

MEDIUM THEORY

An Alternative to the Dominant Paradigm of Media Effects

◆ Joshua Meyrowitz

When printing first spread through Western Europe in the late 15th century, it was tightly controlled by the Church and Crown. An analyst who looked at this situation through the most common approach to “media effects”—with a focus on the influence of media content and medium control—would likely have predicted that the long-term impact of the printing press on Western Europe would be to increase religiosity and strengthen the authority of monarchs. Evidence to support this view was plentiful in the early era of printing. Indeed, many of those who first tried to use the new medium to question religious or monarchical authority were severely punished, sometimes even put to death. Yet, most historians and other observers would now agree that the ultimate influence of the spread of printing and literacy was in direct opposition to the thrust of early printed content and the desires of the medium’s first masters. In the long run, printing helped to secularize society through the spread of scientific learning and also

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undermined the authority of monarchs by supporting the development of constitutional systems, where widely available printed documents literally constituted the shared conceptions and laws of each nation.

To observe these types of potential media effects—whether in the past, present, or future—one needs to shift the focus from the content of media as the prime source of influence and look to the nature and capacities of each medium itself. A key question is: How do the characteristics of each medium differ from those of other means of communication? To ask such a question is not to argue that a medium can have influence without any content, nor is it to argue that a medium's features magically "determine" the medium's impact on passive humans. Rather, the exploration of the features that distinguish one medium from another is compatible with the assumptions that the same or similar content often has different effects in different media, that new means of communication afford new possibilities that human beings creatively exploit for both old and new purposes, and that people actively develop new forms of content and new ways of interacting to match the potentialities and constraints of new media.

Printing, for example, differed dramatically from handwritten manuscripts in that it allowed for relatively inexpensive, rapid, and widespread sharing of identical texts. Printing facilitated a shift from a focus on copying and preserving existing "authoritative" documents to a focus on broad distribution. Printing made possible more sophisticated means of organizing, searching, and citing written material with such innovations as page numbers, tables of contents, and indexes (in place of identifying scribal content by a name for a whole manuscript or, at best, by chapter and verse). Broad distribution and new forms of organizing writings increased interaction among authors who referenced and critiqued each other. And such interaction led to incremental improvements in texts and in knowledge through

many new books and through corrected and expanded editions of older volumes. All told, these and other contrasts between handwritten manuscripts and printed books were differences that made a difference in political, religious, and intellectual life.

Medium theory is a special type of media study that focuses on such characteristics of each medium and on how each medium (or each *type* of media) is physically, socially, and psychologically distinct from other media. Medium theorists, for example, look both at how the Internet is different from television and at how television and the Internet (as two forms of electronic media) differ from books and newspapers (two forms of print media). Medium theory also compares and contrasts each medium with unmediated face-to-face interaction. The term *medium theory* was coined in the 1980s (Meyrowitz, 1985, p. 16) to give a unifying name to scholarship in a variety of fields, including political economy, literature, anthropology, history, the classics, religion, and communication. The singular "medium" is used in the name of the theory to distinguish this perspective from more generic "media theory" by calling attention to the special focus on the particular characteristics of each medium. Medium theory is closely related to the field of "media ecology" (cf. Lum, 2006; Strate, 2006). This chapter describes the types of differences among media that medium theory explores, the history of medium theory, subgenres of medium theory, micro- versus macrolevel medium theory, and the critiques and limitations of medium theory.

♦ *Medium Characteristics*

In comparing and contrasting different communication technologies, medium theorists attempt to identify the characteristics of media and how those characteristics may have an influence on human interactions,

