

oral tradition. This leads to a separation of knowledge (what is known) from the knower (who knows it). Those who can read and write have special status, so that formal education takes on an important role. Knowledge, then, becomes objectified and can assume the status of truth, and individuals and groups can be divided among those who "have" the truth and those who do not. Further, information can be stored, or saved, which makes literacy a tool of conservation. Importance is assigned to that which is "stored" in written language.

Another shift occurred when electronic media came to the fore. Electronic media such as television can be immediate and ephemeral, but they are not tied to a particular place. Broadcast media extend your perception beyond where you are at any given moment, creating what McLuhan called the "global village." At the same time, like print, electronic media allow information to be stored. Because they are more readily available than print, electronic media create an information explosion, and a great competition occurs among various media to be heard and seen. Information in electronic media is sold like a commodity, which creates pressure for information to be attractive. Knowledge in the electronic age changes rapidly, and we become aware of different versions of truth. The politics of interest and a commodity-based economy separate people by accentuating their differences.

If you were a member of a primarily oral culture, differences would be minimal, and decisions would be made collectively based on the wisdom of tradition as it has been passed down generation to generation. If you were a member of a primarily print-oriented culture, decisions would rely on "truth" stored in documents, and those who had access to information would have great influence as a class in society's decision making. But today, you are likely a member of a primarily electronic culture in which you identify with interest groups that vie against one another. You hear many voices at once, and your challenge is to integrate these in some way.

Still another shift—the rise of the Internet and related technologies—social media and computer-mediated communication (CMC)—has created yet additional forms of reality. These are generally referred to today as "new media."¹⁰ Although McLuhan and his mentors began to identify various media environments and their potential effects, the stark shift from broadcast to interactive media with the rise of the Internet brought media environments to the fore, with a renewed interest in medium theory among communication scholars. The next theory explores new medium theory as it relates to Web 2.0 and other CMC.

New Medium Theory

In 1990, Mark Poster published his landmark book, *The Second Media Age*, which heralded a new period in which interactive technologies and network communications, particularly the Internet, would transform society.¹¹ The idea of the second media age began in the 1980s and introduced important changes in media theory. The first alteration loosened the concept of "media" from primarily "mass" communication to a variety of media ranging from very broad to quite personal in scope. The personal computer, tablets, and smart phones were a big part of this change.¹² Second, the concept drew attention to new forms of media use that could range from individualized information and knowledge acquisition to interaction. Indeed, it is now said that we live in a "network soc

ety."¹³ Third, the thesis of the second media age brought medium theory from the relative obscurity of the 1960s to renewed popularity that continues today. The power of media in and of themselves came back into focus, including a renewed interest in characteristics of dissemination and broadcast media.¹⁴

David Holmes explains differences between the first and second media ages.¹⁵ The first media age was characterized by (1) centralized production (one-to-many); (2) one-way communication; (3) state control, for the most part; (4) the reproduction of social stratification and inequality through the media; (5) fragmented mass audiences; and (6) the shaping of social consciousness. The second media age, in contrast, can be described as: (1) decentralized and user-generated (many to many or many to few); (2) two-way; (3) beyond state control; (4) democratizing; (5) promoting individual consciousness; and (6) individually oriented.

Further, Holmes explains there are perhaps two dominant views of the differences between the first media age, with its emphasis on broadcast, and the second, with its emphasis on networks. These are labelled the *social interaction* approach and the *social integration* approach respectively. The *social interaction approach* distinguishes media in terms of how close they come to the model of face-to-face interaction. Older forms of broadcast-oriented media emphasized transmission of information, which reduces the possibility of interaction. Such media are thought of primarily as informational and therefore mediate reality for the consumer. New media, in contrast, are more interactive and create a new sense of personalized communication.¹⁶

A key advocate of the social interaction point of view is Pierre Lévy, author of *Cyberculture*.¹⁷ Lévy sees the World Wide Web as an open, flexible, and dynamic information environment, which allows human beings to develop a new orientation to knowledge and thereby engage in a more interactive, community-based, democratic world of mutual sharing and empowerment. The Internet provides virtual meeting places that expand social worlds, create new possibilities for knowledge, and facilitate sharing of perspectives worldwide.¹⁸

Of course, new media are not the same as face-to-face interaction, but they provide new forms of interaction that bring us back into personal contact in ways that older media could not do. For example, we can share pictures and exchange messages on Facebook. At the same time, this communication is still mediated because it is going through a device and encourages us to eschew face-to-face communication in favor of mediated communication. For example, a friend of ours described how his son was having a Skype conversation with two friends. Rather than talking to each other, they were texting each other. These interactive media, then, have advantages and disadvantages for communication and create dilemmas for us. New media, for example, may provide openness and flexibility of use, and yet we rely on them for difficult conversations that would be better suited to talking in person (e.g., managing a conflict with your boss or breaking up with your girlfriend). New media greatly widen choice, but choice is not always a virtue when we need structure and guidance. Diversity is one of the great values of new media, but it can also lead to division and separation. New media may allow us flexibility in how we use time, but they also create new time demands.¹⁹ For example, you can now check your email at any time of day, but you might have to spend a couple of hours daily checking email—which was not the case 20 years ago.

