Routledge
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Communication Theory and Research in the Age of New Media: A Conversation from the *CM Café*

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The *Communication Monographs Café* has become a neighborhood fixture—a spot for conversation about ideas that are circulating in the discipline and that have the potential for shaping scholarship in the future. The first opening of the *Café* (published in Volume 78, Issue 2) featured a conversation about social justice and public scholarship. Six months later (Volume 78, Issue 4) another group of scholars gathered at the *Café* to discuss the issues of materiality and knowledge, particularly in organizational communication and communication technology. In the last month of 2011, the doors of the *CM Café* were once again flung open. This time, the scholars who strolled in came to discuss the ways in which our scholarship can consider the rapidly changing media landscape of the twenty-first century. An eclectic mix of media scholars came to the *Café*: Nancy Baym (University of Kansas), Scott Campbell (University of Michigan), Heather Horst (RMIT University), Sri Kalyanaraman (University of North Carolina), Mary Beth Oliver (Pennsylvania State University), Eric Rothenbuhler (Ohio University), and René Weber (University of California–Santa Barbara).

As before, the *CM Café* was facilitated through a private group on Facebook, and though many of the scholars attending were already active Facebook users, several signed up especially to engage in this discussion about new media. The setting of the *Café* allowed participants to drop in and out of the conversation, post their own questions as desired, and take each other down new paths as ideas diverged and converged. In spite of busy end-of-semester schedules, travel, and a car accident, the exchange was stimulating and enlightening. In contrast to previous openings of the *Café*, the discussion that developed regarding communication theory and research in the age of new media was a relatively linear one—there were twists and turns, of course, but much of the interaction proceeded on one thread on the Facebook page. This recounting of the conversation, then, will begin with that thread headed with my opening question: "So, to begin, what do we mean when we talk about "new media"—social networks? mobile telephony? global media? Further, what can we say is really new (theoretically as well as technically) in the study of new media?"

Listen in, as the conversation commences.

René: Good question! It is certainly easier to agree on what we mean when we talk about "Old Media": Television and radio (electronic); magazines, newspapers, and books (print). Thus, very generally, with "New Media" we basically mean everything that is *not* analog such as television, radio, magazines, newspapers, and books. There are a number of important characteristics that are used to distinguish new from old media. To keep this first post brief, here is an enumeration of just a few characteristics that are most relevant in my view: (1) interactivity and virtuality, (2) on-demand and real-time access, (3) creation, distribution, and consumption of content by (almost) everyone.

Eric: René has a useful list of characteristics of some of the media we call new today. The unifying theme of those characteristics, though, isn't necessarily newness. We need a good label for what that is—interactivity, portability, ubiquity?—and we might also want to give some attention to newness as such. Newness is an experience in history and presumably all media have had their moments. Are there common characteristics of that experience, across different media and different moments in history that might illuminate our responses to the media that are being experienced as new today? Radio brought new forms of communication into new places—strangers' voices in the home, for example—was that ubiquitous and portable and interactive in its time? Is there something about an edge of the communicative frontier experience that motivates the label new? Is it new when we experience communication being pushed into places, times, circumstances, or forms where it wasn't before?

Scott: Hi all. Interesting exchange so far! This isn't so much an answer to the question of what is "new" media, but rather some reflections on what so-called new media do to traditional lines of theory. One of the key technological affordances of new media is that they tend to be hybrid in nature, offering platforms for both mass and interpersonal communication. Thus, a key technological attribute is the ability to connect with social ties, which I believe substantially heightens the salience of those ties. Theoretically speaking, this has meaningful implications for the "media effects" tradition, which has traditionally emphasized exposure to a given technology and the content it delivers. In today's new media environment, it is important to account not only for *how much* one uses a given medium and *how* they use it, but also *whom with*. In the case of mobile communication, research suggests that consequences are shaped not only by frequency and patterns of use, but also by the network ties that one uses the technology with. Seems like this dynamic offers a way of thinking about the old debate regarding technological vs. social influence in more complementary, as opposed, to competing ways.

Sri: I think there are at least two inchoate ways in which new media can be classified: one is in terms of the physical manifestation of the technology itself (somewhat similar to the "media as boxes" perspective). This consideration would include all technological devices and gizmos such as laptops, smart phones, etc. and

even include environments that are rendered as a result of hardware and software sophistication (e.g., virtual reality).

