THE MEDIUM IS THE SIGN:
WAS MCLUHAN A SEMIOTICIAN?

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That the world is being threatened more and more by those who hold the levers of "media power," i.e., by those who control television networks, movie production studios, and computer media, is obvious to virtually everyone. It was, of course, Marshall McLuhan who was among the first to emphasize this fact, showing how the "meaning structures" that the media produce shape human cognition. The interesting thing for a semiotician is that he did so in a way that is consistent with semiotic ideas and, above all else, semiotic method. Was McLuhan a semiotician? Of course, he never claimed to be one, and, whether he knew anything about semiotic theory as such is beside the point.

It is not commonly known outside of semiotics proper that the "science of signs" grew out of attempts by the first physicians of the Western world to understand how the body and the mind interact within specific cultural domains. Indeed, in its oldest usage, the term *semiotics* was applied to the study of the observable pattern of physiological symptoms induced by particular diseases. Hippocrates (460?–377? BCE)—the founder of Western medical science—viewed the ways in which an individual in a specific culture would manifest and relate the symptomatology associated with a disease as the basis upon which to carry out an appropriate diagnosis and then to formulate a suitable prognosis. The physician Galen of Pergamum (130?–200? CE) similarly referred to diagnosis as a process of semiosis. It was soon after Hippocrates' utilization of the term *semeion* (and its grammatical and lexical derivatives) to refer to symptoms as signs to be understood in cultural ways, in addition to purely physiological ones, that it came to mean, by the time of Aristotle (384–322 BCE), a mental form. Those who took up the concept of sign in their writings are too numerous to mention here. I mention—just for the sake of mentioning—St. Augustine, John Poinsot, John Locke, Ferdinand de Saussure, Charles Sanders Peirce, Thomas A. Sebeok, Charles Morris, Roland Barthes, Algirdas Greimas, and Umberto Eco. The late Thomas Sebeok would often point out that the list of those who did semiotics without knowing it, however, would fill the pages of an infinitude of books. If I recall correctly, he referred to this state of affairs as the "Monsieur Jourdain syndrome." Monsieur Jourdain was a character in Molière's *Bourgeois Gentilhomme* who, when told that he spoke good prose, answered by saying that he didn't know he spoke in prose.

Analogously, Sebeok would point out to some scholar in a field such as psychology, anthropology, or medicine that he or she was, like Monsieur Jourdain, doing something of which she or he was not aware—semiotics.

In effect, McLuhan was a semiotician in the Sebeokian sense—i.e., he worked with the fundamental principles of sign theory probably without knowing that he did so, discovering them in his own trademark way.

My purpose in this brief essay is to revisit one specific aspect of McLuhnian theory that indicates to me (at least) that he was a true Jourdanian semiotician in the Sebeokian sense of that word. The aspect I am referring to here is that he saw media as unconscious extensions of our inbuilt sensory and cognitive systems (McLuhan 1964). These extensions are, *ipso facto*, signs as the semiotician would construe them. I will also look at the related area of inquiry that investigates the relation between change in sign systems as related to the physical form of the media that contain them. My approach here will be simply to present a set of observations without the usual critical apparatus of footnotes, bibliography, and the like. These observations are based upon two previous works of mine—*Understanding Media Semiotics* (2002) and *Brands* (2006)—in which such an apparatus can be consulted by readers interested in doing so.

What Is a Medium?

The academic study of the media traces its roots to America in the 1930s. It was not until the late 1950s, however, that semiotics ventured into this domain of investigation. That was the decade in which the French semiotician Roland Barthes (1915–1980) showed, for the first time, the importance of studying media in terms of how they generate meanings. Semiotic method, as Barthes argued in his masterpiece *Mythologies* (1957), is fundamental because, unlike other approaches to media, it focuses almost exclusively on the construction of meaning as it relates to the physical nature of the medium carrying it.

In his often-emotional lectures, McLuhan would be wont to warn his students at the University of Toronto in the 1960s and 1970s that the media to which they were exposed on a daily basis constituted a blessing and a curse at the same time. While they do in fact make information more available and accessible to larger and larger groups of people, he argued, the media also engender a general feeling of alienation and "disembodiment" in people. Several decades after his death, it has become obvious to virtually everyone that McLuhan's caveat was well-founded. Our modern mediated cut both ways. The "disembodiment" or "de-personalization" that McLuhan warned about just a

few decades ago has, seemingly, become widespread, while at the same time more and more people gain access to information that was once the privilege of the few. The reason why media are powerful, McLuhan insisted, is because they are extensions of ourselves.

