Communication Processes in Participatory Websites

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Research on participatory websites has been minimally theoretical and lacks a comprehensive framework that identifies common elements and their functions across a variety of Web 2.0 platforms. This article suggests the definitions of 4 common message types in participatory websites—proprietor content, user-generated content, deliberate aggregate user representations, and incidental aggregate user representations—and offers research exemplars that illustrate how they may function in transforming online social interaction and influence. It introduces the 6 empirical studies in this Special Issue of the Journal of Computer-Mediated Communication in terms of the theories, functions, cues, and message types on which these articles focus.

The newest generation of computer-mediated communication systems involves participatory websites. Also known as Web 2.0,[1] or social web sites, these systems present and juxtapose messages that are generated by different authorial sources: central messages posted by a web page's proprietor, and user-generated content that other readers contribute. These systems can both facilitate and complicate social influence because they provide information from a variety of sources simultaneously who possess different attributes and connote different relationships to readers (Walther et al., 2010a). Participatory web systems are complex communication phenomena that are rendered understandable through the application of communication theory.

Well-known participatory web systems with these characteristics include a wide range of social network sites (SNS) such as Facebook, Hyves, Cyworld, studiVZ, and others; video-sharing and commenting sites, including YouTube and the Internet Archive; blogs; "talk-back" features appended to online news stories; user-generated rating sites such as movie ratings, restaurant ratings, or professor ratings; vendors' and consumers' product reviews on sites such as Amazon.com and travel-related recommendations on TripAdvisor.com. They may include wikis and advice-sharing systems, such as Yahoo! Answers (although these systems tend to have no central proprietor's content, and beyond their templates all content is user-generated). Although each of these sites typifies a certain approach to the incorporation of user-generated content, any given Web 2.0 site may exhibit considerable "convergence," according to Dylko and

McClusky (2012, p. 253), in that it may combine several communication platforms: "Content-sharing sites contain diverse textual and/or multimedia content that users submit and often rate, tag, and comment on . . . . Social network sites often incorporate blogs, IM [instant messaging], status updates, running tally of comments on the individual's profile page, and the ability to tag and share various content."

Participatory websites incorporate many features from conventional forms of computer-mediated communication (CMC). They can foster topical discussions among large, dispersed groups; as earlier e-mail list systems do, they host virtual communities in which hobbyists or support seekers share concerns or cures and comment on one another's contributions. They can facilitate a level of interactivity among comments reminiscent of listserv and Usenet discussions (see Rafaeli & Sudweeks, 1998). Like the traditional World Wide Web, there is generally a page owner or authoritative source controlling much of what appears on the site in terms of text, multimedia content, graphics, typography, and color. It is the combination of all these features—visual informational and interface cues, a central authorial message source, plus the contribution and incorporation of visitors' input—that marks the evolutionary departure of Web 2.0 systems from previous forms of online messaging systems and websites. The manner in which user-generated content and the page owner or proprietor's messages complement each other, or compete with each other for influence, raises numerous questions about how these platforms function as communication systems.

The participatory web phenomenon has emerged so quickly and widely that research has generally focused on various features, user responses, and design characteristics much more than on theoretical explanations for the underlying causes and contingent effects associated with their use. In a recent review of empirically based publications focusing on Web 2.0 systems (Chong & Xie, 2011), of the 54 studies the authors found, although 34 mentioned the word "theory" in them, only 5 used some theory to guide the research. The articles in this Special Issue of *JCMC* depart from this trend. They provide valuable illustrations of the potential to apply rigorous theoretical approaches—many of them quite traditional—to our understanding of participatory web systems. In doing so, moreover, they enhance and extend the scope and dynamics of the theories, as technologically shaped contexts frequently do.

In addition to dearth of theoretical research, few integrative reviews have appeared that attempt to identify commonalities among these systems or the communication dynamics that many of them share. The current essay attempts to address this concern. It begins by identifying and describing some message sources common to a number of Web 2.0 systems, with exemplars in a variety of contexts. It then discusses some processes in which research has documented transformations in social interaction afforded by the dynamics these systems offer. It concludes by bridging these positions to the articles that comprise the Special Issue.

