Media* 57 (3), 338-355.
- Jamieson, P. E., and Romer, D. (2014) "Violence in popular U.S. prime time TV dramas and the cultivation of fear: A time series analysis." *Media and Communication* 2 (2), 31-41.
- Jeffres, L. W. (2015) "Mass communication theories in a time of changing technologies." *Mass Communication and Society* 16 (2), 523-530.
- Jeffres, L. W., Neuendorf, K., and Atkin, D. J. (2012) "Acquiring knowledge from the media in the Internet age." *Communication Quarterly* 60 (1), 59-79.
- Kahlor, L., and Eastin, M. S. (2011) "Television's role in the culture of violence toward women: A study of television viewing and the cultivation of rape myth acceptance in the United States." *Journal of Broadcasting and Electronic Media* 55 (2), 215-231.
- Kampf, Z. and Daskal, E. (2014) "Communicating imperfection: The ethical principles of news corrections." *Communication Theory* 24 (2), 165-185.
- Karlsson, M., Bergström, A., Clerwall, C. and Fast, K. (2015) "Participatory journalism – the (r)evolution that wasn't: Content and user behavior in Sweden 2007–2013." *Journal of Computer-Mediated Communication* 20 (3), 295-311.
- Kaufhold, K., Valenzuela, S. and Gil de Zúniga, H. (2010) "Citizen journalism and democracy: How user-generated news use relates to political knowledge and participation." *Journalism and Mass Communication Quarterly* 87 (3/4), 515-529.
- Kim, S.-H. (2012) "Testing fear of isolation as a causal mechanism: Spiral of silence and genetically modified (GM) foods in South Korea." *International Journal of Public Opinion Research* 24 (3), 306-324.
- Kruikemeier, S. and Lecheler, S. (2016) "News consumer perceptions of new journalistic sourcing techniques." *Journalism Studies*. Retrieved from <http://www.tandfonline.com/doi/abs/10.1080/1461670X.2016.1192956>
- Lasorsa, D. L., Lewis, S. C., and Holton, A. E. (2012) "Normalizing Twitter: Journalism practice in an emerging communication space." *Journalism Studies* 13 (1), 19-36.
- Lee, J. K., and Coleman, R. (2014) "Testing generational, life cycle and period effects of age on agenda setting." *Mass Communication and Society* 17 (1), 3-25
- Lewis, S.C., Holton, A.E. and Coddington, M. (2014) "Reciprocal journalism: A concept of mutual exchange between journalists and audiences." *Journalism Practice* 8 (2), 229-241.
- Lewis, S. C., Kaufhold, K., and Lasorsa, D. L. (2010) "Thinking about citizen journalism: The philosophical and practical challenges of user-generated content for community newspapers." *Journalism Practice* 4 (2), 163-179.

- Liu, J. (2016) "Digital media, cycle of contention, and sustainability of environmental activism: The case of anti-PX protests in China." *Mass Communication and Society* 19 (5), 604-625
- Livingstone, S. (2004) "The challenge of changing audiences: Or, what is the audience researcher to do in the age of the Internet?" *European Journal of Communication* 19 (1), 75-86.
- Marchionni, D.M. (2013) "Journalism-as-a-conversation: A concept explication." *Communication Theory* 23 (2), 131-147.
- Matthes, J., Rios Morrison, K., and Schemer, C. (2010) "A spiral of silence for some: Attitude certainty and the expression of political minority opinions." *Communication Research* 37 (6), 774-800.
- McCombs, M. E., and Shaw. D. L. (1972) "The agenda-setting function of mass media." *Public Opinion Quarterly* 36 (2), 176-187.
- McDevitt, M., Kiouisis, S., and Wahl-Jorgensen, K. (2003) "Spiral of moderation: Opinion expression in computer-mediated discussion." *International Journal of Public Opinion Research* 15 (4), 454-470.
- McKay Semmler, K., Semmler, S. M., and Kim, Y. Y. (2014) "Local news media cultivation of host receptivity in Plainstown." *Human Communication Research* 40 (2), 188-208.
- McLeod, J. M., Becker, L. B. and Byrnes, J. E. (1974) "Another look at the agenda-setting function of the press." *Communication Research* 1 (2), 131-166.
- Meraz, S. (2009) "Is there an elite hold? Traditional media to social media agenda setting influence in blog networks." *Journal of Computer-Mediated Communication* 14 (3), 682-707.
- Miyata, K., Yamamoto, H., and Ogawa, Y. (2015) "What affects the spiral of silence and the hard core on Twitter? An analysis of the nuclear power issue in Japan." *American Behavioral Scientist* 59 (9), 1129-1141.