Before the advent of alphabets, people communicated and passed on their knowledge through the spoken word. But even in these early "oral cultures" tools had been invented for recording and preserving ideas in "durable" physical forms. The forms were invariably pictographic. So intuitive and functional is pictography that it comes as little surprise to find that it has not disappeared from our own world, even though most of our written communication is based on the alphabet. The figures designating *male* and *female* on washrooms and the *no-smoking* signs found in public buildings, to mention but two common examples, are modern-day pictographs.

Pictography is a perfect example of what a *medium* (from Latin *medius*, "middle or between") is—a means of recording ideas on some surface (a cave wall, a piece of wood, papyrus) with appropriate technology (a carving tool, pigment, a stylus). More generally, a *medium* can be defined as the physical means by which some system of "signs" (pictographs, alphabet characters, etc.) for recording ideas can be actualized.

McLuhan was among the first to realize that changes in media (like changes in signs) leads to changes in social structure and in knowledge systems. Pictography did not alter the basic oral nature of daily communication, nor did it alter the oral mode of transmitting knowledge of early societies. That occurred after the invention of alphabetic writing around 1000 BCE—an event that brought about the first true radical change in the world's social structure. The philosopher Thomas Kuhn (1922–1996) called such radical changes "paradigm shifts" (1962). The move away from pictographic to alphabetic writing was, to use Kuhn's appropriate term, the first great paradigm shift of human history, since it constituted the initial step towards the establishment of a worldwide civilization. Simply put, alphabetic writing made *print* the first viable global medium for storing and exchanging ideas and knowledge.

The second step in the establishment of a worldwide civilization was taken in the fifteenth century after the development of movable type technology—an event that made it possible to print and duplicate books cheaply. McLuhan (1962) designated the type of social order that ensued from that technological event the "Gutenberg Galaxy," after Johann Gutenberg (1400?–1468), the German printer who invented movable type in Europe. The Gutenberg Galaxy did indeed, as McLuhan pointed out, establish printed books as the primary tools for recording and preserving information and knowledge.

But it did more than that. It also established the book as the first true "mass distraction" device of history. And, indeed, to this day we read books not only for educational or reference purposes, but also to while away our leisure hours.

The third step towards the founding of a worldwide civilization was taken at the start of the twentieth century, after advancements in electronic technology established sound recordings, cinema, radio, and (a little later) television as new media for communicating information and, above all else, for providing distraction to larger and larger masses of people. Since electronic signals can cross borders virtually unimpeded, McLuhan characterized the world that was being united by electronic media as the "global village" (1962). To emulate the perceptive Canadian scholar, that world can be designated as the "Electronic Galaxy." Near the end of the twentieth century, the fourth step towards establishing a worldwide civilization was taken right after computers became widely available and the Internet emerged as a truly global medium. In line with the terminological style established by McLuhan, the current world can thus be called the "Digital Galaxy."

Representing the World

The process of recording ideas, knowledge, or messages in some physical way is called *representation* in semiotic theory. This can be defined more precisely as the use of signs (pictures, sounds, etc.) to relate, depict, portray, or reproduce something perceived, sensed, imagined, or felt in some physical form. It can be characterized as the process of constructing a form X to call attention to something that exists either materially or conceptually, Y, in some specific way, $X = Y$. Figuring out the meaning of $X = Y$ is not, however, a simple task. The intent of the form-maker, the historical and social contexts in which the form was made, the purpose for which it was made, and so on and so forth, are complex factors that enter into the picture. The purpose of semiotics is to study those very factors. In order to carry out this task systematically, it has established a distinct terminology, which need not concern us here.

As an example of what representation entails from a semiotic perspective, consider the notion of *romantic love*. This is something that exists in the world as a biological and emotional reality. In semiotics this is called a *referent*, because it is something to which we desire to *refer* in some way as it "presents itself" to our consciousness through our senses, emotions, and intellect. Now, as a referent, it can be *represented* (literally "presented again") in some physical form constructed on purpose. For example, in modern-day culture *romantic love* can be represented with such forms as a photograph of two people engaged in kissing romantically, a poem describing the various

physical and emotional aspects of love, and so on. Each constitutes a specific kind of *sign*—something that has a particular physical form. This is perhaps why the philosopher Charles Peirce designated a sign a *representamen*—something that does the representing. Note that the meanings are built into each representamen not only by its maker, but also by certain preexisting notions relative to the culture in which the sign was made. Representations of *romantic love* in, say, Toronto are vastly different from representations of the same referent that tend to be made, for instance, in Calcutta. Moreover, the medium used to portray the referent also shapes the interpretation of meaning, which Peirce called the *interpretant*. The ways in which people living in Toronto or Calcutta will derive meaning from the above representations will vary widely. This is because they have become accustomed in their specific cultures to different representations that underlie perceptions of love.