Participatory Website Characteristics

In order to lay a foundation for discussing the nature of participatory websites, we propose four elements which comprise them: proprietor content, user-generated content, deliberate aggregate user representations, and incidental aggregate user representations.

Proprietor Content

Proprietor content includes the messages composed and displayed by the primary author or proprietor of a webpage. We avoid the term "owner-generated content" because the controller or proprietor of a web page may not in fact own it. Individuals who maintain a Facebook profile, for instance, do not own it but do have proprietary privileges to determine the central content (less so the format) within it such as their self-descriptions, photos, and status updates. Proprietor content may take the form of videos, text, and/or

pictures. These forms may operate in combination. For instance, videos on YouTube accompany textual descriptions of the video or tags provided by the person who posted them, just as individuals frequently caption pictures that they post on Facebook. Proprietor content is not unique to Web 2.0 systems: The content of traditional websites is entirely proprietor content. In Web 2.0 systems, proprietor content tends to persist on a webpage where it becomes accompanied by messages that other users append.

Not only do individual or institutional proprietors control what a page originally says. They also tend to have editorial privilege over the content that other users subsequently contribute. A proprietor may control whether users may contribute anything, or, once posted, a proprietor may remove others' postings. When proprietors do not remove undesirable user-generated content from pages under their control, its persistence connotes the proprietors' tacit approval and endorsement of the content to subsequent readers (DeAndrea, in press).

Proprietor content also tends to shape the focus of user-generated responses in participatory web systems. For example, a video that is a proprietor message draws the focus of users' comments on any given YouTube web page (although users occasionally post irrelevant messages or "spam"). And although users may co-opt proprietor content and edit or remix it with other sonic or visual elements in a "mash-up" that is uploaded elsewhere (see Jackson, 2009)—another form of user-generated responses—the original content remains.

User-Generated Content

User-generated content (UGC) contains the messages that participatory websites invite, capture, and display from nonproprietary visitors. The ability for users other than web pages' proprietors to append their own contributions, and those messages' subsequent appearance within the webpage, are the defining feature of participatory websites and distinguishes them from the traditional Web. User-generated content includes readers' responses to either proprietor content or to other user-generated messages. A form or pop-up box is usually available in which users write their comments, which sites then display in visual and spatial juxtaposition to the proprietor content. Comments often appear in a sequence or conversational thread on the same page as proprietor content, or are made visible via a hyperlink.

As user-generated messages compile in relation to a news story, video, or other proprietary message, their interrelationship may be reactive or interactive, as Rafaeli (1988) described different forms of messaging. Much UGC appears *reactive*, in that, while the comments tend to focus on the proprietor and/or the proprietor content, they are not interconnected with other comments, but exist in a growing list with only their referent (the proprietor content) in common. In other cases user-generated messages respond to other user-generated messages, and the referential meaning of a given posting depends on the content of the prior postings, comprising *interactivity*. Interactivity, in a face-to-face or computer-mediated exchange, is hypothesized to incite greater involvement, acceptance, satisfaction, motivation, sociability, and fun, according to Rafaeli and Sudweeks (1998). At times interactive UGC sequences become uncivil, with ad hominem attacks on other commenters appearing (Thorson, Vraga, & Ekdale, 2010). Civil or not, when contributors offer their reasons for disagreement, readers may learn the decision premises that led to others' conclusions, learn about issues, and potentially change their minds.

Research is examining the qualities of participatory message cues that affect their persuasive value. Aside from the impact of the valence of a proprietor's or a user-generated statement—its positive or negative evaluation of some content or object—other message qualities are the focus of considerable interest. Message qualities refer to the linguistic, stylistic, and semantic components of statements.

