

Beyond Categorization:

**Marshall McLuhan, Technological Determinism, and Social
Science Methodology – a Reappraisal**

by

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ABSTRACT

This thesis is a contribution to the reappraisal of Herbert Marshall McLuhan. Its aim is to rethink McLuhan's views about media and technology, as well as his place in empirical, social science research, by challenging two dichotomies – i.e., two binary oppositions – that have been used to simplify and assimilate his work throughout the 1960s, 1970s and 1980s. First, the determinist/instrumentalist dualism is addressed by combining Paul Grosswiler's, Robert Babe's, as well as other recent contributors to the field of McLuhan studies, and drawing from McLuhan's biographies in addition to other secondary sources along the way. This binary structure is then replaced by an alternative interpretative approach (i.e., a phenomenologically-informed application of Andrew Feenberg's four-fold model of "orientation towards technology") to allow for a more flexible engagement with the dialectical thought of a man who – much like the media of communication he sought to understand – was in "constant flux." Despite the complexity of this model, the elusive nature of McLuhan's thought means that his oeuvre is "beyond categorization." It is not, as will be demonstrated, "beyond applicability," however. The quantitative/qualitative divide that characterizes social science methodology is then challenged in the context of a classroom-based, Wikipedia-cantered case study, by showing that McLuhan's qualitative (analogical, artistic, dialectical) approach to the study of media effects can be used as a diagnostic tool, side by side with standard social science procedures, to make sense of statistical results pertaining to the relative experience of students and TAs, as the use of electronic text was substituted for traditional print.

Keywords: Marshall McLuhan, Technological Determinism, Phenomenology, Instructional Design, Wikipedia

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TABLE OF CONTENTS

Approval	ii
Abstract	iii
Acknowledgements	iv
Table of Contents	v
Quotation	vii
Chapter 1: Introduction	1
Organization of this thesis	4
Chapter 2: Beyond Assimilation	7
Chapter 3: Beyond Categorization	17
A dialectical thinker.....	17
An alternative path.....	30
Feenberg's model.....	33
McLuhan as an instrumentalist.....	37
McLuhan as a technological determinist	39
McLuhan as a substantivist	44
McLuhan as a critical theorist.....	48
Conclusion.....	51
Chapter 4: Operationalizing McLuhan	53
Subjective perception over objectification.....	60
A controversial, multifaceted personality	61
A unique style, a secondary interest	68
Specific studies, specific challenges.....	72
Chapter 5: Applying McLuhan	77
The learning model.....	78
Instructional vs. constructional design	80
The theoretical framework	82
The methodology.....	84
Results and interpretation.....	85
The socialization factor.....	87
The vocational factor	89
The organizational factor.....	91
The relational factor.....	94
The situational factor	97
Conclusion.....	97

References	101
Appendix A: Summary of Written Survey Results	106

*"What being will be must of necessity arise
on the basis of what it is not" – Jean-Paul Sartre*

CHAPTER 1: INTRODUCTION

Twenty-eight years since the death of Herbert Marshall McLuhan, what remains most alive about his extensive oeuvre is a simplified take on some of his probes¹ and aphorisms: e.g., *The Medium is the Message*,² *The Global Village*,³ and, *Hot and Cool*.⁴ To this day people continue to encounter McLuhan through these and other metaphors without fully understanding the significance of his entire system. This should come as no surprise: a professor of English literature by training with particular interest in poetry and rhetoric, McLuhan's ability to synthesize highly complex ideas and package them in catchy phrases was undoubtedly one of his greatest strengths. Theall (2001) writes:

Ted Carpenter has noted that although McLuhan's phrases and insights came primarily from others, it was his poetry and rhetoric that converted them into universal tags such as "global village" (from Wyndham Lewis), "the print era as linear" (from Dorothy Lee), "the medium is the message" (from Ashley Montagu) and "the medium is the message" (from Sam Zacks, a Canadian art collector). (p. 26)

McLuhan's talent as a synthesizer, however, was also one of the main sources of criticisms, as Striegel (1978) observes:

His apoditic [*sic*] statements and his tendency to subsume widely differing academic disciplines without explanation led to his rapid segregation from the

¹ This is a word McLuhan consistently applied to his intellectual investigations throughout the latter part of his career – part of his "observation minus theory" approach to communication studies. "I poke these sentences around to probe and feel my way around in our kind of world," he once declared (quoted in Marchand, 1998, p. 196).