There is no way to pin down a representamen or to predict what system of reference and meaning will be employed for figuring out precisely what a particular representation ($X = Y$) will mean to specific people. The process of deriving meaning from some representation is not a completely open-ended process, however. It is constrained by social conventions, by communal experiences, and by many other contextual factors that put limits on the range of meanings that are possible in a given situation. A task of semiotic analysis is to figure out what that range is.

Signs as Extensions

In effect, little difference exists between the *medium* used to construct a representation and the *representation* itself. This is consistent with McLuhan's often-quoted adage that the "medium is the message." This idea is, in effect, a basic principle of semiotic theory. The form of the sign and that to which it refers are dynamically intertwined, one suggesting the other. This implies that the signifying resources and elements used to make representations are "tools" in the McLuhnian sense, namely extensions of the biology and psychology of the human organism making them. In effect, our signs are derivatives of ourselves.

A tool is an artefact that extends some sensory, physical, or intellectual capacity. For example, an axe extends the power of the human hand to break wood; the wheel of the human is an extension of the foot, useful for covering great distances. For the sake of scientific accuracy, it should be mentioned that tool-making is itself an outgrowth of *bipedalism*—the capacity to walk with an erect posture on two legs. Fossils discovered in Africa provide evidence that hominids walked erect and had a bipedal stride even before the great increase in

their brain size millions of years ago. Complete bipedalism freed the human hand, allowing it to become a supremely sensitive limb for precise manipulation and grasping. The erect posture gave rise to the subsequent evolution of the physiological apparatus for speech, since it brought about the lowering and positioning of the larynx for controlled breathing.

McLuhan claimed that the type of actual tools developed to record and transmit messages determines how people process and remember them. This is so because they are themselves signs based on the senses. Human beings are endowed by Nature to decipher information with all the human senses. Our *sense ratios*, as he called them, are equally calibrated at birth to receive information. However, in social settings, it is unlikely that all the senses will operate at the same ratio. One sense ratio or the other increases according to the modality employed to record and transmit a message. In an oral culture, the *auditory sense ratio* is the one that largely shapes information processing and message interpretation; in a print culture, on the other hand, the *visual sense ratio* is the crucial one. This raising or lowering of sense ratios is not, however, preclusive. Indeed, in our own culture, we can have various sense ratios activated in tandem. For example, if one were to hear the word *cat* uttered by someone, the auditory sense ratio would be the operational one in processing the meaning of the word. If, however, one were to see the word written on a sheet of paper, then the visual sense ratio would be activated instead. A visual depiction of the *cat* accompanied by an utterance of the word would activate the auditory and visual sense ratios in tandem.

Any major change in how information is encoded or, better, "in-mediated" brings about a concomitant paradigm shift in cultural systems. Ancient cuneiform writing, impressed indelibly into clay tablets, allowed the Sumerians to develop a great civilization; papyrus and hieroglyphics transformed Egyptian society into an advanced culture; the alphabet spurred the ancient Greeks on to make extraordinary advances in science, technology, and the arts; the alphabet also made it possible for the Romans to develop an effective system of government; the printing press facilitated the dissemination of knowledge broadly and widely, paving the way for the European Renaissance, the Protestant Reformation, and the Enlightenment; radio, movies, and television brought about the rise of a global pop culture in the twentieth century; and the Internet and the World Wide Web ushered in McLuhan's "global village" as the twentieth century came to a close.