One quality that was suspected to affect readers' attitudes is the extremity of valenced messages. Lee, Rodgers, and Kim (2009) suggested that greater extremity or polarity of a recommendation message

enhances attitude change than less extreme statements. Their research compared four different levels of experimentally contrived user-generated product reviews: an extremely positive review, a moderately negative review, an extremely negative review, and a control condition. The extremely negative review had the strongest effect on consumer attitudes, moreso than extremely positive ones, and the authors concluded that there is a negativity bias in the effects of reviews. Other researchers have suggested a more complex picture. Willemsen, Neijens, Bronner, and de Ridder's (2011) research examined several message characteristics in online product reviews including valence, argument density, argument diversity, and expertise claims. They assessed the relationships of each of these characteristics with the degree of usefulness other readers attributed to the reviews. Willemsen et al. determined that the negativity effect pertained only in the case of "experience goods," that is, products and services that warrant experiential evaluations after purchase. The negativity preference did not pertain to reviews of "search products," i.e., those that possessed objective characteristics that could be compared prior to purchase. Metzger, Flanagin, and Medders (2010) found a contingency effect in relation to the presence of negative information. Their respondents expressed a preference for balanced perspectives in online information, and if no negative information is presented from other consumers, they find the validity of the remaining positive information to be questionable.

Research has examined variations in other writing qualities and their potential relationship to message usefulness and persuasiveness. Cheung, Lee, and Rabjohn (2008) posited that relevance, timeliness, accuracy, and comprehensiveness may be key variables for argument quality in online product reviews; their findings indicated that only relevance and comprehensiveness contributed significantly to information usefulness. Features such as depth and two-sided messages have shown negative effects on users' attitudes or evaluations, as seen in Kim's (2010) examination of restaurant reviews from Yelp.com. Overall, research focusing on message features without theoretical frameworks with which to comprehend them has generated a less-than-coherent body of research to date. Among the exceptions, Winter and Krämer's research in this Special Issue adapts persuasion theory to demonstrate how a message feature also plays a role in readers' selection of Web 2.0 content for consumption.

Aggregate User Representations

Along with user-generated content and proprietor content, many Web 2.0 systems also provide *aggregate user representations* (AURs). These are computer-generated descriptive statistics that a web page displays representing accumulations of users' ratings, votes, or other site-related behaviors. They typically appear as counts or ratios, and may be presented in some graphical fashion such as the number of stars, or they may simply display the mathematical sum of how many people rated the content one way or the other. There are two types of AURs: *deliberate AURs* and *incidental AURs*.

Deliberate AURs display the users' collective responses to some request for overt evaluative input. They frequently depict accumulated data on users' opinion ratings about some object or content with regard to some specific quality. This includes, for instance, a coefficient alongside user-generated advice that indicates how many previous readers voted that the advice was useful. It may also take the form of an average of users' ratings of how reliable a particular retail vendor or individual seller has been in the past. These AURs may reflect evaluations of proprietor messages (e.g., how many people "liked" a Facebook status update) or other UGC (such as ratings about user-generated restaurant reviews or product reviews). In some systems, user-generated ratings become input in the computational determination of which reviews or answers are displayed most prominently on the site to subsequent viewers (Otterbacher, Hemphill, & Dekker, 2011).

The second type, incidental AURs, reflects information extracted by a computational system from records of users' behaviors that were not enacted with the purpose of signaling anything to others.

They reflect intentional behavior but it is not behavior by which users deliberately meant to express their opinions or overt evaluations about some content to others (in contrast both to user-generated comments and deliberate AURs). The number of one's Facebook friends is one example; it appears on one's profile, and others make inferences from it regardless of the whether or not "friending" was meant to signal the social attractiveness of the friend to others (Tong, Van Der Heide, Langwell, & Walther, 2008; Utz, 2010; Zwier, Aruajo, Boukes, & Willemsen, 2011). Incidental AURs often reflect the popularity of an item or person, such as the number of times users have viewed a particular video, or which stories on a news site users have forwarded via e-mail the most often. A system may also indicate how frequently a specific user has provided (or received) ratings.

A potentially persuasive characteristic of incidental AURs is that users often have little or no direct control over the AUR's cumulative rating. In contrast, an SNS profile proprietor can actively manipulate self-representations by changing profile pictures or other content; one can even delete unwanted user-generated messages left by others. In incidental AURs, however, the aggregate data are beyond the control of the proprietor or any single user. As such, to the extent that readers believe that AURs are immune to manipulation by the target to whom they refer, they may have exceptional *warranting* value, that is, they may comprise more trustworthy information because they appear not to have been manipulated by the proprietor that they describe (for review see Walther, Van Der Heide, Hamel, & Shulman, 2009).