institutions, and social structure. Such characteristics of media include

- the *type of sensory information* the medium is able and unable to transmit (e.g., visual, aural, tactile, olfactory, etc.) and whether the medium is *uni-* or *multisensory*;
- the *form or forms* of information conveyed by the medium within each sense (e.g., the dots and dashes of abstract Morse code contrasted with speech, as two distinct types of sound; or ideograph vs. photograph vs. written word, as three distinct types of visual information);
- the *degree of verisimilitude between the medium form and "reality"* (e.g., one may mistake a radio voice for a real person in the next room, but rarely does one mistake a TV image for a live visitor in the house, and yet, the TV images of people certainly look more like real persons than do written descriptions of them);
- whether the medium offers *unidirectional versus bidirectional versus multidirectional communication*;
- whether exchanges through the medium are *sequential or simultaneous* (as in the difference between the telephone, with its overlapping utterances, and the turn-taking in CB radio);
- the *degree and type of control the users have over reception and transmission* (e.g., the fixed speed and sequence of a TV news broadcast as opposed to readers' freedom to jump around in a newspaper or create their own paths through Internet news via hyperlink options);
- the *physical requirements for using the medium* (such as whether one has to touch the medium, remain in a fixed location, look in a certain direction, and so forth) and what other mediated and unmediated activities can and cannot be done easily at the same time (e.g., while many people drive or make love while listening to music, television watching and computer keyboarding are generally considered less compatible with those activities);
- the *degree and type of human intervention/manipulation that is necessary or possible in creating a message* (as in the difference between snapping the shutter of an automatic camera and painting an oil portrait, or the different range of manipulations possible with digital photography contrasted with a chemical photo darkroom);
- the *scope and nature of dissemination* of the medium (e.g., the question of how many people in different locations can experience the same message at the same time);
- the medium's *durability* (how long the medium or its messages last) and *portability* (how easily the medium and its messages can be transported over great distances);
- the *relative ease or difficulty of learning to code and decode messages in the medium*, including the issue of whether one tends to learn to use the medium all at once (as seems to be more true of radio and TV than of most other media) or in stages (as is typical with literacy) and the issue of the *ratio of coding/decoding complexity* (e.g., learning to *watch* an animated cartoon is much simpler than learning to *produce* an animated cartoon, but listening and speaking over the telephone are on a relatively equal plane of difficulty); and
- all the ways in which *media physically interact with each other* (e.g., a letter can be "sent"—actually, just reproduced—by a fax machine over phone lines, but a videotape would have to be physically transported from one place

to another unless its content is first digitized for electronic transmission, and while one can easily place text on a computer screen, one cannot as simply put a computer screen in a book).

By focusing on these and other differences among media, medium theorists argue that media, far from being passive channels for transmitting information from one environment to another, are themselves distinct communication environments. As a type of environment, each medium tends to encourage certain types of interaction while discouraging others.

♦ *The History of Medium Theory*

Medium theory has ancient roots. A medium theory perspective is implicit in the Ten Commandments, which suggested that the medium through which God was portrayed made a difference. Graven images and idols were forbidden in favor of worship of an abstract, imageless god.

Perhaps the first explicit medium theory was articulated by Socrates (469–399 BC), who, as a master of oral discourse, looked at the spread of writing with a suspicious and critical eye. Writing, he recognized, was not just another way of speaking. Writing, Socrates said, would lead to forgetfulness, because writers and readers would no longer need to rely on their memories. In addition, writing diminished dialogue, since a reader could not ask a text a question or directly influence the thoughts of the writer. Moreover, while something spoken was typically tailored to the specific abilities, interests, and concerns of those present, something written was imprecise communication that might or might not be understandable or of interest to those whom it eventually reached. Although these critiques may at first seem odd and humorous to the modern mind, a few moments' reflection suggests that Socrates was perhaps a more perceptive

analyst of some of the effects of writing than those born into cultures where widespread writing and reading have been taken for granted. Few literate people can display the feats of memory that anthropologists have discovered among extant oral cultures, and the lack of writer-reader dialogue in manuscripts and printed books is obvious upon reflection. (Even a written-down conversation is static and excludes the reader.)

Socrates, however, was better at seeing how writing was different from the oral interactions he treasured than he was at seeing what writing could facilitate that did not yet exist, including extended treatises and arguments too complex even for their own writers to memorize, let alone share with any large number of people through conversation. Moreover, what Socrates disparaged as texts composed for no one in particular, is now praised by writing teachers who encourage children to write in an "objective tone." Although Socrates was correct about the basic differences between speech and writing, he missed the fact that the values he imposed on the distinctions would later come to be reversed: The book would come to be seen as the facilitator and repository of all sophisticated science, philosophy, and literature, while conversation was often seen as too "personal," ephemeral, and idiosyncratic. (These relative values have been in flux again in the electronic age.) Socrates was unable, of course, to see the distant future of more spontaneous and interactive forms of writing in e-mail, instant messaging, text messaging, and blogging and reader responses. One wonders if the wise Socrates could anticipate the irony that his own medium theory is now remembered primarily because his best student, Plato, wrote it down in the *Phaedrus*.