Because media are tools extending bodily and cognitive processes, they have brought about several paradigm shifts over the course of human history. The first one was a consequence of the invention of writing and the spread of

literacy. Reading and writing activate linear thinking processes in the brain, because printed ideas are laid out one at a time and can thus be connected to each other sequentially and analyzed logically in relation to each other. Orality, on the other hand, is not conducive to such precise thinking, because spoken ideas are transmitted through the emotional qualities of the human voice and are, thus, inextricable from the "subject" who transmits them. Literacy engenders the sense that knowledge and information are disconnected from their human sources and thus that they have "objectivity"; orality does not. This perception is bolstered by the fact that printed information can easily be categorized and preserved in some durable material form such as books. Simply put, without the advent and institutionalization of literacy, the spread of philosophy, science, jurisprudence, and the many other human intellectual activities that we now hold as critical to the progress of human civilization would simply not have been possible in the first place.

But orality has not, of course, disappeared from human life. The spoken word comes naturally; literacy does not. Through simple exposure to everyday dialogue, children develop the ability to speak with little or no effort and without any training or prompting whatsoever. Literacy, on the other hand, does not emerge through simple exposure to printed texts. It is learned through instruction, practice, and constant rehearsal. Schools were established, in fact, to impart literacy and print-based knowledge.

The second event that changed the course of history occurred in the twentieth century—millennia after the advent of alphabetic writing—with the emergence and diffusion of the electronic mass media. These not only facilitated distance communications, but they also brought about a global form of culture anchored in the "distraction factory." Known generally as *pop culture*, this industry constitutes a system of everyday life that is implanted in movies, television shows, detective novels, fast-food chains, musical styles, and the like, blurring the line between what is meaningful and what is merely entertainment.

As Peirce cogently argued, "Every thought is a sign" (1960). But, as he also wrote, "Not only is thought in the organic world, but it develops there." This statement encapsulates why McLuhan's ideas are so important today. Like our senses, signs never really tell the whole truth. As tools, they mediate reality for us, constituting functional selections from the infinite realm of the knowable. For instance, by calling some creature *rabbit*, we have in effect singled out that creature as distinct from all other creatures. When we use the word *rabbit*, consequently, we highlight a chosen portion of the animal realm, in the same way that, by analogy, we highlight a chosen portion of an on-screen

document on our computers. By doing this regularly, we eventually come to see that portion as having some necessary *raison d'être*, rather than constituting a convenient selection.

Change in Media

Many social critics today are decrying the many seemingly bizarre forms that have entered languages from media. The same kinds of critical voices existed in McLuhan's day. The details of the debate have changed, but not the debate itself. Especially worrisome for many today are the forms and tendencies that characterize what has come to be known as "netlingo" or "cyberlanguage"—the language that has crystallized in all kinds of contemporary electronic communication contexts and media (emails, chatrooms, etc.). Above all else, cyberlanguage is marked by what can be called an efficiency of structure that manifests itself in such phenomena as abbreviations, acronyms, and the use of numbers, all of which are designed to make the delivery of linguistic communication rapid and highly economical, but which many equate with a paucity of reflection and overall understanding. With few, if any, corrective forces at work in cyberspace, two relevant questions emerge: Is this "economizing of form" a contemporary phenomenon or has it always existed as a general tendency within the language faculty itself? Is it influencing not only the mode of delivery of language as used in cybernetic communications, but also language in all its structural, cognitive, and expressive dimensions?

The answer to both questions would appear to be in the affirmative. And McLuhan's idea that media reflect biological forces comes forward to provide a plausible explanation to the fact that languages do indeed seem to develop reductively in cyberspace. But this tendency long predates the current cyber age. Scholars and scientists, alas, have always used abbreviations and acronyms of various kinds to facilitate technical communications among themselves so as make them swift and precise. Abbreviations such as *etc., et al., op. cit.,* and *N.B.,* are still part and parcel of "scholarspeak," as it may be called. But what sets the reductive tendencies in cyberlanguage apart from all economizing tendencies of the past is the speed and extent to which reduced forms are spreading and becoming part of communicative behaviour in cyberspeak throughout the world and, subsequently, spreading to language as it used in general. In a mediated world, language seems to have become particularly condensed.