A more stringent way of conceptualizing new media technologies is by examining those attributes that are endemic to new(er) technologies. Such an approach breaks down the classification of technologies in terms of specific concepts and underlying variables. In fact, this perspective was proposed more than two decades ago in a landmark 1990 book chapter (Nass & Mason, 1990), and, in many ways, has laid the edifice for the systematic study of media effects of new media. The task then is to identify those variables that accentuate new technologies and/or are unique to new technologies. There are probably many such variables that may be proposed but some that have had enduring impact are interactivity and customization.

Of course, we still are a long way away from a unified conceptualization of new media. One reason for that, in my opinion, is because sustained empirical research has not kept pace with proclamations, suppositions, and armchair theorizing. To clarify this thought, here are some examples of illustrative questions: what exactly do we mean by interactivity? If multimedia, navigability, etc. are examples of unique elements in new media, what does research on these concepts/variables tell us? I believe answers to such questions can guide our forage for a more ecumenical understanding of new media (and maybe even render the term "new media" moot someday). Talking of forage, I believe that even the perspective of technology as a box can be quite valuable if we embark on a quest for appropriate theoretical frameworks that would help in forwarding testable propositions. For instance, why would the same message on two different platforms (desktop vs. PDA) evoke differential responses? One reason could be the idea that we see the PDA as being part of us, as a personalized possession—somewhat analogous to Belk's notion of the extended self (1988).

Nancy: I think the others have hit on many of the points I'd make here as well—newness is a state of time rather than of technology and we get further thinking in terms of concrete attributes or affordances of particular technologies than we do thinking of "newness" as a quality of any given machine or thinking that all machines that are new share some inherent quality. We need to separate out the layer of questions about what happens when communication technologies—any media, even historic ones (especially, perhaps, historic ones)—are new from the questions we may have about the media that happen to be new at this moment in time.

I think the term "new media" appeals in part because it allows us to talk about a wide and rapidly evolving range of means of communication that seem to have something in common without having to identify what exactly that is. Thus the term can be applied to Hulu, to social network sites, to mobile phones, text messages, and all manner of other media. What's new about any of them may vary considerably. In my book *Personal Connections in the Digital Age* (Baym, 2010), I propose thinking about newness in terms of how any particular new medium compares to previous ones in terms of seven key concepts: what kinds of interactivity are available? What is/ are the temporal structures possible (synchronous, asynchronous)? How available are social cues including the physical, nonverbal and social/identity cues? Is the medium

stored? Is it replicable? How many people can messages using that medium reach? What kinds of mobile engagement does that medium afford?

New media are theoretically provocative because they are disruptive. They challenge embedded ways of doing things and the power balances those entail in every context, they throw social norms into question and open possibilities for reorganizing practice at everyday and systematic levels. They force communication researchers to reconsider what they have taken for granted. New media are rarely revolutionary—to the contrary, their presence and the rhetorics that surround them often serve to reinforce old orders—but they do amplify and make possible consequential social shifts.

Mary Beth: These are all excellent points, and I don't see any conceptualization or argument that I disagree with here. I would like to further add that I believe that changes in communication technologies re-energize the importance of learning (again) from medium theorists (or those sometimes referred to as media ecologists). I believe that now, more than ever, media technologies are radically altering our social environments (à la Meyrowitz, 1985, *No Sense of Place*). Not only are boundaries between social groups being changed, but so, too, the stages on which one interacts, the nature of interaction itself, what is meant by "audience," and even fundamental understandings of concepts such as "privacy."

Eric: Nancy's list of seven key concepts strikes me as very useful. I can imagine using it as a typology to sort and compare a host of media. And it provokes two additional thoughts. First, though I think she is suggesting that this set was designed for examining the media that are new at the moment, rather than for identifying what is true of newness across media and moments, still I wonder. Wouldn't most media rate higher on most of those variables in the social context in which they were new? The development of the volume control was described as making phonographs more interactive, for example. The mass newspaper made politics and social life more immediate. Is it possible that interactivity, synchronicity, and so on, attract our attention because they are "needs" of communication, or part of the fundamental logic of communication? So any medium that offers more of them, pushes communication farther in that direction, will be hailed as new and exciting?