Until the mid-20th century, most other medium theory appeared in bits and pieces, often buried within different primary concerns. In the mid-15th century, Johannes Gutenberg boasted of the ways in which his invention of movable type bypassed

the power of the Church's scribes. In the early 16th century, religious reformer Martin Luther and his protégés consciously exploited the unique features of printing for the first mass-mediated publicity campaign for the Protestant Reformation. A perspective akin to medium theory was implicit in the birth of the field of sociology in the 19th century, which recognized that the impact of industrialization could not be reduced to the products that were produced (the "content") but had to be gauged instead in the ways that changes in means of production (the "medium") altered the structure of institutions and social relations and led to dramatic changes in rural and urban life. Yet, sociology's founders were often blind to the similarly transformational role of communication media. Indeed, they mostly overlooked the prior role that the printing press based on movable type had played for several centuries as the prototype of standardization, interchangeable parts, and mechanized production—as well as being the mass production machine that made possible the widespread sharing of the plans for new forms of making goods and organizing social life.

In the early 20th century, Patrick Geddes (1904) moved toward medium theory by studying the interrelationships between natural and built environments. Geddes's disciple Lewis Mumford (1934) advanced that project into the heart of medium theory in his analyses of the impact of printing and other technologies, as well as the broader myths and influences of "the machine." In the 1930s, gestalt theorist and film enthusiast Rudolf Arnheim (1957) developed a form of medium theory as a response to those who claimed that movies could not be an art form because they merely involve the mechanical reproduction of reality. Arnheim's *materialtheorie* argued that scientific and artistic descriptions of reality are shaped as much by the peculiarities of the medium used as by the reality being portrayed.

Full-scale medium theory arose in the era of radio and with the birth of television. In the 1940s, Canadian political economist Harold Innis realized that his prior studies of the ways in which natural and human-made waterways affected the flow of the fur trade and other staples were, in effect, studies of communication media. That insight led Innis (1950, 1951) to write two books, *Empire and Communications* and *The Bias of Communication*. In these dense works, Innis extended principles of economic monopolies to the study of information monopolies from early Mesopotamia and Egypt to the British Empire and the Nazis, rewriting the history of civilization as the history of communication media and their influences.

Before his death in 1952, Innis influenced the thinking of his University of Toronto colleague Marshall McLuhan, a professor of literature. McLuhan's (1962, 1964) aphoristic and pun-filled style, combined with his bold claims (he preferred to call them "probes") and his lack of respect for what he characterized as print-inspired separations between disciplines, helped to make him the most famous—and infamous—of medium theorists. Building on Innis, McLuhan argued that the spread of literacy and printing enhanced individuality, gave oral people an eye for an ear, detribalized society and created isolated "points of view," encouraged cause-and-effect thinking, and fostered belief in linear "progress." Electronic media, McLuhan argued, were reversing many of these trends, retribalizing society, minimizing the gap between action and reaction, and imploding the world into a "global village" of greater interconnection. McLuhan criticized the content-obsessed focus of most media research with his oft-quoted, and usually misunderstood, pun, "The *medium* is the message," by which he meant that many significant and pervasive social influences derive more from the nature of the medium employed than from the particular messages sent

through it. McLuhan's message resonated well enough with media gatekeepers for him to become famous through TV and print exposure. At the same time, McLuhan incurred the wrath of many writers and scholars through his argument that television and other electronic media were having a major, and not necessarily bad, influence on the culture and that such changes were diminishing the significance of literacy-inspired modes of thought and social organization. McLuhan's reputation declined dramatically in the late 1970s and 1980s, only to be revived from the mid-1990s onward, as the spread of globalization, the dramatic impact of the World Wide Web, other media developments, and cultural trends seemed to match his descriptions of how an electronic era and the "age of information" differed from "print culture."