There are unusual cases in which AURs, or verbal UGC, are indeed deliberately manipulated. In SNSs, in order to appear popular, some individuals deliberately attempt to boost the number of friends they have by soliciting friends indiscriminately. Such behavior is considered undesirable (Donath & boyd, 2004) and its perpetrators are perceived as relatively less socially attractive (Tong et al., 2008). In terms of ratings and reviews, some industries are prone to virtual ballot-stuffing by individuals paid to use fake online personae, a phenomenon called a "sybil attack" (Douceur, 2002), although bogus reviews tend to feature different linguistic characteristics than real ones (Ott, Choi, Cardie, & Hancock, 2011).

Despite the possibility of their falsity, users tend to rely on AURs in assessing characteristics of proprietor messages and/or their authors. For example, AURs about a proprietor's or user's message affect the message author's source credibility (Metzger et al., 2010) or inferred persona (Zwier et al., 2011). Because Internet users minimize cognitive effort and the time to process information, aggregated ratings or testimonials affect credibility and trust by stimulating various cognitive heuristics. In this way, incidental AURs can lead to popularity bandwagon effects, as work by Fu addresses in this Special Issue.

With respect to proprietor content, UGC, and AURs, participatory web pages often display messages from these multiple types of contributors in a contiguous fashion, where each agent's contributions persist in a different location on a single web page. These displays may be hierarchical, with proprietor messages generally occupying a larger portion of the screen display than do sets of various user-generated components. But regardless of the level of salience afforded to proprietor or user-generated components, any given participatory web site generally conventionalizes where the various sources—proprietor, reviewer, rater, commenter, and AUR—appear on the screen. This differs from the simple conversational threads of electronic bulletin boards or discussion board systems (see for review Quarterman, 1990), where users' messages are undifferentiated by role or participant type.

Participatory Websites and Social Interaction

The juxtaposition of proprietor content, UGC, and aggregate user representations makes participatory systems different from traditional web systems in the way they transform social interactions. These effects appear in, among other contexts, impression formation and management, virtual communities,

Categorical Impressions and Credibility

Much early CMC research focused on the notion that online text-based messages, without auditory or visual access to message senders, disables the expression or detection of users' identity online. Whether this effect may have been an endemic or contingent feature of CMC, Web 2.0 has radically changed our assumptions about the ease with which users identify who others are online. That readers easily recognize when they are reading comments by peers rather than by commercial spokespersons, for example, is a basic assumption underlying most explanations for the attraction and popularity of online peer commenting systems. The social identification/deindividuation model of CMC (Lea & Spears, 1992) introduced the idea that at times, online, certain social categories or social groups may become apparent and salient to users, with which visually anonymous users identify or self-categorize. As identification with such groups becomes stronger, the influence of the group drives much of online behavior. Nowhere has this notion become more powerful than in many UGC sites. As Willemsen, Neijens, and Bronner show in the Special Issue, readers detect and differentiate responses to subcategories of peers online, such as laypersons, self-proclaimed experts, and experts who are credentialed by third parties. This attests even more strongly to Internet users' facility in differentiating among the types of persons they encounter online, even if those persons are represented only by text. The rapidly-growing literature about online credibility, generally, is built on this new but apparently widely-accepted premise that individuals readily rely on cues other than those in face-to-face encounters in order to tell who is what, at least categorically, in participatory websites. On Web 2.0, everyone knows you're a dog (vs. a cat).

Research has noted the powerful persuasive potential of ingroup similarity between readers and message posters in participatory websites. On sites such as Ratemyprofessor.com, for instance, students anonymously provide ratings for other students who are likely to encounter the same professors. Organizing its content according to colleges, the site conveys clear social identities among the students who comprise its past posters and future readers. An experiment demonstrated the potency of this UGC environment by displaying either positive or negative comments about a faculty member on Ratemyprofessor.com (Edwards, Edwards, Quing, & Wahl, 2007). Despite the fact that the students who read the different comments also saw the same video clip showing the professor teaching, the different UGC affected ratings of the instructor's attractiveness and credibility, and subjects' attitudes toward course material and learning from the professor. Similarly, Walther, DeAndrea, Kim, and Anthony (2010b) assessed the effects of readers' identification with those who posted responses to antimarijuana public service videos on YouTube. Experimentally created pages of user-generated comments either complimented the proprietor video and denigrated drug use, or denigrated the video and extolled marijuana. The videos themselves did not affect viewers' attitudes toward the video, but the comments did. Additionally, the more that viewers identified with YouTube commenters, the more their attitude toward the dangers of marijuana were affected in the expected direction.