- Morgan, M., and Shanahan J. (2010) "The state of cultivation." *Journal of Broadcasting and Electronic Media* 54 (2), 337-355.
- Morgan, M. Shanahan, J., and Signorielli, N. (2009) "Growing up with television: Cultivation processes." In J. Bryant and M. B. Oliver (eds.), *Media effects: Advances in theory and research* (3rd ed., pp. 34-49). New York: Routledge.
- Morgan, M. Shanahan, J., and Signorielli, N. (2015) "Yesterday's new cultivation, tomorrow." *Mass Communication and Society* 18 (5), 674-699.
- Nielsen, R. K., and Ganter, S. A. (2017) "Dealing with digital intermediaries: A case study of the relations between publishers and platforms." *New Media and Society*. Retrieved from <http://journals.sagepub.com/doi/full/10.1177/1461444817701318>

- Noelle-Neumann, E. (1993) *The spiral of silence: Public opinion – our social skin*. Chicago: University of Chicago Press.
- Norris, W. (2017) “Digital humanitarians: Citizen journalists on the virtual front line of natural and human-caused disasters.” *Journalism Practice* 11 (2/3), 213-228.
- Oliver, M. B., and Armstrong, G. B. (1995) “Predictors of viewing and enjoyment of reality-based and fictional crime shows.” *Journalism and Mass Communication Quarterly* 72 (3), 559-570.
- Paulussen, S., and Ugille, P. (2008) “User generated content in the newsroom: Professional and organisational constraints on participatory journalism.” *Westminster Papers in Communication and Culture* 5 (2), 24-41
- Phillips, A. (2012) “Faster and shallower: Homogenisation, cannibalisation and the death of reporting.” In P. Lee-Wright, A. Phillips and T. Witschge (eds.), *Changing journalism* (pp. 81-98). London: Routledge.
- Potter, W. J. (1993) “Cultivation theory and research: A conceptual critique.” *Human Communication Research* 19 (4), 564-601.
- Price, V., and Allen, S. (1990) “Opinion spirals, silent and otherwise: Applying small-group research to public opinion phenomena.” *Communication Research* 17 (3), 369-392.
- Prochazka, F., Weber, P. and Schweiger, W. (2016) “Effects of civility and reasoning in user comments on perceived journalistic quality.” *Journalism Studies*. Retrieved from <http://www.tandfonline.com/doi/abs/10.1080/1461670X.2016.1161497>
- Putnam, R. D. (2000) *Bowling alone: The collapse and revival of American community*. New York: Simon and Schuster.
- Revers, M. (2014) “The twitterization of news making: Transparency and journalistic professionalism.” *Journal of Communication* 64 (5), 806-826.
- Rinke, E.M. (2016) “The impact of sound-bite journalism on public argument.” *Journal of Communication* 66 (4), 625-645.
- Robinson, S. (2011) “‘Journalism as process’: The organizational implications of participatory online news.” *Journalism and Communication Monographs* 13 (2), 137-210.
- Salmon, C. T., and Neuwirth, K. (1990). “Perceptions of opinion ‘climates’ and willingness to discuss the issue of abortion.” *Journalism Quarterly* 67 (3), 567-577.
- Scheufele, D. A., and Moy, P. (2000) “Twenty-five years of the spiral of silence: A conceptual review and empirical outlook.” *International Journal of Public Opinion Research* 12 (1), 3-28.
- Scheufele, D. A., and Tewksbury, D. (2007) “Framing, agenda setting and priming: The evolution of three media effects models.” *Journal of Communication* 57 (1), 9-20.

- Schulz, A., and Roessler, P. (2012) "The spiral of silence and the internet: Selection of online content and the perception of the public opinion climate in computer-mediated communication environments." *International Journal of Public Opinion Research* 24 (3), 346-367.
- Scott, J., Millard, D., and Leonard, P. (2015) "Citizen participation in news: An analysis of the landscape of online journalism." *Digital Journalism* 3 (5), 737-758.
- Severin, W. J., and Tankard J.W. Jr. (2001) *Communication theories: Origins, methods and uses in the mass media* (5th ed.). New York: Longman.
- Shanahan, M. C. (2011) "Science blogs as boundary layers: Creating and understanding new writer and reader interactions through science blogging." *Journalism* 12 (7), 903-919.
- Shrum, L. J., Lee, J., Burroughs, J. E., and Rindfleisch, A. (2011) "An online process model of second-order cultivation effects: How television cultivates materialism and its consequences for life satisfaction." *Human Communication Research* 37 (1), 34-57.