Second, a thought trailing off in another direction, Nancy's list leans toward technical capabilities. What would it look like if we added business models (patronage, purchase, admission, subscription, advertising, etc.), communicative or programming forms (conversation, narrative, performance, etc.), or some kind of institutional structures (industrial, communal, familial, etc.)?

Heather: I would like to piggyback on Eric's suggestion that we need to be thinking more about the relationship between the technical capabilities and a range of other structures and stakeholders such as institutions. I've been struck recently in my own work on mobile phones with the role of companies/corporations and the creation and interpretation of value and meaning in their marketing and other efforts as well as the other kinds of structures (minutes, micro exchanges of money and credit, pre and post pay models and so on) and their relationship to regulatory environments/ governance, every day practices, capabilities, affordances, etc. I realize that many of us

work with different forms of media and I'm curious how much that matters—what structures, stakeholders, institutions emerge depending upon the different capabilities, institutions and infrastructures, and how much others feel we can generalize about "media."

Nancy: I love Eric's point about supporting institutions—and networks—and Heather's elaborations of it. In my own work I've been thinking about how social media such as Facebook, Twitter, and Myspace are playing roles in reshaping relationships between musicians and their audiences in ways that have ramifications on huge structural levels in terms of corporate structures, copyright law, international intellectual property treaties, and more. I see a personal relational component becoming more and more critical to processes that used to be more—if never strictly—economic and market oriented.

René: Interesting thoughts from all of you! I find Nancy's key concepts very useful as they highlight the concept of interactivity and—most important in my view—the role (and shift) of temporal structures, i.e., the question of synchronous and asynchronous exchange via new media technologies. I also think that Scott made a great point when emphasizing that it is "useful for scholars of new media to start with people and their engagement as a point of entry rather than the technology itself." I agree, but I think that both are interconnected, especially when it comes to interactivity and temporal structures. For example: Recently, I began a line of research that deals with (1) synchronization processes on multiple levels (e.g., simple behavioral/motor level or complex experiential/cortical level), (2) how those synchronization processes "cause" cooperation in groups confronted with a collective action problem, and (3) how those synchronization processes are generated by use of interactive new media. We know from many experiments (a very good, recent one: Wiltermuth & Heath, 2009) that people tend to act more cooperatively after engaging in synchronous activities. Like Nancy, temporal coordination seems to me increasingly important in the evolving interactive media environment, which offers individuals new opportunities to simultaneously engage with other media users or to isolate themselves from other users both physically and temporally. There is a lot to say about the synchronization principle in dynamic (media) systems, but the implications of synchronous and asynchronous information exchange for cooperation in large groups (and vice versa), and how synchronous and asynchronous information exchange is orchestrated via a new/interactive media environment is most fascinating to me.

Mary Beth: René, I'm a fan of your work in this area! I'm interested in what everyone thinks about how changes in technologies have altered media use as synchronous (or not). On the one hand, it seems that synchronous media use is rare now. Just the other day, there was a thread on Facebook from some friends talking about how they used to love to watch holiday TV shows (e.g., the Grinch), and how part of the fun was anticipating when it would come on. Everyone (as a culture) would be watching it together—like we still do for big media events like the Oscars or huge sporting events. So it's true that as a mass audience, we may not be that synchronous anymore. But there are other indicators, right? One perhaps odd one

that comes to mind that seems to be facilitated by technologies is the flash mob. It's almost as if people have a deep urge to make this synchronous connection. Further, observing flash mob events seems to elicit feelings of inspiration, connectedness – cooperation? So a redefinition of synchronicity and media's role in it?

Scott: Reflecting on my work and that of others like Rich Ling, it seems that synchronicity plays out on two levels, especially with texting among close network ties. On the one hand, texting is an asynchronous form of interaction—to varying degrees, of course. But there is kind of a cumulative effect toward greater "social synchronicity" in the sense that oftentimes this form of interaction is used to fill in the gaps between face-to-face meet ups. We see this especially with youth, but I think this practice is bubbling up to some adults as well. So, they are using an asynchronous medium to stay more socially in synch as they carry on with their everyday affairs. Oftentimes the exchanges are super mundane, some even call them "meaningless messages," but they have important symbolic and relational value in making people feel like they are socially in synch by sharing little updates, sometime pictures/videos, of mundane or interesting things they experience while physically apart. This is like virtually carrying your friends and family around with you throughout daily life, or as Ito and Okabe (2005) call it, "ambient accessibility." Anyhow, the point I'm trying to make is that I think asynchronous mediated contact can "add up" to making people feel more like they are carrying out their relationships more synchronously when they establish rhythmic flows with their interactions. I'd be interested in hearing if my illustration with texting resonates with other forms of mediated contact, such as social network site use.

