“After three thousand years of explosion, by means of fragmentary and mechanical technologies, the Western world is imploding” (McLuhan 3). With these words on the first page of Understanding Media published in 1964, Marshall McLuhan burst onto the intellectual scene with his most influential book. At the time the Commonweal Review called the book “infuriating, brilliant, and incoherent” (Gordon, “Critical Reception” 545). More recently, Nicholas Carr wrote that Understanding Media is “oracular, gnomic, and mind-bending” (1). Terrance Gordon argues that “Understanding Media occupies a central place in McLuhan’s work” but also says that the book “defies summary” (“Editor’s Introduction” xiii).

With its mosaic style Understanding Media is not an easy book to understand or to teach to students. I have been teaching Marshal McLuhan’s Understanding Media to undergraduates for 18 years. When teaching major theorists such as McLuhan, I prefer to expose students to the original texts rather than distillations provided by another author whenever possible. This, of course, presents some difficulties in McLuhan’s case because of his nonlinear style and the complexity of his ideas.

In this essay I will explain how I interpret McLuhan’s Understanding Media to my students. This essay is more interpretative than pedagogical. If we understand what McLuhan is saying in this book and how he is saying it, we can make these ideas understandable to undergraduates. I impose some linearity and coherence on McLuhan by identifying the following four themes that run throughout Part I of the book: media as extensions of ourselves, hot and cold media, the reversal of the overheated medium, and antidotes to the narcotic effects of media. Then my students and I explore the application of these themes in Part II of Understanding Media as McLuhan discusses how his theories apply to specific media.

Media as Extensions of Ourselves

The core of McLuhan’s theory, and the key idea to start with in explaining him, is his definition of media as extensions of ourselves. McLuhan writes: “It is the persistent theme of this book that all technologies are extensions of our physical and nervous systems to increase power and speed” (90) and, “Any extension, whether of skin, hand, or foot, affects the whole psychic and social complex. Some of the principle extensions, together with some of their psychic and social consequences, are studied in this book” (4). From the premise that media, or technologies (McLuhan’s approach makes “media” and “technology” more or less synonymous terms), are extensions of some physical, social, psychological, or intellectual function of humans, flows all of McLuhan’s subsequent ideas. Thus, the wheel extends our feet, the phone extends our voice, television extends our eyes and ears, the computer extends our brain, and electronic media, in general, extend our central nervous system.

In McLuhan’s theory language too is a medium or technology (although one that does not require any physical object outside of ourselves) because it is an extension, or outering, of our inner thoughts, ideas, and feelings—that is, an extension of inner consciousness. McLuhan sees the enormous implications of the development of
language for humans when he writes: “It is the extension of man in speech that enables the intellect to detach itself from the vastly wider reality. Without language . . . human intelligence would have remained totally involved in the objects of its attention” (79). Thus, spoken language is the key development in the evolution of human consciousness and culture and the medium from which subsequent technological extensions have evolved.

But recent extensions via electronic technology elevate the process of technological extension to a new level of significance: “Whereas all previous technology (save speech, itself) had, in effect, extended some part of our bodies, electricity may be said to have outered the central nervous system itself, including the brain” (247). Thus, pre-electric extensions are explosions of physical scale outward, while electronic technology is an inward implosion toward shared consciousness, a change that has significant implications. McLuhan states: “Our new electric technology that extends our senses and nerves in a global embrace has large implications for the future of language” (80). This electronic extension of consciousness is one about which McLuhan himself seems conflicted, as when he writes:

Rapidly, we approach the final phase of the extension of man—the technological simulation of consciousness, when the creative process of knowing will be collectively and corporately extended to the whole of human society, much as we have already extended our senses and nerves by the various media. Whether the extension of consciousness, so long sought by advertisers for specific products, will be ‘a good thing’ is a question that admits of a wide solution. (3-4)

Thus, it is incorrect to categorize McLuhan as either a technophile or a technophobe, as his critics often try to do. McLuhan is more interested in exploring the implications of our technological extensions than in classifying them as inherently “good” or “bad.”