Categorization and Community

For the many user-generated recommendation sites on which individuals evaluate products, services, hotels, and other things, analysts have suggested user participation must be great in order for these systems to maximize their value to users. Encouraging UGC in these evaluation systems has been the focus of scholarly research as well as attention by corporations who profit from the increased purchasing that user-generated reviews encourage.

Recent research has focused on encouraging users' participation by adjusting the interface for and appearances by which UGC is seen online, in order to effect differences in the nature of the social presence and psychological satisfaction users experience (Farzan, Dabbish, Kraut, & Postmes, 2011; Lee & Jang, 2010). Farzan et al. explored different psychological forms of identification with other users that the display of others' comments facilitates. The *social identification* strategy occludes users' interindividual differences to submerge them with a sense that they are part of a group, which encourages participants to contribute in order to enhance one's identification with the group. In the *interpersonal connection* strategy, users' names and characteristics appear, and users are encouraged to address each other as friends. As they develop affinity for other users, this encourages contributions as a form of interpersonal exchange.

Research has applied these principles in alternative interfaces to the movie recommendation site, Movielens.org (Ren et al., in press). Among other features, Movielens offers users deliberate AUR ratings and discussion boards to "talk about movies with serious movie buffs" (http://movielens.org/quickpick). After assigning new Movielens users into group-based, interpersonally based, or generic (control) recommender networks in a 6-month field experiment, results indicated that the form of identification significantly affected site usage. Group identity strategies increased site visitation compared to other conditions, and the interpersonal interaction condition showed greater usage compared to the control condition. These efforts marry the potential for sociotechnical arrangements that facilitate different kinds of relations with increased participation in, and benefits from, user-generated review systems.

Interpersonal Impressions and Impression Management

How people form impressions of other media users is as longstanding a topic in CMC research, yet participatory websites change the nature of this process. Previous research has examined how participants and observers form impressions of others' personalities from computer conferencing (Walther, 1993), online chat (Hancock & Dunham, 2001), and static web pages (Vazire & Gosling, 2004) in which impression-affecting messages were proprietor-controlled: Receivers only consumed what the sender generated, and was subject to senders' selective self-presentation (see Walther, 1996). In participatory websites, however, proprietors lose their monopoly over the messages that affect observers' impressions of them. User-generated content may accentuate, complement, or undermine a source's intended impression.

Research examining impressions garnered via Facebook illustrates how UGC affects perceptions of proprietors' qualities. When a Facebook friend posts a message to another friend's "wall" or status update, both the statement and the friend's photo appear. The content of the statements affect other viewers' assessment of the proprietor's own social attractiveness, and the physical attractiveness of one's friends' photos affect perceptions of the proprietor's physical attractiveness (Walther, Van Der Heide, Kim, Westerman, & Tong, 2008). Although an SNS proprietor can delete undesirable comments from friends, a proprietor cannot create such messages, and friends' comments can therefore be more influential in shaping observers' impressions of a proprietor than proprietors' own comments are due to the warranting value they may possess. Research established that Facebook friends' user-generated comments suggesting that a proprietor was physically attractive or unattractive had a greater influence on observers' perceptions of the proprietor's attractiveness than did the proprietor's own self-descriptions, despite the presence of a neutrally attractive photograph of the proprietor (Walther et al., 2009).

Organizational Impression Management

Matters take a similar path when it is not a friend, but a business customer, who generates online content that reflects poorly on others. The use of Twitter by consumers to broadcast dissatisfaction

with various organizations is a widespread phenomenon (Jansen, Zhang, Sobel, & Chowdury, 2009), and many companies monitor and respond to these messages as best they can (Gulas & Larsen, 2012). The prospect for online vendors to respond effectively to consumer complaints in Web 2.0 review sites is addressed also by Matzat and Snijders in the Special Issue.