If language is indeed a medium itself and is, moreover, delivered *through* a rapid technological medium, then it comes as no surprise to find that as a sign it is adapting to new circumstances in the same way that a body would

adapt to new physical conditions. In effect, the McLuhnian framework supports what has come to be known as the *Principle of Least Effort* in linguistics and semiotics. This principle was made somewhat famous in the 1950s by the French linguist André Martinet (1955), who claimed essentially that languages change as a result of the operation of economic tendencies. Calling it the *Principle of Economic Change*, Martinet posited that complex language forms and structures tended towards reduction, abbreviation, compression, levelling, or elimination over time. For example, the opposition between short and long vowels in Latin, which produced a relatively large inventory of distinct words in that language, was levelled in the emerging sound systems of the Romance languages and later eliminated. Latin had ten distinct vowel sounds, equivalent approximately to the vowel phones represented by the letters *a, e, i, o, u*. In addition, each vowel was pronounced as either long or short—for example, the pronunciation of the word spelled *os* could mean either "mouth" or "bone," depending on whether the vowel was long or short (respectively). The ten-vowel phoneme system was, to a large extent, reduced or levelled in the Romance languages, in line with the Principle of Economic Change. Distinctions of meaning were preserved nonetheless (as they are in modern Italian) but with less phonic material.

Grammatical change, Martinet argued, is usually a consequence of previous phonetic change. A classic example of this is the loss of the Latin declension system in the Romance languages. As a result of phonetic changes, such as the elimination of the final /-m/ in accusative forms and the dropping of final consonants generally, the suffixes used in declensions no longer signalled grammatical distinctions as early as the fourth century CE. Over time, this led to the reconstitution and even elimination of the entire declension system. More economical devices were developed by the Romance languages to maintain case distinctions—prepositions, for example, became necessary to distinguish many cases in the Romance languages.

Although the interaction between phonological and grammatical change comes under various names in the linguistic literature, it can be called the *Principle of the Historical Cycle*, to emphasize the fact that change in grammar is connected cyclically to change in sound. This Principle is thus a corollary of what is commonly called the *Principle of Least Effort* (PLE) in that branch of linguistics known as glottometrics.

The fact that such a Principle may be operative in determining the actual constitution of linguistic systems was, actually, first identified in the 1930s by the Harvard linguist George Kingsley Zipf (1902–1950). Essentially, Zipf (1935) claimed that many phenomena in language could be explained as the

result of an inborn tendency in the human species to make the most of its signifying resources with the least expenditure of effort (physical, cognitive, and social). This tendency was independent of individual and culture. Zipf saw language as a "self-regulating structure" evolving independently from social factors. The PLE is, Zipf claimed, the reason why speakers minimize articulatory effort by shortening the length of words and utterances. At the same time, people want to be able to interpret the meaning of words and utterances unambiguously and with least effort. In one of his most famous studies, Zipf (1932) demonstrated that there exists an intrinsic interdependence between the length of a specific word (in number of phonemes) and its rank order in the language (its position in order of its frequency of occurrence in texts of all kinds). The higher the rank order of a word (the more frequent it is in actual usage), the more it tends to be "shorter" (made up with fewer phonemes). For example, articles *(a, the)*, conjunctions *(and, or)*, and other function words *(to, it)* which have a high rank order in English (and in any other language for that matter), are typically monosyllabic, consisting of 1–3 phonemes. What is even more intriguing is that this "compression" force does not stop at the level of function words, as Zipf and others subsequently found. It can be seen to manifest itself, above all else, in the tendency for phrases that come into popular use to become abbreviated (*FYO, UNESCO, Hi, Bye, ad, photo, Mr., Mrs., Dr., 24/7,* etc.) or changed into acronyms (*aka, VCR, DNA, laser, GNP, IQ, VIP*, etc.). It can also be seen in the creation of tables, technical and scientific notation systems, indexes, footnotes, bibliographic traditions, and so on. In effect, the general version of "Zipf's Law," as it is now commonly called, proclaims that the more frequent or necessary a form for communicative purposes, the more likely it is to be rendered "compressed" or "economical" in physical structure. And the reason for this seems to be an inherent psychobiological tendency in the human species to expend the least effort possible in representation and communication.

Since the mid-1950s, Zipfian-inspired research has established empirically that there is a tendency in all aspects of language towards the compression of high-frequency forms. Remarkably, Zipf's Law has been found to characterize many types of activities and behaviours, from numeration patterns to the distribution of city populations. For the sake of historical accuracy, it should be mentioned that after the publication of Zipf's Law, the mathematician Benoit Mandelbrot (1924–), who developed the modern-day branch of mathematics known as fractal geometry (1977), became fascinated by it, since he detected it as being a particular type of what is called a "scaling" law in biology. As a brilliant mathematician, Mandelbrot also made appropriate modifications to Zipf's original Law and, generally speaking, it is Mandelbrot's

version of the Law that is used today to study frequency distribution phenomena in several branches of linguistics, such as corpus linguistics, lexicostatistics, glottometrics, textlinguistics, and quantitative linguistics generally.