At times McLuhan speaks of a movement toward a global consciousness in positive terms, as when he writes: “might not our current translation of our entire lives into the spiritual form of information seem to make of the entire globe, and of the human family, a single consciousness?” (61). But at other times, he expresses reservations about this development: “With the arrival of electric technology, man extended, or set outside himself, a live model of the central nervous system itself. To the degree that this is so, it is a development that suggests a desperate and suicidal autoamputation . . .” (43). Thus, one of McLuhan’s key concerns in Understanding Media is to examine and make us aware of the implications of the evolution toward the extension of collective human consciousness facilitated by electronic media.

Hot and Cold Media

Probably no part of McLuhan’s theory is more confusing and confounding to his critics than his discussion of hot versus cool media in chapter 2 of Understanding Media. But, we can understand this part of McLuhan’s theory if we impose some linear order on it. I teach this by providing the students my own binary chart that lays out the characteristics of each this way, with McLuhan defining “high definition” as the state of being well filled with data:

Hot Medium
extends single sense in high definition
low in audience participation
engenders specialization/fragmentation
detribalizes
excludes
uniform, mechanical
extends space
horizontally repetitive

Cool Medium

low definition (less data)
high in audience participation
engenders holistic patterns
tribalizes
includes
organic
collapses space
creates vertical associations

McLuhan provides examples of hot versus cool media as follows:

Hot Medium
photograph
radio
phonetic alphabet
print
lecture
film
books

Cool Medium

cartoon
telephone
ideographic/pictographic writing
However, we misunderstand these concepts if we try to impose too much linear order and structure on McLuhan’s definitions and examples. We have to see hot and cool media not in terms of static definitions but as dynamic concepts that are designed to get at the experience and effects of how we use media. As Paul Grosswiler points out, McLuhan’s method was dialectical, process-oriented, and open-ended, not mechanistic. Keeping that in mind, I argue there are three ideas that are essential to understanding McLuhan’s concept of hot versus cool media.

First, McLuhan was not concerned with providing consistent, linear meanings of the terms “hot” versus “cool” media. For him, it was the effect the medium had that he was trying to get at. McLuhan indicates this in chapter 2 of *Understanding Media* where he writes:

> The new electric structuring and configuring of life more and more encounters the old lineal and fragmentary procedures and tools of analysis from the mechanical age. More and more we turn from the content of messages to study total effect. . . . Concern with effect rather than meaning is a basic change of our electric time, for effect involves the total situation, and not a singe level of information movement. (26) [all emphases in original]

Thus, McLuhan saw his ideas as intuitive probes designed to get at the experience or effect of using a particular medium, or media in general, rather than as attempts to provide scholarly definitions or understandings of media. Later in *Understanding Media* he makes a similar point when he writes:

> Everybody experiences far more than he understands. Yet it is experience, rather than understanding, that influences behavior, especially in collective matters of media and technology, where the individual is almost inevitably unaware of their effects upon him. (318)

So we misconstrue McLuhan’s “hot” versus “cool” distinction when we try to force these terms into static definitions. Rather we should understand them as terms for getting at effects of media.

Second, since hot versus cool media are not definitions, but attempts to capture the experience or effect of a medium, whether a medium is hot or cool can depend on the society into which it is introduced and the stage of technological or social development of that society. For example, McLuhan writes:
Nevertheless, it makes all the difference whether a hot medium is used in a hot or cool culture. The hot radio medium used in cool or nonliterate cultures has a violent effect, quite unlike its effect, say in England or America, where radio is felt as entertainment. A cool or low literacy culture cannot accept hot media like movies or radio as entertainment. (30-31)

Elsewhere in the chapter on hot and cold media, McLuhan again provides a warning not to take the meanings of the terms “hot” and “cool” media too literally, but to consider the context and situation. He argues that the less developed countries of the world may be in a better position than the industrialized West to cope with the arrival of electric technology:

However, backward countries that have experienced little permeation with our own mechanical and specialist culture are much better able to confront and to understand electric technology. Not only have backward and nonindustrial cultures no specialist habits to overcome in their encounter with electromagnetism, but they have still much of their traditional oral culture that has the total, unified “field” character of our new electromagnetism. (26-27)

Therefore, a medium’s “hotness” or “coolness” is not just a function of the nature of the medium itself but also the nature of the society into which the medium is introduced.