Innis and McLuhan are unique in terms of the scope of their claims and the breadth of history and culture that they attempt to analyze within their frameworks. Other theorists, however, have added texture to medium theory by exploring narrower topics in greater depth. Various aspects of the shift from orality to literacy have been explored by J. C. Carothers (1959), Jack Goody and Ian Watt (1963), Eric Havelock (1963, 1976), Robert Logan (1986), and Walter Ong (1982). These works suggest that orality and literacy foster different definitions of "knowledge" and encourage different conceptions of the individual, modes of consciousness, and social organization.

The significance of the shift from script to print has been explored by H. J. Chaytor (1945) and Elizabeth Eisenstein (1979). Chaytor argues that what is often thought of merely as the "mechanization" of writing created a new sense of "authorship" and intellectual property, reshaped literary style, fostered the growth of nationalistic feelings, and altered the psychological interaction of words and thought. Eisenstein's masterful study supports many of Chaytor's themes and also presents extensive evidence and

argument that the printing press revolutionized Western Europe by facilitating the Protestant Reformation and the growth of modern science.

The influences of electronic media have been explored by numerous scholars. Ong (1967), for example, analyzes how the "primary orality" of preliterate societies compares and contrasts with the "secondary orality" of electronic media. He explores the spiritual and psychological significance of the return of "the word" in electronic form. Daniel Boorstin (1973) compares and contrasts political revolutions with technological revolutions and describes how electronic media make experience "repeatable," "mass-produce the moment," and, along with other technological inventions, "level" time and space and alter conceptions of nationality, history, and progress. Joshua Meyrowitz (1985) analyzes how electronic media tend to reshape the social roles of print culture by fostering more shared patterns of access to social information, making the dividing line between public and private behaviors more permeable, and undermining the link between physical place and social "place." Manuel Castells (1996) explores how electronic media facilitate the global dominance of a form of connection—the network—that could previously exist only on a smaller scale. Mark Poster (2006) analyzes the structure and the social and cultural influences of the new relations between humans and information machines. Rich Ling (2008) explores how mobile communication alters social spheres and reshapes the patterns of social cohesion.

The current era of hypermediation has created a milieu of enhanced appreciation for, and study of, medium theory. The growth of the World Wide Web, mobile telephones, Wi-Fi, video surveillance technologies, virtual communities, radio frequency identification (RFID) tags, global positioning systems (GPS), social networking Web sites, blogs, and many other mediated environments has led to broader acceptance of the basic medium theory premise: that such media must be

looked at as creating new social settings, settings whose influence on the structure of social life cannot be reduced to the content of the messages transmitted through them. Medium theory helps us to understand some of the ways in which the technologies we create tend to re-create us.

◆ *Subgenres of Medium Theory*

Even without any direct collaboration, many medium theorists share a common view of general communication history, such as epochal differences between oral and literate societies, that printing was much more than mechanized writing, and that the electronic era is dramatically different from the print era. At the same time, medium theory can be divided into various subgenres based on different foci and concepts. A key concept in Innis's medium theory, for example, is the distinction between "time-biased" and "space-biased" media. The characteristics of a time-biased medium (such as stone hieroglyphics) allow it to last for a very long time, while the characteristics of a space-biased medium (such as papyrus) allow it to move over great distances. Innis sees such "media biases" as tied to a culture's ability to maintain stability over long periods of time or to control large areas of territory. Innis's medium theory also explores how these and other characteristics of media tend to encourage or undermine "knowledge monopolies." Central tenets in McLuhan's medium theory include the idea that media are extensions of the human senses and that changes in media alter the ratio of the senses transforming the nature of humans' self-perceptions and their interactions with each other and the outside world. In the shift from the circular world of oral sound to the visual world of writing and then print, for example, McLuhan sees a move from round huts and villages and a focus on cycles of nature toward straight-line architecture, gridlike cities, and a one-thing-at-a-time and one-thing-after-another linear philosophy that

mimicked the lines of text on a printed page. Meyrowitz has developed a "role-system" medium theory that begins with the argument that a society's typical stages of socialization, types of group identity, and levels of hierarchy are dependent on certain patterns of access (and restrictions of access) to social information. Role-system medium theory suggests that changes in media foster the restructuring of social roles by altering the balance of what different types of people know *about* each other and *relative to* each other. Ronald Deibert's (1997) "ecological holism" medium theory eschews the notion of "inherent effects" of any medium, focusing instead on the ways in which preexisting trends are either favored or not favored by the new communication environment. Deibert explores how the "chance fitness" with a new medium tends to bring some existing ideas and social forces from the margins of society to the center.