² The idea that the way of conveying messages is more important than the messages conveyed.

³ The notion that electronic communication technologies shrink distances, while increasing opportunities for talk and cross-cultural sharing.

⁴ A binary model used to differentiate audio-visual media from print media.

recognized mainstreams of scholarly investigation. Easily objectivated both socially and geographically as the Toronto School of Communications Research, McLuhan and his work could be effectively circumscribed outside the bounds of legitimate academic research and sidestepped as a little more than a curious and occasionally irritating symbol system. (p. 2)

Unfortunately, McLuhan himself both failed to contest the numerous misinterpretations and over-simplifications of his work (Theall, 2005, p. 49), while simultaneously discouraging a more thorough understanding his entire system of thought, claiming to have neither theories nor points of view: "People make a great mistake trying to read me as if I were saying something," he once declared (Marchand, 1998, p. 196).

It was up to his followers – Neil Postman, Walter Ong and Joshua Meyrowitz, to name just a few – to revisit and make sense of his paradoxical oeuvre, as well as to infer a "general media theory" (sometimes referred to as "medium theory") from his pun-filled prose. This theory deals with embodiment, mediation, technology and knowledge; consists of a three-fold program – a perceptual model, a historical model, and an analogical model (Striegel, 1978), and rests upon three conceptual pillars:

1) A broad, expansive conception of media – namely, that any human artifact can be seen as a medium of communication, whose message can be said to be the totality of satisfactions and dissatisfactions and the environmental services and disservices it engenders (Babe, 2000; Theall, 2001, p. 52);

2) The idea that content is as important as form – "knowledge and the process of obtaining knowledge are of equal magnitude" (McLuhan, 1964, p. 38);
and,

3) The notion that we become what we behold – “we shape our tools and thereafter our tools shape us” (Lapham, 1994, p. ix).

McLuhan’s famous phrase, “Medium is the Message/Message,” practically summarizes his entire system: it points to the notions that

1) Media are not neutral but transformational – “they work us over completely” (McLuhan, 1967, p. 26) by virtue of their very existence and regardless of the messages they convey; and,

2) They incline certain uses by imposing their own assumptions as well as a certain resistance upon the user, ultimately influencing the pace and character of human association and action. Accordingly, “The message of any given medium or technology is the change of scale or pace or pattern that it introduces into human affairs” (McLuhan, 1964, p. 8).

Erroneously labelled a technological determinist throughout the 70s and 80s, McLuhan has since the mid-90s undergone a process of reappraisal and vindication. With the advent of the Internet, globalization, and the concomitant realization of some of his ‘predictions’ (e.g., *The Global Village*), also came the confirmation of his 1960s title of *Prophet* – of “Oracle of the Electric Age,” in the sense of being ahead of his time. McLuhan accepted the titles, much in the same way as he welcomed attempts at testing his work scientifically (Marchand, 1998, p. 134, 151-152); however, he preferred to view himself as an artist (Babe, 2000, p. 12; Theall, 2005, p. 46) and made it very clear that he did not believe in predictions. In his view, the future of the future was really the present, even though we fail to acknowledge it because we live ahead of our thinking. In this

context, the artist (“the antennae of the race”) is the only one that can look at the present with impunity. Accordingly, his predictions were not technically predictions but a blunt “observation-minus-theory” apprehension of the present. Taking a similar, essentially descriptive, interpretative, empirical – but not scientific – approach, this thesis amounts to a reappraisal of his place in media theory, with an emphasis on the applicability of his ideas, and with an eye towards one of his main concerns: media and pedagogy.