- Singer, J. B. (2016) "Transmission creep: Media effects theories and journalism studies in a digital era." *Journalism Studies*. Retrieved from <http://www.tandfonline.com/doi/abs/10.1080/1461670X.2016.1186498>.
- Singer, J. B., and Ashman, I. (2009) "'Comment is free, but facts are sacred': User-generated content and ethical constructs at the *Guardian*." *Journal of Mass Media Ethics* 24 (1), 3-21.
- Steensen, S. and Ahva, L. (2015) "Theories of journalism in a digital age: An exploration and introduction." *Digital Journalism* 3 (1), 1-18.
- Tichenor, P. J., Donahue, G. A., and Olien, C. N. (1970) "Mass media flow and differential growth in knowledge." *Public Opinion Quarterly* 34 (2), 159-170.
- Tran, H. (2013) "Does exposure to online media matter? The knowledge gap and the mediating role of news use." *International Journal of Communication* 7. Retrieved from <http://ijoc.org/index.php/ijoc/article/view/1550/886>.
- Tsfati, Y., Stroud, N. J., and Chotiner, A. (2014). "Exposure to ideological news and Perceived opinion climate: Testing the media effects component of spiral-of-silence in a fragmented media landscape." *International Journal of Press/Politics* 19 (1), 3-23.
- van Deursen, A.J., and van Dijk, J.A. (2014) "The digital divide shifts to differences in usage." *New Media and Society* 16 (3), 507-526.
- Vergeer, M., and Pelzer, B. (2009) "Consequences of media and Internet use for offline and online network capital and well-being: A causal model approach." *Journal of Computer-Mediated Communication* 15 (1), 189-210.
- Vis, F. (2013) "Twitter as a reporting tool for breaking news: Journalists tweeting the 2011 UK riots." *Digital Journalism* 1 (1), 27-47.

- Viswanath, K., and Finnegan, J. R. Jr. (1996) "The knowledge gap hypothesis: Twenty-five years later." In B. R. Burleson (ed.), *Communication Yearbook 19* (pp. 187-227). New York: Routledge.
- Viswanath, K., Kahn, E., Finnegan, J. R. Jr., Hertog, J., and Potter, J. D. (1993) "Motivation and the knowledge gap: Effects of a campaign to reduce diet-related cancer risk." *Communication Research* 20 (4), 546-563.
- Wahl-Jorgensen, K., and Hanitzsch, T. (2009) "Introduction: On why and how we should do journalism studies." In K. Wahl-Jorgensen and T. Hanitzsch (eds.), *The Handbook of Journalism Studies* (pp. 3-16). New York: Routledge.
- Walgrave, S., and van Aelst, P. (2006) "The contingency of the mass media's political agenda setting power: Toward a preliminary theory." *Journal of Communication* 56 (1), 88-109.
- Weaver, D., McCombs, M., and Shaw, D. L. (2008) "Agenda-setting research: Issues, attributes, and influences." In L. L. Kaid (ed.), *Handbook of Political Communication Research* (pp. 257-282). Mahwah, NJ: Lawrence Erlbaum Associates.
- Wei, L., and Hindman, D. B. (2011) "Does the digital divide matter more? Comparing the effects of new media and old media use on the education-based knowledge gap." *Mass Communication and Society* 14 (2), 216-235.
- Weimann, G., Weiss-Blatt, N., Mengistu, G., Tregerman, M. M. and Oren, R. (2014) "Reevaluating 'the end of mass communication?'" *Mass Communication and Society* 17 (6), 803-829
- Westley, B. H., and MacLean, M. S. Jr. (1957) "A conceptual model for communications research." *Journalism Quarterly* 34 (1), 31-38.
- Widholm, A. (2016) "Tracing online news in motion: Time and duration in the study of liquid journalism." *Digital Journalism* 4 (1), 24-40.
- Williams, D. (2006) "Virtual cultivation: Online worlds, offline perceptions." *Journal of Communication* 56 (1), 69-87.
- Yan, Y., and Bissell, K. (2015) "The sky is falling: Predictors of news coverage of natural disasters worldwide." *Communication Research*. Retrieved from <http://journals.sagepub.com/doi/abs/10.1177/0093650215573861>
- Yoo, S. W. and Gil de Zúñiga, H. (2014) "Connecting blog, Twitter and Facebook use with gaps in knowledge and participation." *Communication and Society* 27 (4), 33-48.
- Zelizer, B. (2004) *Taking journalism seriously: News and the academy*. Thousand Oaks, CA: Sage.