Third, whether a medium is hot or cool can also depend on how it is used in a particular society, and that can change over time. Media interact with one another, so the introduction of a new medium can change the way older media are used. As McLuhan points out, “no medium has its meaning or existence alone, but only in constant interplay with other media” (26); and “media as extensions of our senses institute new ratios, not only among our private senses, but among themselves, when they interact among themselves. Radio changed the form of the news story as much as it altered the film image. . .” (53). In addition, television changed the way we use radio, which McLuhan notes when he writes: “One of the many effects of television on radio has been to shift radio from an entertainment medium into a kind of nervous information system” (298). So a medium’s impact on a society is not linear and static, but multi-dimensional and dynamic as that medium interacts with other media and as the society changes how it uses the medium.

Furthermore, McLuhan argues that media can “heat up” over time (which I will discuss in more detail in the next section), but, for now, consider television. Writing in the 1960s McLuhan described television as a cool medium, but one could argue that television has “heated up” since then as it has become more high definition and more ubiquitous. We do not use television today in the same way we used it in the 1950s and 1960s, when families frequently sat around the television watching one show at a time. Now we have multiple televisions and other types of screens (such as personal computers, laptops, cell phones, tablet computers) of multiple sizes in multiple locations (including on our person) that are available continuously to provide a stream of images, text, and other information that we often attend to in a fragmentary and desultory manner. Therefore the experience and effect of using electronic screen technology has heated up over time.

Thus we can see that for McLuhan the hot versus cool media distinction describes effects, not definitions. In addition, those effects can vary depending on the society’s stage of technological development, and those effects can change over time as that society changes and as that society changes how it uses that medium.

The Reversal of the Overheated Medium
One of McLuhan’s more intriguing ideas, and one that shows how dynamic and dialectical his theories are, is his concept of the reversal of the overheated medium, or break boundaries, discussed in chapter 3 of *Understanding Media* where he writes: “The present chapter is concerned with showing that in any medium or structure there is what Kenneth Boulding calls a ‘break boundary at which the system suddenly changes into another or passes some point of no return in its dynamic process’” (38). The principle that at some point during their development, processes and methods go too far and reverse into their opposite, McLuhan finds to be “an ancient doctrine” (34). He cites the example from classical Greek drama of the concept of *hubris*, when a character’s overweening pride leads to his own fall, as well as the ancient Chinese Taoist text the *Tao Te Ching*, which refers to the same concept of excess leading to its opposite (38-39). McLuhan notes the way roads and highways designed to provide freedom of movement have reversed into traffic congestion and urban sprawl and the irony that mobile, nomadic tribal societies were socially static while contemporary, sedentary, specialist societies are socially dynamic and progressive (38).

McLuhan considers one of the most common causes of break boundaries in any system to be cross-fertilization or hybridization, which is when two (or more) mediums or processes come together (39), an event which releases “great new force and energy” (48). He explores this force more fully in chapter 5 of *Understanding Media* on “Hybrid Energy.” These explosive hybridizations occur when a society is moving from one dominant medium to another, as in the transition from orality to literacy that unleashed modernism in the Western world and in the transition from literacy to electronic media that is today transforming our world (49-50). In McLuhan’s view, oral societies create people of complex emotions and feeling, while the power of literacy is in teaching people how to suppress their emotions in the interests of efficiency and practicality. Electronic media create the “global village” (93), transforming us into people who are complex, depth-structured and emotionally aware of our interdependence with all of human society (50-51). Yet these transitions, or hybridizations, can be “a moment of truth and revelation” by providing a release of freedom and energy by snapping us out of the usual sensory numbness and narcosis our media forms induce in us (55).  

**Antidotes to the Narcotic Effects of Media**

The chance to snap out of our numbness, provided by processes of break boundaries or hybridization, is one of several possible antidotes to the narcotic effects of media. McLuhan wrote *Understanding Media*, in part, as a warning about the effects of media that we are ignoring. One of McLuhan’s antidotes is awareness; by being aware of the effects our media have on us we can be in a better position to counteract them. But that is only the first step. Awareness itself is not enough. McLuhan writes in chapter 31 on television:

> It is the theme of this book that not even the most lucid understanding of the peculiar force of a medium can head off the ordinary “closure” of the senses that causes us to conform to the pattern of experience presented. . . . To resist TV, therefore one must acquire the antidote of related media like print. (329)

So one antidote to the numbing effect of a particular medium is to use another medium that has a counter-effect: “When the technology of a time is powerfully thrusting in one direction, wisdom may well call for a countervailing thrust” (70-71). So turn off the TV (or the computer or the cell phone) after some time and read a book or take a walk in the woods. After enough reading, have a conversation with another human being. McLuhan thus is arguing that a “cure” for the effects of a dominant medium or pattern of the time can be a countervailing force in the opposite direction of the dominating force.