Organization of this thesis

Chapter 2 provides an overview of how our understanding of McLuhan’s work – its reception in the eyes of various and varied critics – has evolved since the 1960s; demonstrates that, because of his elusive nature as an eclectic, artistic thinker, McLuhan’s work cannot be easily assimilated into the social sciences, and argues that, in order to take McLuhan seriously, one must deal with his work in its own terms by thinking *McLuhanistically*. Chapter 3 develops the research problem identified in Chapter 2 in two sections: first, a review of literature designed to identify past attempts (corresponding to stages 1 & 2 in James’ model) of understanding McLuhan’s conception of media and technology. The goals of this section are to demonstrate that both criticisms and praises of McLuhan’s work rest on a common, unstable foundation – the use of inflexible categorizations based on binary oppositions to structure these analyses (i.e., the technological-determinism vs. technological-instrumentalism dichotomy) – and to challenge this unstable foundation.

The second section seeks to rediscover McLuhan's views on media and technology by enlarging the scope of the debate, introducing a set of alternative interpretative as well as conceptual tools to allow for a more flexible engagement with the dialectical nature of his thought – the thought of a man who (much like the media of communication he sought to understand) is in “constant flux.” This is to be accomplished by combining the contributions of Robert Babe and other recent scholars to the field of McLuhan studies with a phenomenologically informed application of Andrew Feenberg's four-fold model of “orientation towards technology.” To do this, I draw from McLuhan's biographies as well as other secondary sources along the way.

In the context of Feenberg's four-fold taxonomy, an exploration of points of contact between McLuhan's ideas about media and other conceptions of technology, such as substantivism and critical theory shall be conducted. The belief is that exploring connections between his general media theory and other theories can help us reveal hidden areas in McLuhan's work. While this may imply a certain degree of ‘hybridization,’ it does not mean assimilation; the emphasis will be placed not on what McLuhan is, but on what he is not. There is a substantial difference between labelling McLuhan a technological determinist (the one criticism of his work that we have been witnessing for the past 40 years) and stating that, though not a phenomenologist, there are important points of contact between McLuhan – with his interest in the senses – and phenomenology – with its emphasis on experience and perception. Taking McLuhan to the next level does not have to be, as James's model proposes, a claim to have

discovered his work. In this spirit, I believe that McLuhan should speak for himself when appropriate through direct quotation and paraphrasing.

Chapter 4 examines the implications of the problem identified in Chapter 2 – McLuhan’s idiosyncratic views about media – across the realms of praxis, applicability, and implementation: firstly, it argues that it is partly as a result of an insistence on assimilation that McLuhan continues to be as enigmatic a figure today as he was 40 years ago; secondly, it shows that due to the strictly theoretical, normative nature of the engagements with McLuhan, the applicability of his work – in my view one of the keys to understanding his work and thought – has rarely been attempted; thirdly, it identifies general challenges associated with testing McLuhan empirically, which are closely related to the challenges of situating McLuhan’s views about media and technology; finally, it acknowledges a number of studies that have been conducted and looks at their limitations, arguing that despite the limitations associated with testing McLuhan scientifically, McLuhan can be applied to complement and assist in the interpretation of statistical analysis.

Taking all of the above into account, Chapter 5 introduces a case study (i.e., the assessment of an innovative, Wikipedia-cantered, instructional design) with the following two-fold objective: 1) to use McLuhan’s general media theory as a diagnostic, to aid in the interpretation of statistical analysis and variations in the levels of acceptance of the said design among students; and 2) to determine what this case study can say about the utility of McLuhan’s general media theory as well as the accuracy of some of his predictions.

CHAPTER 2: BEYOND ASSIMILATION

Since the publication of *Understanding Media: The Extensions of Man* nearly forty-five years ago, a great deal of effort by journalists and academics alike has been devoted to dissecting McLuhan's paradoxical oeuvre about "the effects of technological innovation – particularly communications media – on sensory perception, modes of cognition, and the alteration of social and psychic environments" (Striegel, 1978, p. 4). Indeed, it has been interesting to watch McLuhan's general media theory run through what William James (1948) called "the classic stages of a theory's career." Any new theory, says James, "first is attacked as absurd; then it is admitted to be true, but obvious and insignificant; finally it is seen to be so important that its adversaries claim that they themselves discovered it" (p. 159). The evidence presented here suggests that McLuhan's work has gone through the first and second stages of James' model; however, given the elusive nature of his idiosyncratic thought, it is unlikely that his work will ever reach James' third stage. We may therefore witness two possible outcomes: 1) a situation whereby the battle for assimilation rages on indefinitely between followers and critics of McLuhan; or 2) a situation whereby a general consensus is reached to take McLuhan seriously (Meyrowitz, 1996). The second option entails dealing with his paradigmatic oeuvre in its own terms. In his introduction to "The Question Concerning Technology" (1977), translator William Lovitt wrote of Martin Heidegger: "Every philosopher demands to be read in his own terms. This