Beyond perceptions about individuals' social characteristics and organizations' reliability, research has demonstrated that UGC and AURs have important commercial consequences in cases where evaluations of a source's dependability are concerned. Resnick, Zeckhauser, Friedman, and Kuwabara (2000) examined the effects of the number and nature of comments provided by past buyers in regard to the sellers of goods on eBay. The number and the valence of seller ratings affected how much buyers were willing to bid for certain goods which were also available from other sellers who had different ratings. Clearly, UGC and AURs have strong effects on viewers' evaluation of sources.

Macrosocial Perceptions: Understanding Opinion Climate

Because user-generated content and AURs on participatory websites reflect unknown others' opinions, participatory web systems may affect readers' perceptions of the *opinion climate* on an issue. If UGC affect readers' perceptions of society's opinions, it may impact one's own willingness to express an opinion, from the perspective of the spiral of silence theory (Noelle-Neumann, 1993). The spiral of silence posits that people are motivated to understand the opinion climate pertaining to an issue as a basis for deciding whether to express their own opinions. Since individuals normally wish not to be isolated from others by expressing an unpopular opinion, their perceptions of opinion climate ultimately regulate what, if anything, they may say about a matter. The theory originally argued that people gauge opinion climate through information obtained through mass media or interpersonal interactions.

Participatory web systems provide information that readers assume to reflect public opinion about social issues. As Lee's work in this special issue demonstrates (see also Lee & Jang, 2010; Lee, Jang, & Kim, 2009), user-generated comments on news, in particular, affect perceptions of opinion climate. The proprietor content of many news stories often attempts to appear neutral and objective. User-generated comments on such stories, on the other hand, are rife with evaluations, interpretations, and subjective explanations. These elements may ultimately be more informative to a reader in gauging how others feel about an issue.

At the same time, aspects of the spiral of silence theory may warrant revision as a result of various online discussion platforms and the social networking they provide. Participatory media, from the discussion groups hosted in older Internet venues to the diffusion of participatory web systems, allow like-minded users to form their own communication networks. As a result, users may find discussions in which to exchange the relatively unpopular perspectives or opinions they prefer, rather than withhold their opinions after passive exposure to mass media or mainstream online news-and-commenting systems. For instance, De Koster and Houtman (2008) describe how white supremacist groups buffer themselves from mainstream society through online discussions in participatory websites that promote their own cosmology.

Participatory websites' capacity for helping individuals to find others who share their views and to forge communication spaces where their own opinions can resonate, despite general social disapproval, presents new and interesting challenges and extensions to the spiral of silence theory. These dynamics help us see how participatory media such as a Facebook group can be credited with mobilizing the 2010 Egyptian uprising in the Arab Spring, just as user-generated YouTube videos help to galvanize the recent backlash against the Syrian government (Hamby & Gomaa, 2012). The capacity for participatory media to contest public opinion and allow individuals to express opinions with other like minds has become a critical part of what Youmans and York (2012) call "the activist toolkit."

The Special Issue

The articles that follow in the special issue speak one or more of the concerns suggested above. The articles, as a group, tend to be somewhat psychological in their focus, yet the explanatory frameworks for which they provide evidence quite readily reflect on much larger societal issues.

The focus of Lee's article is the tendency for user-generated comments alongside news stories to induce perceptions of what public opinion is, and the potential to instigate perceptions of biased reporting in the mainstream news. She identifies specific contingencies that surface these effects, and helps clarify theory related to hostile media perceptions in the process. The implications and applications of these findings are broad. Although they are not the focus of her experimental study, Lee's framework and findings are consistent with accounts of social media's role in Arab Spring and movements, where "social media posts used a human interest frame defining protests as 'a revolution for freedom and social justice,'" but "semiofficial newspapers framed the event as 'a conspiracy on the Egyptian state'" (Hamby & Gomaa, 2012, p. 195).

The work by Willemsen et al. in this issue helps to address a credibility paradox in Web 2.0. Although the new media are not without cues with which to identify sources online, some of these cues take relatively unique forms in participatory product review sites. How a reviewer's credentials are presented, in terms of who confers them and how, makes a difference in readers' credibility judgments and in their reactions to reviews. Whether trustworthiness and expertise judgments coincide or compete is another focus of this research, drawing on theoretical distinctions dating back to Hovland, Janis, and Kelly's (1953) pioneering work on credibility face-to-face. Who to believe, and how they establish authority, is of course a question of *ethos*, a focus of communication study since its beginnings, and as Willemsen et al.'s research shows, a matter warranting continued investigation in the evolving online universe.