◆ *Microlevel Versus Macrolevel Medium Theory*

Medium theory can also be divided into microlevel and macrolevel approaches. In microlevel medium theory, the focus is on the use of one medium or type of media for a particular purpose in a specific situation. Microlevel medium questions, for example, might explore the intended and unintended consequences of employing one medium over others (and over face-to-face communication) for such activities as applying for a job, initiating or ending a romantic relationship, communicating with one's employees or supervisor, teaching a course, commanding troops, staying in touch with one's relatives or neighbors, promoting a product or a political candidate, and so forth. Macrolevel medium theory, however, looks at broader issues, such as how the widespread use of a new medium, when added to the existing matrix of media and face-to-face interaction, may influence many dimensions of social life within societies and globally. Macrolevel

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medium theory explores how changes in media may subtly or not so subtly reshape social roles, social institutions, conceptions of time and space, thinking patterns, architecture, urban design, interactions among cultures, and social structure in general.

In microlevel medium theory, the different characteristics of various media are seen as interacting with an individual's or group's communication style and the nature of the specific task at hand. A medium theorist, for example, would argue that there is a significant difference between choosing a telephone conversation over a textual medium to end an intimate relationship. On the phone, the words we speak are typically upstaged by our emotional vocal overtones, and we are interrupted by the words and sounds of the other person. Also, discourse on the telephone is often hesitant and rambling (or incredibly off-putting if read from a text), and a speaker cannot "erase" what he or she has said to that moment to revise the message invisibly or to begin anew. For many people, using a telephone to end a close relationship entails paradoxical communication: the telephone conversation maintains an intimate and fluidly bidirectional bond (for at least the length of the call), even as one is supposedly trying to dissolve it. (Telephone calls, however, often function well for *renegotiating* the terms of an intimate relationship, since they combine highly interactive, intimate talking with barriers to sight and touch.) For these reasons, perhaps, our culture is familiar with the "Dear John letter," but not the "Dear John telephone call." A letter writer can revise a letter until it has a formal and polished form. There are no emotional vocalizations; only words are conveyed. The letter writer can state a position without any interruption or immediate response from the other party. Newer media add new options for establishing, maintaining, and breaking off intimate relationships, with different features for each. E-mail, instant messaging, and text messaging lie somewhere in between

telephone calls and letters. These media allow users some letter-like opportunities to craft, edit, and time the delivery of messages, and yet they retain telephone-like characteristics of speed and nearly simultaneous bidirectionality.

Individuals' personalities and inclinations—combined with cultural and sub-cultural differences, generational styles, and relational context—influence the choice of medium and the ways in which selected media are used for particular purposes. Yet, people cannot create channels of interaction not afforded by the selected medium (a father is able to sing a lullaby to a child over the phone but not in a text message), nor can they obliterate the channels that are in play (one is rarely successful in asking someone to ignore one's tone of voice over the telephone and focus solely on the words spoken). The medium is part of the overall message.

On the macro, societal, and global levels, medium theorists who study the telephone would ask different types of questions, such as: How has the use of the telephone altered the texture of social relationships in general? How has the phone affected the speed, style, and degree of formality of business interactions? How does use of the telephone change the frequency and function of personal letter writing (potentially complicating biographers' research tasks, as old forms of correspondence diminish)? How has the telephone affected social hierarchies by changing the typical patterns of who can easily interact directly with whom? Has the telephone fostered the development of virtual "neighborhoods" and "communities" by extending the range and customization options for frequent conversational partners while also weakening ties in physically defined locales, including the home? Similar questions could be asked about the explosion in use of e-mail, which has led to changes in the frequency and function of letters, faxes, and telephone calls. Medium theorists would also examine the subtler, yet significant, distinctions between landline telephone interactions and mobile phone

conversations in terms of sound quality, reliability of the connection, degree of mobility, conceptions of phone etiquette and privacy, and other significant differences. For example, since calls to a mobile phone generally reach an individual (regardless of where he or she is), rather than reaching a location (regardless of who is there), mobile phones tend to bypass many social mediators (such as parents, spouses, roommates, receptionists, and coworkers) who once monitored wired phone contacts.