is especially true of Heidegger. One must not come to him with ready-made labels, although these are very often given" (p xiii). In light of the affinity between Heidegger and McLuhan, discussed briefly in Chapter 1, I believe a similar approach is necessary to understanding McLuhan: this means taking his paradoxical oeuvre beyond assimilation, conceptualization, and categorization, and into a different realm altogether; for it is through difference, and above all, praxis – not strictly theoretical engagements – that the true essence of McLuhan's oeuvre shall be revealed in full force.

The theoretical/conceptual split over McLuhan began with *Understanding Media* and continued to grow and evolve even after his death in 1980. Scholars of Marxist, Neo-Marxist, and Post-Marxist traditions were among the first to negatively react to McLuhan's work, thus constituting the first stage corresponding to James' model (circa 1964 through the early 1990s). Grosswiler (1998) has closely followed the interplay between McLuhan and critical theory. He writes:

Marxist scholars for the most part have attacked McLuhan for failing to include essential elements of the social process in his writing, including private property, class struggle, and the fight for liberation. At their least vitriolic, McLuhan's critics have labeled him a Catholic conservative. The criticisms share the assertion that if there is anything McLuhan was not, he was not a revolutionary. (p. 3)

Of particular notoriety are the charges brought forward by British and US cultural studies, led by Raymond Williams (1968, p. 188-191) and James Carey (1969, p. 270-308; 1981, p. 162-178; 1987, p. 29-38; 1989, p. 142-172; 1989, p. 113-141) respectively. In her formal review of Grosswiler's *The Method is the Message* for the *Canadian Journal of Communication* (1999), Nancy Shaw observes that,

Raymond Williams' (1967, 1974) critique of Marshall McLuhan's technological determinism has greatly influenced the way McLuhan has been received in communication and cultural studies...Williams was one of the first to suggest that McLuhan was a technological determinist because his formalist analysis of the media was lacking in its ability to account for the workings of power, political economy, institutional organization, and everyday life. (para. 1)

There were, of course, countervailing forces during this first stage – forces which were more or less successful at clarifying, applying and advancing McLuhan (Theall, 1971; Baudrillard, 1981; Ong, 1982; Meyrowitz, 1985; Postman, 1985; to name just a few); however, none of them had the stature of Williams at the time. In addition, for every positive and constructive reappraisal there were numerous others that, in their attempt to explain McLuhan, further complicated his ideas and added to the confusion. According to Striegel (1978), "McLuhan has been misquoted, misapplied, and misunderstood since he began writing about communication techniques and technologies over 25 years ago" (p. 2), and for Lapham (1994) "...few of the people who explicated his text fully understood what it was that he was trying to say" (p. x).

Of this first stage, James Finley Striegel is one of the few who seems to have truly understood what McLuhan was about and was successful at explicating his work without simplifying or complicating its nature. In his sadly neglected PhD dissertation, entitled "Marshall McLuhan on Media," Striegel (1978) convincingly shows that, despite his repeated early claims of having no

theories about media and no point of view about technological innovation,⁵ there is in fact a coherent general media theory behind McLuhan's pun-filled prose. In his introduction, Striegel announces that the purpose of his dissertation is to "alleviate some of the confusion and controversy" (corresponding to "stage one" in James' model), and to present the work of McLuhan "in the context of a coherent and successful general theory acceptable to a number of academic disciplines" (p. 3). He writes:

The subject matter of this dissertation is the work of Hebert Marshall McLuhan in describing the effects of technological innovation – and particularly communications media – on sensory perception, modes of cognition, and the alteration of social and psychic environments. The substance of this study is the author's interpretation and construction of this body of work as a coherent and significant general theory. The objectives are to accurately present and describe what McLuhan, himself, has written in terms of three models of experience, and to suggest linkages wherever appropriate between this unique body of inquiry and a variety of other fields of study. (p. 4; emphasis mine).