The second way in which media are distinguished is in terms of *social integration*. This approach characterizes media not in terms of information, interaction, or dissemination but in terms of ritual—how people use media as a way of creating community. Media are not primarily an instrument of information nor a means for achieving self-interest but rather a means that allow us to come together in some form of community and offer us a sense of belonging. This happens by using media as a shared ritual, which may or may not involve actual interaction. According to the social-integration view, interaction is not a necessary component of social integration through ritual. We interact not so much with other people but with the medium itself. Use of media is a self-contained ritual that has meaning in and of itself. For example, you might set *Washington Post Online* as your home page and check it several times a day—not because you want to know the news but because you have ritualized the action. Face-to-face interaction, then, no longer is the baseline for comparison of communication media.

Every medium has potential for ritual and integration, but media accomplish this function in different ways. With older, broadcast-oriented media, such as television and books, centralized sources produce situations and characters with which audiences can identify. Yet broadcast media allow for little interaction other than controlling the remote or deciding what stories to read or watch. You listen and view, but media do not talk back, or interact, with you.

In contrast, we use new media as a shared ritual that makes us feel part of something bigger than ourselves. Media are ritualized because they become habitual and take on values that are larger than media use itself. A smart phone is indeed useful for keeping track of and exchanging information with others, but it is much more. It makes us feel that we are part of a social community of users; we identify with something that transcends ourselves. Maybe this is why certain people love to check their email, Facebook, or Instagram on a smart phone while traveling along a country road in France on vacation.

Caren August and James Liu conducted a study of race talk online to illustrate how various forms of Web 2.0 media shape the nature of interaction.²⁰ They examined threaded comments on YouTube videos related to a news story about two race-related incidents involving Paul Henry, a New Zealand television personality. Henry is a controversial figure who first sparked outrage and debate when he asked the Prime Minister of New Zealand if the next Governor General of New Zealand would “look and sound like a Kiwi.” The prior Governor General was New Zealand born of Indian descent. The second incident involved commentary about a minister in India whose name is Sheila Dikshit. Henry commented, “and it is so appropriate because she’s Indian, we should call her a dick in shit.” More than one thousand complaints were received by the Broadcasting Standards in New Zealand about these incidents, and Henry ultimately was forced to resign.

August and Liu completed a thematic analysis of the threaded conversations about the Henry incidents. They found that there were high levels of obscenities, overt and covert racist comments, denial of racism, and high levels of hostility as part of the YouTube conversations. There were almost no examples of resolution of arguments, but rather what the authors described as point scoring. Further, conversations were tangential and framed by hyper-low context com-

munication (very direct), combined with brief comments leading to interpretive ambiguity. The authors contrasted these posts with news-story posts, which lacked obscenity and overt hostility. The authors explain that these findings support medium theory in that the type of conversation on YouTube would not happen in other contexts. For example, on Facebook, users would be removed from the site if they included obscenity. Face-to-face conversation would likely lead to a fight if it followed this framework. Thus, certain aspects of technology enable certain types of conversations that construct and shape perspectives and relationships in society. The next theory develops the idea of medium theory further to explain how the structure of media shape institutions in society.

Media Ecology and Mediatization

Even before the rise of the Internet, the ideas of McLuhan and other medium theorists inspired a body of scholarship known as *media ecology*. This term was coined by Neil Postman in 1970; he was interested in the ways that the media of communication “affect human perception, understanding, feeling, and value.”²¹ Postman chose the word *ecology* because “it implies the study of environments: their structure, content, and impact on people.”²² Just as physical environments are ecological, Postman argued, so are media environments. He claimed technological innovations, like those in any system, inescapably have unpredictable, far-ranging consequences:

One significant change generates total change. If you remove the caterpillars from a given habitat, you are not left with the same environment minus caterpillars: you have a new environment, and you have reconstituted the conditions of survival. . . . This is how the ecology of media works as well. A new technology does not add or subtract something. It changes everything. In the year 1500, fifty years after the printing press was invented, we did not have old Europe plus the printing press. We had a different Europe. After television, the United States was not America plus television; television gave a new coloration to every political campaign, to every home, to every school, to every church, to every industry.²³

Aspects of media ecology, then, build on the foundational claims of medium theory. Chief among them is the idea that the inherent predispositions, or “biases,” of a given medium are more important than the content of any particular message communicated through that medium. Indeed these biases affect the very fabric of the culture in which the medium is present. As Postman famously argued when television was the dominant medium (as it was in the global West during the late twentieth century), television’s “bias” is toward entertainment; thus, all of the culture’s other institutions prioritize entertainment as well. Politicians, clergy members, teachers, and business executives—not to mention news anchors—are judged on their ability to amuse as much as, if not more than, their success in accomplishing the substantive tasks expected of leaders in their fields.²⁴ Extending this line of thinking to twenty-first century concerns, contemporary media ecologists would say that since the bias of digital media is toward instantaneous availability of information, all other cultural spheres must now also provide immediate answers or instant gratification of some kind or be found wanting. As Postman foresaw as early as 1992, when technology gains “a