Another challenge facing Web 2.0 readers, besides who to believe, is what to select among the abundance of content choices one faces, and relatively little is known about how readers select what content to consume (cf. Otterbacher, 2011). Two of the articles in this issue address that question, in different settings and in much different ways. Winter and Krämer approach the question by examining blogs—science blogs in particular—where the choice of what postings to read has implications for how thorough and balanced a perspective Internet users are liable to glean regarding scientific (and social scientific) issues. The cues on which Winter and Krämer's study focus are message characteristics in the headers and summaries of blog posts, specifically whether these elements suggest one-sided vs. two-sided presentations. They also examine the roles of blog posts' author credentials, and readers' need for cognition, in blog selection patterns. They use a novel extension of elaboration likelihood theory (Petty & Cacioppo, 1986) as a framework, which not only provides a powerful organizing schema for their predictions, but extends the theory's scope in an original way.

The second article exploring readers' content selections is Fu's article that examines cues that influence the selection of videos to watch on a video-sharing site. The most potent cue is a form of incidental AUR—the number of prior viewings—but other cues compete for influence on readers' actions. A second cue is user-generated textual descriptions of the video, and a third is a graphic thumbnail preview, a hybrid cue that a video's contributor must request but one which is generated automatically by the site's computational system. Fu's work features theories and econometric analyses pertaining to bandwagon effects and what mitigates them.

In communication, a message calls for a response, and Matzat and Snijder's article examines overt responses an organization may post online, and the potential salutary effect different kinds of responses may have when a user has accused the organization of a problem. The authors draw on theories of trust restoration based in face-to-face encounters, which have been challenged in previous online research. They test an original explanation to integrate the disparate findings from the online and offline domains,

that focuses on the a priori level of trust that consumers may or may not have toward online shops when such a shop is accused by a consumer. Their results have compelling theoretical and practical implications for online sellers' trust-restoration message strategies.

The final article by Walther, Liang, Ganster, Wohn, and Emington, like the one by Williamsen et al. (this issue), looks at sites featuring user-generated product reviews. The work incorporates and analyzes the copresence and mutual influence of several user-generated sources of information on a product review page: an initial reviewer's narrative evaluation of a product, the deliberate AUR rating the helpfulness of that reviewer, and a second author's narrative comment on the first review. Through an original adaptation of Osgood and Tannenbaum's (1955) congruity theory, the research derives specific interaction effects that predict how these sources enhance or mitigate the influence of one another, which an experiment supported. The study offers implications for how Web 2.0 readers evaluate unknown sources (who are presumed to be categorically similar to themselves) and unfamiliar products and when recommendations collide or complement one another. Like several of the articles in this issue, the results extend the scope and operation of a quite traditional theory by virtue of its application in the context of participatory websites.

As a group, the articles reach across a range of Web 2.0 contexts, from review sites to news sites, blogs, and video-sharing. They present and evaluate the effects on readers of stimuli that are textual or numerical, deliberate or incidental, initial or responsive. Although the mechanisms on which they focus are largely perceptual, the responses they measure range from self-report to overt behavior, and the data emanate from both laboratory and field settings. Despite this diversity, they share in an effort to redress the aforementioned 9% ratio of articles concerning Web 2.0 that used theory to drive their research (Chong & Xie, 2011), in the expectation that when other researchers confirm, contest, or extend their theoretical conclusions, our understanding of Web 2.0 as a communication system takes shape.

Note

1 The tem *Web 2.0* often refers to attributes such as software platforms, business plan capabilities, capitalization of social networks, and other features (see for review Cormode & Krishnamurthy, 2008; Scholz, 2008). Most relevant to communication scholarship are attributes such as the means by which these systems ''harness collective intelligence'' (O'Reilly, 2005) through ''a continually−updated service that gets better the more people use it, consuming and remixing data from multiple sources, including individual users, while providing their own data and services in a form that allows remixing by others, creating network effects through an 'architecture of participation''' (O'Reilly, 2007).

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