Eric: This is going in a very interesting direction. René's points/questions about synchronicity and the follow ups lead me to think of the ritual structures of communication. Strong forms of ritual and ceremony are highly scripted and almost always involve some unison group activity—recitation, singing, movement, or posture. The scripting is of the substance (words, etc.) and the form (rhythm, sequence, posture). This unison is a very powerful communicative device that both creates and displays "groupness." What it communicates to its own members is at least as important as what it says to others.

In conventional mass media there is a fair amount of unity—Tarde (1901/1969) thought it revolutionary that with the modern newspaper people could read about the barricades while there was still time to join them—nothing had ever been so simultaneous for such large groups! But in retrospect we can see that there is very little communication of unity back to the group in conventional mass media. You have to know by some other means that everyone is watching in order for that fact to become part of your experience of watching.

Maybe an important part of what is new about some of the new media is that they add capabilities for that metacommunication; they do not let the synchronicity remain latent, they make it part of the communication itself. If so, maybe this is the explanation for why we see more collective, sociable responses to media use, a turn toward social causes and a comfort and preference for social cooperation among young people grown up with these media—as I think Mary Beth was pointing to. By

contrast, those of us who came of age with the social movements of the 60s followed by Watergate are accustomed to receiving information, thinking, talking, and making up our own minds—different media, different rituals, different cognitive results, different social outcomes.

Also, as Scott raised the conversational form of texting, there are different ritual structures for different forms of communication. Unison movement is one thing, the dance of conversation is another, but both are forms of synchronization (though not what we mean by synchronic and asynchronic media in the technical sense). There are forms for synchronizing action in space and forms for synchronizing relations in time.

Scott: Actually *ritual* was exactly what I had in mind when I made that comment about texting and social synchronicity. Extending on Durkehim and Goffman, sociologist Randall Collins (2004) has advanced the notion of "interaction ritual chains," essentially arguing that certain patterns and rhythms can develop during face-to-face interpersonal exchanges that contribute to social cohesion. He gave a talk on this here at Michigan around 2005 or 2006, and I had a chance to ask him about whether this can occur in a mediated context—he asserted "no" because it wouldn't support the sense of togetherness, timing, and rhythm we get in face-to-face interaction. Later, in his book *New Tech New Ties*, Rich Ling (2008) challenges Collins's position on the need for face-to-face with the notion of "mediated ritual interaction chains," using insights into texting as evidence to back up his claim. I was pleased to see the book received a very positive review from Collins.

Nancy: Scott asks about whether his description of texting resonates with other forms of mediation like social network site use. Certainly Facebook chat functions the same way for teens. This, like texting, is important in enabling people to create a sense of being together when they are physically apart, and I would agree with Scott that it functions as a synchronous coenvironment, and with Eric about the ritual dimensions of this interaction.

I want to pick up on René's question about "coordinated (or uncoordinated) information exchange in interactive media environment and its relationship with cooperation in large groups." I think this is very important, and if you think about it broadly, is one of the fundamental shifts brought about by the current crop of new media. In their comprehensive *Social History of the Media,* Briggs and Burke (2009) show how every new medium for centuries has functioned to decentralize control of information. As people gain access to all kinds of resources that weren't available before and can engage others around that information, they develop their own systems of information exchange and problem solving. Pierre Levy (2001) talks about collective intelligence, and certainly something we see happening on a large scale across the Internet are big groups cooperating to solve problems. Henry Jenkins's (2008) discussion of fans of the TV show *Survivor* working together to identify the season's winner before the contestants for that season had even been publicly announced is a good example of the levels of detail with which groups can work together to solve problems. The model of collective intelligence these fans demonstrate is also at work as large groups work together online to figure out

scientific, political and other sorts of concerns. This shifting of expertise and information management to the audience or public creates systemic challenges for all the media and political industries that have relied on centralized control of information.