Micro- and macrolevel medium theory issues are obviously related to each other. A microlevel medium study of political style, for example, might ask how a candidate for public office alters the content and tone of her speeches when a video camera and microphone are present. Related macrolevel questions include how electronic media have reshaped political styles in general, changed the range of viable political candidates by shifting the general criteria that the public uses to judge public figures, and perhaps changed the overall status and credibility that leaders in general hold in the eyes of the public.

Macrolevel medium theory is usually more provocative and controversial than microlevel medium theory, both because it makes grander claims and because it is less subject to empirical investigation through typical observational or experimental methods (Meyrowitz, 1994). Macrolevel medium theory is also quite distinct from the dominant "media effects" approach of studying the potential imitative and persuasive impact of media content. Millions of dollars, for example, have been spent over the last decades studying what is perhaps the most popular media research question: Do children imitate the violence and other antisocial behaviors they watch on TV or experience through other media, such as movies and video games? Macrolevel medium analysis, in contrast, is more likely to ask broader questions about how different types of media create different forms of experience for children and different patterns of access

to information about the outside world. The role-system form of medium theory, as one example, suggests that the more overlap there is in what children know about adults, and compared with adults, the more difficult it is to maintain sharp child-adult role distinctions. Because children learn to read in stages, adults can use books to stagger children's access to information about the adult world. Different sets of information can be created for children of different ages based on "reading level." (To this day, many children's books have a code on the back cover, such as "4:2," meaning fourth grade, second month.) Moreover, each book is a discrete object that can be made accessible to children or restricted from them. Indeed, a parent can be in the same room with a child and yet be reading a book or newspaper the content of which is not accessible to the child. Similarly, children of different ages in the same room can be separated into different "stages" of literate information.

Television is completely different on all these counts. Because it presents its information in image and voice, TV does not have clear levels of viewing difficulty; many top-rated shows among children have been programs designed for adults. Many different types of programs come through the same object—the TV set—making it difficult to control which content is or is not accessible to children. And parents have difficulty censoring children's access to television without censoring their own TV viewing or making certain that children are not in the same room. The resulting "effects" of television cannot be seen merely by studying media content. An advice book for parents that suggests what subjects to discuss with or hide from young children is effective in controlling children's access to information not because of the messages alone, but also because of the restrictive nature of the book as a medium. A television program with the same content presents a paradoxical situation: on TV, hundreds of thousands of children who are not yet able or likely to read an adult advice

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Television is completely different on all these counts. Because it presents its information in image and voice, TV does not have clear levels of viewing difficulty; many top-rated shows among children have been programs designed for adults. Many different types of programs come through the same object—the TV set—making it difficult to control which content is or is not accessible to children. And parents have difficulty censoring children's access to television without censoring their own TV viewing or making certain that children are not in the same room. The resulting "effects" of television cannot be seen merely by studying media content. An advice book for parents that suggests what subjects to discuss with or hide from young children is effective in controlling children's access to information not because of the messages alone, but also because of the restrictive nature of the book as a medium. A television program with the same content presents a paradoxical situation: on TV, hundreds of thousands of children who are not yet able or likely to read an adult advice

book can listen in, hearing about those things that parents are considering keeping secret from them, and learning the biggest secret of all—the “secret of secrecy,” that is, that adults conspire about what to tell and not tell children. Television exposure, in general, contrasts with children’s books that once presented children with an image of all-knowing, calm, cool, and collected adults. With television, parents are generally unable to hide the fact that adults engage in irrational behavior and violence; commit crimes; and have doubts, fears, and anxieties. As a result of all these features of the medium, television routinely exposes children to aspects of adult life that parents over several centuries tried to keep hidden from young children.