Nowhere is the operation of Zipf's Law as apparent today as it is in the forms that are created in cyber space. Emails, text messages (SMS's), and the like are the media through which, and in which, such forms develop. To increase the speed at which such messages can be input and received, a series of common abbreviations, acronyms, and other reduced structures have crystallized that are now part of a common cyberlanguage. Here are a few common English cyberforms, as they can be called:

b4	=	before
bf/gf	=	boyfriend/girlfriend
f2f	=	face-to-face
gr8	=	great
h2cus	=	hope to see you soon
idk	=	I don't know
j4f	=	just for fun
lol	=	laughing out loud
cm	=	call me
2dA	=	today
wan2	=	want to
ruok	=	Are you OK?
2moro	=	tomorrow
g2g	=	gotta go

Writing takes time and effort. In today's cybernetic universe, both come at a premium. Not answering the barrage of emails or text messages that people receive on a daily basis is perceived negatively. Slowness in response is, at times, even penalized by social ostracism or various other forms of reprobation. Logically, reduction of forms helps counteract the situation by making it possible to "get back" to one's sender of messages quickly and rapidly. Various strategies of condensation have thus evolved within cyberlanguage that are

consistent with the PLE. In addition to the traditional abbreviation and acronymic reductions, cyberforms are now produced through various phonic and numeric replacements. For example, in the cyberform *How R U?* ("How are you?") the letters *R* and *U* are pronounced in the same way as are the words *are* and *you*, and thus are used because they are shorter. In the cyberform *B4* ("before") the *B* is pronounced like the morpheme *be-* and *4* like the morpheme *fore*. Such replacements are common, reflecting an economizing strategy that allows for rapid inputting of messages in email, chatroom, and text messaging forms of cyber communication.

In effect, the Internet is changing not only language itself in specific ways, but also assigning linguistic authority to people in truly radical ways that have obvious implications beyond language, reaching into the very structure of social interaction and ritual. McLuhan knew this, arguably, before anyone else did. Zipf did not make a connection between the medium in which language is delivered and the economizing forces at work. McLuhan did, at least implicitly.

A consideration of the PLE suggests that media such as alphabets came about serendipitously as part of a larger psychobiological tendency in human beings to render writing more compact and efficient. It also reveals that this tendency in no way restricts or diminishes human ingenuity and creativity. Indeed, once alphabet characters came into existence as economic reductions of pictographs they took on a semiotic life of their own—a life that has become rather productive in the language used in cyberspace and in the modern world generally. This kind of assessment of change in sign systems probably characterizes how many (if not all) innovations are made in representation and communication generally. As argued in this paper, McLuhnian ideas demonstrate that humans, in their apparent quest for economy, end up producing new systems that produce new ideas and serendipitous discoveries. General conditions seem to exist in sign systems that determine the equilibrium of the systems in terms of their forms and meanings. It is the specific conditions that shift with time and place, not the general semiotic tendencies.

Concluding Remarks

I conclude my observations, which may seem scattered and at times disconnected here. I thus beg the reader's indulgence. I have articulated them here with a singular intention—to make a case that I believe that McLuhan was a semiotician. Indeed, following Sebeok's insight, I have tried to make the claim that McLuhan was a "Jourdainian semiotician." The fact that media profoundly influence the general shape of cultures, which are essentially networks of signs, comes as no surprise to semioticians. The changes occurring

at a rapid pace in cyberspace are also not surprising, as discussed briefly above. As a consequence, today people are more apt than in previous generations to want to know and to do things quickly and without effort. Logically, the physical nature of cyber communications—their rapidity, their quantity, etc.—does indeed have implications for how societies will evolve, as McLuhan had envisaged. How will literacy be defined in, say, the year 2067? What form will writing take? Perhaps it is the feeling of powerlessness that besets all of us when change occurs so swiftly and becomes part of everyday experience.

Cyberlanguage will become more and more the target of investigation in the study of linguistic change. It has already become a "philological" barometer, so to speak, for inferring evolutionary patterns in language and social institutions. As McLuhan anticipated, digital forms of communication are indeed reshaping language and, as a consequence, social interaction and rituals. Unlike traditional forms of writing, such as the poem and the novel, the new cyberforms are created by the "common person" in our lifetime and, thus, as semioticians and we are in a unique position of being able to see how they unfold and how they are changing the world (for better or worse).

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