René: Thank you, Nancy! I agree with you—it seems that synchronous, "event-like" media use becomes rare in the changing media landscape with interesting implications. Like Eric and Scott, I think that synchrony, or the experience of synchrony, does not require groups of people acting within the same system at the same moment in time. Important in my view is that actions are *experienced* as coordinated. As a simple analogy: Singing a canon is an asynchronous, coordinated activity with the experience of synchrony. A canon is characterized by a stable phase shift between singers. Of course, as Eric, Scott, and Nancy hinted, exchange via new media technologies is certainly more complex than singing a canon (e.g., is characterized by varying phase shifts). I completely agree with Eric's point that an important part of what is new about new media is that they add capabilities for "metacommunication" (interactivity) and make coordinated information exchange part of the communication itself.

Sri: In light of the recent discussions, there were some aspects that particularly piqued my interest. One stems from a comment that Mary Beth alluded to earlier regarding the changes that elements of the new environment had wrought in our understanding of more "traditional" concepts (i.e., concepts that weren't popularized or proposed in new media environments, but ones that have assumed newer meanings in new media) such as "privacy." The other pertains to our understanding of terms that are endemic to new media ("interactivity" would be a useful example since it's been mentioned prominently in multiple posts). The consensus is that new media is a lot more than just the technology itself, so I am wondering whether our comprehension of concepts is also contingent on which element we consider to be crucial (such as a specific technological affordance, the temporal dimension, etc.). Related to this is our own evolving sense of the role of technology—as Turkle (2011) alludes, this can be characterized by not just what technology does for us but also what technology does to us. René, Eric, and Scott's identification of synchronicity is a great example because it prompts a deeper examination of our interactions and our notions of who we are as social animals. At the same time, the utility of some of these concepts/terms would also depend on whether we use (a) technology for human interaction or whether we interact with the technology itself (for instance, much of the discussion on synchronicity beautifully captures a *CMC* scenario, but I wonder whether they would be similarly applicable if we examined psychological outcomes of our interaction with the technology itself, or the novelty of affordances offered by the technology). If we as a group of people interested in new communication technologies can specify—or even attempt to specify—distinct conditions and parameters and propose that our consideration of a concept would depend on the prevailing parameters, it would offer a useful roadmap to illuminate the conceptual murkiness that we come across from time to time.

For instance, interactivity is perhaps the most used (and abused) concept in new media terminology, yet there is not much consensus among scholars in terms of conceptual definitions, and even less so in terms of operationalization. Perhaps, the ideas outlined here would lend themselves to a suitable typology where terms and concepts are not treated as equally applicable to all situations (say, mediated communication vs. human–technology interaction; synchronous vs. asynchronous) and environments (say, virtual reality vs. social networks), but one where the most appropriate perspective can be adopted (the roadmap can serve as a potential heuristic in such adoption).

So in this single Facebook thread (and trust me, I've left a lot out!), *Café* participants wove together a fascinating discussion that moved among issues of time, typologies, theory, interactivity, synchronicity, ritual, and more. In this and other threads, productive tangents were explored. These included the issue of media determinism, raised by Scott, though he noted the risk of eliciting "acute groaning." Heather agreed that the contrast between social constructionism and technological determinism is not an "inconsequential debate" and noted that users of new media "are constantly finding workarounds to subvert the logic of the technologies." Eric and René considered the ways in which new media reshape pedagogy in terms of both content and process. And there were numerous discussions of specific research projects (too detailed to reproduce here) that illustrated the complexities of communication scholarship in the new media landscape.

As our two weeks of *Café* time drew to a close, I asked participants to post "closing comments" that could sum up thoughts from the discussion, chart directions for the future, or express strongly held positions about communication scholarship in the area of new media. Though not everyone was able to post a closing comment, those who did shared important insights about scholarship that resonate beyond the area of technology and media. Not surprisingly, these closing comments elicited additional discussion—indeed, many of these conversations will continue in our journal pages, conference meeting rooms, and (hopefully) virtual and real life cafes. But we'll close out this particular round of the conversation with the "closing comments" of Scott, René, Eric, and Mary Beth.