Medium theory, therefore, looks not just at how children may imitate the content and characters they are exposed to through television, but how the whole structure of adult-child interactions may change. In a television (and now an Internet) culture, children know more about many types of social behavior than they did through book-controlled socialization. Because adult life in general is now more exposed to children, parents, teachers, and other adults have great difficulty convincingly pretending for children that they always behave maturely and usually know best. The result is much more than a change in the particular behaviors of children; we have seen a transformation in the very cultural meanings of “childhood” and “adulthood.” The claim that television could foster such changes is supported by the fact that modern conceptions of childhood and adulthood did not develop in Western cultures until the spread of printing and literacy-based education (Meyrowitz, 1985, pp. 226–267).

The contrast between medium theory and the typical media effects approach is equally stark with respect to other popular research topics. A large body of feminist research, for example, has focused on concerns that women and young girls would imitate the sexist behavior in the

media content that dominated early television and persists in many TV programs, movies, and other media. Early television, within this dominant view, was a powerful and sexist force that served the patriarchal interests of keeping women in their place as housewives and mothers. Yet, as with the alternative arguments about the impact of printing at the start of this chapter, medium theorists would point out that the actual behavioral outcomes seem to contradict the typical claims. The first generation of female viewers to grow up watching television has not been known for wanting to stay in the kitchen or nursery; indeed, they have pushed hard for gender integration of the spheres that were once limited primarily to men. Medium theory would explain this outcome by arguing, again, that the major impact of a medium comes not from imitation of, or persuasion by, its messages, but in how it alters the boundaries of social experience. At the height of print culture, the Victorians lauded the notion of “separate spheres” for men and women, and this view was strong in middle-class American life at the dawn of the TV era. There was the public, male realm of rationality and suppressed emotion, work and accomplishments; and there was the private, female sphere of emotion, home, and childrearing. Men and women were not supposed to dwell in, or even know that much about, the other’s sphere. Although the content of early television projected this worldview, the characteristics of the medium undermined the continuity of such gender distinctions among its viewers.

Unlike etiquette books and other literature written for each gender, television exposed similar behaviors and locations to all viewers. Although most of the *characters* in early TV existed in their separate gender spheres, the *viewers* were allowed to see into the settings of “the other.” Television exposed young girls and homebound women to all those realms of

the culture—business, government, courtrooms, war, and so forth—that men used to tell women “not to worry your pretty little head about.” Such exposure would be unlikely to make female viewers satisfied with their traditional roles, since there is nothing more frustrating than being shown the activities and places that you are told are not meant for you. Rather than female viewers being relatively passive recipients of content for their imitation or persuasion, they apparently actively *used* the content to make sense of the gendered society and then to reimagine more inclusive roles for themselves in it. Television’s images and voices demystified men and their behaviors for women viewers, making the male world and its roles seem less mysterious and inaccessible. Conversely, television close-ups made it difficult for male viewers to ignore the emotional dimensions and consequences of public actions. Television revealed the sweat on the brow, tears welling up in the eyes of leaders, voices cracking with emotion. Television also exposed male and female viewers to the strategies that each gender traditionally used to “manage” the other, thereby making it more difficult to use such techniques successfully in real life. Such macrolevel medium theory argues that the potential changes encouraged by media cannot be seen clearly by studying media content alone. Indeed, often the shifts in long-term behaviors are in opposition to initial content, such as in changes in concepts of appropriate male and female roles. Within this view, television, in spite of early sexist content (and perhaps even more so because of it), has encouraged gender blending, with more career-oriented women and more family oriented men. Again, the plausibility of this argument is reinforced by the fact that distinctions between male and female roles in Western cultures increased with the spread of printing, literacy, and literacy-based education (Meyrowitz, 1985, pp. 187–225).