Another antidote to technological narcosis is for people to assume the attitude of the artist. McLuhan writes:

> The effects of technology do not occur at the level of opinion or concepts, but alter sense ratios or patterns of
perception steadily and without any resistance. The serious artist is the only person able to encounter technology with impunity, just because he is an expert aware of the changes in sense perception. (18)

He further claims that the "artist picks up the message of cultural and technological challenge decades before its transforming impact occurs" and so "the artist is indispensible in the shaping and analysis and understanding of the life of forms, and structures, created by electric technology" (65). But by "artist" McLuhan does not mean just the person who formally engages in some artistic endeavor as a profession but the person of "integral awareness," a point he makes clear when he says: "The artist is the man, in any field, scientific or humanistic, who grasps the implications of his actions and of new knowledge in his own time. He is the man of integral awareness" (65). Thus, the artistic perspective serves as an antidote to media narcosis because it allows us to see the big picture and the interrelationship among things, as well as to anticipate technological changes, and their social and cultural implications, before they happen.

McLuhan’s frequent use of terms such as “integral awareness” (12), “organic interrelation” (93), “organic whole” (353), and “organic unity” (461) points to another antidote: use of myth to help us explain and understand our reality. For example, speaking approvingly of William Blake’s response to the effects of mechanical technology, McLuhan writes: “Blake’s counterstrategy for his age was to meet mechanism with organic myth. . . . For myth is the instant vision of a complex process that ordinarily extends over a long period. Myth is contraction or implosion of any process . . .” (25) [emphasis in original]. Later in the book, McLuhan argues that the “mythic or iconic mode of awareness” substitutes a “multi-faceted” perspective for a single, fixed point of view (153). Thus, myth, like the artistic temperament, serves as an antidote to media narcosis because it allows us to see many things at once by collapsing complex processes into understandable, simplified forms.

Applications

The core of McLuhan’s theory is laid out in Part I of Understanding Media, while Part II is more applicative as he discusses his theories in terms of specific media. Before moving on to Part II of the book, I show my students the video McLuhan’s Wake, produced in 2002 with the cooperation of Eric McLuhan, Marshall McLuhan’s son and collaborator. Not only does this video help explain his ideas, but it also gives the students a chance to see and hear McLuhan in his own words, as well as providing biographical information to put his ideas in the context of the type of person and scholar he was and the kinds of question he was attempting to answer.

As I have noted throughout this essay, I find McLuhan to be dialogic and dialectical in his approach to explicating his ideas. My pedagogy is similarly dialogical and dialectical. For Part II of the book, one student is assigned to prepare questions and lead the discussion of each chapter. Dialectical learning requires common ground, and a close reading of McLuhan with a requirement for students to lead chapter discussions facilitates that dialectical process and creates a common ground. This not only gives the students a chance to gain experience in leading a discussion, but as they often tell me, it requires them to really know the chapters they are assigned intensively and in depth.

Each chapter in Part II of Understanding Media can stand alone as a mini-exposition of McLuhan’s theory, but Part II as a whole also illustrates the wide applicability of McLuhan’s definition of media. There are chapters not only on what we traditionally think of as media—such as the written word, the photograph, the telegraph, film, radio, and television—but also on roads, number, clothing, housing, money, clocks, the automobile, games, and weapons; all technological extensions of ourselves that McLuhan’s theory provides new insights into. This wide applicability is instructive to students who appreciate the liberty to follow McLuhan in multiple directions.

For the final exam my students write a paper explaining McLuhan’s theories. They tell me that although this is
difficult, they grasp his ideas better when forced to sit down and write a paper on him, speaking to his theories from their own perspective, engaging the dialectic on their own terms. Despite the complexity and difficulty of his ideas, my students usually relate to McLuhan because they find his theories to be a reflection of the reality they are living in today. Even though they struggle with McLuhan, my students frequently tell me later that *Understanding Media* was one of the most influential books they read in their undergraduate studies.

1 Hereafter, unless otherwise indicated, all page numbers in parentheses will refer to *Understanding Media* and reference page numbers from the MIT Press edition published in 1994.

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**Works Cited**