Scott: By way of closing, I want to share some reflections on the role of theory in research on new media. As a reviewer, I see a lot of exploratory work being done in the area of new media. Oftentimes the justification is that something "new" is going on and therefore the research is filling some type of gap or addressing questions about what the consequences of this new phenomenon are. First, I want to say that exploratory research can have its place in offering new insights/observations, which may generate future research to help explain those observations. However, I think it is important to stress to young scholars that they should strive to tackle important questions of "why" and "how" things happen in their research on new media. That is, they should be striving to explain and not just make new observations for the sake of studying something new. Speaking as a person who usually takes a social science

approach to his work, this is an important mindset for research to have real theoretical value (I presume folks in the humanities would agree, although perhaps from their own perspective about what theory is and its role in research). I think that with new media—especially with new media—it is tempting to try to break ground in a particular area with exploratory work, while the explanatory contribution takes a back seat. Oftentimes, I see the main justification for these types of studies being that "so many people are using this technology, so it must be important to study." Indeed, prevalence does bolster an argument that something should be studied, but it is important for scholars to go a step beyond that in rationalizing why it really matters and then clearly establishing the need to explain something rather than just explore it.

René: To begin I'd like to reiterate a comment that I made earlier—that the most important characteristics of new media types are their capability to create opportunities for interactivity and virtuality, their on-demand and real-time access, and the possibility for (almost) everyone to create, distribute, and consume content. The "power" of new media technologies with these characteristics arises from the temporal dynamics of information exchange in large groups of communicators. In my view, we are just beginning to explore this phenomenon and I am afraid that traditional theorizing in our field will not be enough to increase knowledge and understanding of new media, let alone predicting future developments and impacts. Perhaps, this will even require a paradigm shift to a new way of studying communication that goes beyond hypothetic-deductive reasoning and embraces current scientific ontology and epistemology. In my view, if communication science was born during the current scientific intellectual milieu, with its current (new) media landscape, classical positivism would have been replaced by variants of dynamic systems thinking like in almost all the hard sciences (and parts of the social sciences). We would probably be thinking and studying new media phenomena from a systems/network perspective that incorporates a philosophy that argues that nature and nurture interact to influence human behavior on both the individual and the group level.

I envision a world in which communication scholars, together and emancipated with psychologists, engineers, neuroscientists, philosophers, and other scholars, take on the challenges of the new media landscape at the forefront of science; a world in which trying to isolate and understand subsystems on various levels—genes, brains, individual/group behavior, culture—means not reduction, but emergence, and does not mean replacement, but complement; a world in which the assumption of complexity is the starting point of our studies and not the conclusion; a world in which we re-discover the power of true exploration and description that will lead to abductive reasoning and theory building.

Eric: By way of generalization, I am again struck at the multidimensionality of our problem in studying new media (and in studying communication in general). Regarding the phenomenon itself we have the technology-technique-medium (structure)-and medium (in use) dimension and the need to give attention to most every stop along the way. We have a continuum of commonalities and differences: All media have some capacities in common; what makes them interesting

are their differences. Today's media draw our attention to new things in new ways; and yet the purposes to which people put them, the way we understand what we are trying to do in communicating, is not so new or different. And we have the object-experience dimension: What's technical in objects and in experience? What's a medium? What's communication? What's new? At the level of implications, our discourse is dominated by a whole host of new agendas in research and teaching: new topics, new questions, new colleagues and more and more fields are seeing the relevance of communication and media. Less obviously, though in the long run maybe more important, there are implications for the conduct of our scholarly work and for the organization of our field. The way the world of everyday communication practices has changed with the proliferation of portable, integrated digital media is, or had better be, changing how we draw the dividing lines between different fields of inquiry, interpersonal vs. mediated being only the most obvious. Along with bringing us new questions, it should also be shaking our confidence a bit in what we thought we already knew about what communication was and how it worked. And if everyone today is a media user and producer, then perhaps we'd better get back to emphasizing the integration of theory and practice. Perhaps the test of our theories should be whether, when put into action, they might help produce a better world.

Mary Beth: Here is my closing statement. I realize that I might sound a bit antitechnology here. I'm really not—but perhaps a little cautious? Whenever a technology is introduced, there are surely benefits, but there are also costs that often go largely unexamined. Technology addresses needs, it solves problems, and it creates opportunities. But it also creates needs that might not have existed otherwise, it introduces problems that no one envisioned, and it can involve drawbacks that weren't fully understood. In short, it's a change in the media and communication landscape—not entirely progress without caveat. It is our job, therefore, to be both advocates and critics, to be diligent in asking the right questions, and to be cognizant of the importance of harnessing technologies to serve the ends of making for more harmonious and respectful communication.

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