◆ Critiques and Limitations of Medium Theory

The most common critique of medium theory is that it is a form of “technological determinism” that ignores human agency. Yet, a close reading of most medium theory demonstrates that it argues for a probabilistic, rather than a deterministic, model. Even McLuhan (McLuhan & Fiore, 1967), whose bold, declarative statements led him to be dismissed by many as a determinist, argued, “There is absolutely no inevitability as long as there is a willingness to contemplate what is happening” (p. 25). McLuhan’s colleague Edmund Carpenter (2001), who edited the journal *Explorations* with McLuhan in the 1950s, summarizes their approach as studying the ways in which “each medium is a unique soil. That soil doesn’t guarantee which plants will grow there, but it influences which plants blossom or wilt there” (p. 239). Paul Levinson (1997) prefers the notion of a “soft determinism” that “entails an interplay between the information technology making something possible” and human “decision and planning” shaping the use and impact of the technology (p. 4). Walter Ong (1986) avoids simple deterministic arguments, describing instead a technological “relationism” in which a medium that “grows to more than a marginal status” tends to interact in “a bewildering variety of ways” with social and intellectual practices and forms (p. 36).

Because medium theory implicitly or explicitly critiques the content-based focus of most other types of media theory and research, it often has the complementary weakness: it tends to pay insufficient attention to how the effects of media are modulated by variations in their content, control, and use, including the wide range of meanings that audiences bring to and take out of media texts. Medium theory also usually ignores the impact of manipulations of production variables (such as TV shot framing, camera angles, selective focus, and so forth), which influence audience members’ perceptions of,

and relationships with, characters and events (Meyrowitz, 1998). Additionally, most medium theory tends to analyze existing forms of media rather than charting the sociopolitical and economic forces that usually shape and limit the invention, design, and uses of media. Medium theory tends to ignore, for example, the economic and political interests of state and corporate elites that encouraged the development of television as a unidirectional form of mass communication for the selling of products and ideologies, rather than as an interactive community medium. Most medium theory also offers few insights into how we can resist and counter dominant cultural narratives that permeate most of the media in a society, including the highly selective “stories” that are told across mainstream media to shape public perceptions of “enemies” and war. Thus, while role-system medium theory argues that television has allowed children to share much of the information aimed at adults, it tends to ignore the fact that the news presented to adults in corporate-controlled media typically conveys narratives of good and evil that are as simplistic as a child’s bedtime story. More recent medium theory, however, has been sensitive to the power of media propaganda and to the ways in which new media create opportunities for bypassing traditional “disinformation systems” (Meyrowitz, 2006).

In focusing on how new media may reshape existing societies, medium theory tends to give less attention to the ways in which significant variations among cultures (e.g., differing perceptions of time, space, nature, human relations, and human-technology interactions) may differentially shape the use of media. Additionally, even though medium theorists examine media as types of “environments,” surprisingly few medium theorists explore the ways in which “advances” in technology often lead to the depletion of natural resources and an increase in toxic environmental waste, or how the benefit/burden ratio of the “information age” is experienced differently by people in different countries and economic strata.

However, in specializing in the study of the unintended communication consequences of new media, medium theory has the potential for insightful analysis of the ways in which technologies such as the Internet, mobile phones, camcorders, and GPS equipment have been embraced by third-world and other activists to protest and undermine the neoliberal agendas that fostered the development of these technologies in the first place.

♦ *Conclusion: Enhancing the Media Studies Toolkit*

As noted in the introduction to this chapter, the potential of print to undermine the power of monarchs and the dominance of the Church did not manifest itself immediately. Indeed, to this day, millions of people still worship earthly and heavenly kings and are indifferent to, or dismissive of, the findings of science. Moreover, the uses that people have made of print over the centuries, as well as the reactions that people have had to printed material, are so varied as to defy easy summary. Thus, the significant “medium effects” analyzed in this chapter remain complex and partial.

We also must not forget that in the short term, those who printed the “wrong” material often suffered severe consequences. In 1584, for example, William Carter printed a pro-Catholic pamphlet in Protestant-ruled England and was hanged. Had a medium theory analysis of the liberating potential of printing been presented at Carter’s funeral, it would have provided only cold comfort to the relatives of the executed man. More appropriate responses would have been outrage at the injustice of the hanging and commitment to collective social action to fight for greater freedom of expression. A parallel response in the present time would be to work toward greater media democracy with limits on the corporate control over our technologies, rather than relying solely on the “characteristics” of new media to do that work for us. Thus, although medium theory offers a unique and valuable insight into the

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