Throughout the remainder of his dissertation, Striegel demonstrates that there is a consistent, coherent tripartite program behind McLuhan's most famous phrase ("The Medium is the Message"⁶), consisting of a perceptual model, a historical model and an analogical model. Striegel's work is crucial for at least two reasons:

⁵ When asked by David Chesterton in a private conversation what he felt when comments were made which suggested that the speakers had an inner knowledge of the working of his [McLuhan's] thought processes, McLuhan replied, 'It amuses me and, in some ways, alarms me. It amuses me that they have found some special meaning in what I have said or written – essentially because I don't really know what I'm talking about. My writings are an exploration of some ideas – explorations without conclusions. I'm searching for something I may never find. That's not pessimism, by-the-way; I'm enjoying the search. What alarms me is that these university professors are going back to their institutions and giving their students a totally false view of my work. They're telling the young people all about the meaning of my work and nothing about the search – and young people nowadays desperately need to be involved in a search.' (quoted in Chesterton, 1982, p. 51-56).

⁶ Striegel (1978) defines the phrase as follows: "Briefly, it means that the forms of our individual and social experience are infinitely more central to the nature of our existence and our social interactions than any merely verbal or visual content of the message received [...] Similarly, the forms of communication (print, radio, film, television) dictate the subjects and substance of their content and effects individual and social behaviors by creating and shaping distinctly different physical, psychic and social environments" (p. 30).

first, because having no theory was one of the allegations brought by critics against McLuhan to question the integrity of his work; and second, because shows that McLuhan's claim of having no theories, like many other of his public pronouncements, are not to be taken literally.⁷

Although charges of technological determinism continued well into the 1990's by many postmodernist critics and writers (Kellner, 1989, p. 131-146; Kellner & Best, 1991, p. 267-268; Aronowitz & Giroux, 1991, p. 192-193), toward the mid 1970s his work had already been dismissed in academic circles. Lapham (1994) writes:

The alarms and excursions associated with *Understanding Media* didn't survive McLuhan's death (on New Year's Eve 1980, at the age of sixty-nine), and as perhaps was to be expected from artisans still working in a medium that the decedent had pronounced obsolete, the obituary notices were less than worshipful. Informed opinion had moved on to other things, and McLuhan's name and reputation were sent to the attic with the rest of the sensibility (gogo boots, Sgt. Pepper, Woodstock, the Vietnam War) that embodied the failed hopes of a discredited decade. (p. xi)

During the 1980s, the philosophers of technology subscribing to the phenomenological tradition chose to either ignore or dismiss McLuhan. Ihde (1979, 1983) recognizes a connection between phenomenology and American

⁷ In making these and other interpretations, it is important to bear in mind that Striegel was by no means the average graduate student. He first met McLuhan at the University of Toronto's St. George School of Graduate Studies in 1970; he studied under McLuhan for two years as a Doctoral student in Literature and in 1975 was named a Research Associate of the University of Toronto's Centre for Culture and Technology – McLuhan's Centre. In the acknowledgements section of his thesis, Striegel recognizes, first and foremost, "the guidance of Dr. Hebert Marshall McLuhan, himself, both as a teacher and a friend" (p. iv), and in the introduction to his thesis he goes on to claim that, "much of the description and explanation included here is drawn directly from personal experience with Marshall McLuhan" (p. 3). Most importantly, Striegel's study of McLuhan and *Media* – in particular his interpretation of McLuhan's analogical model – was endorsed by McLuhan himself in his book "War and Peace in the Global Village" (1968). This thesis will rely extensively on Striegel's insights, as they constitute one of the "missing keys" to a comprehensive examination of McLuhan's oeuvre.

Pragmatism and acknowledges the relative importance of the later in the development of a philosophy of technology:

Praxis philosophies, broadly defined, are those which in some way make a theory of action primary. Theory of action precedes or grounds a theory of knowledge. And it will be noted that praxis philosophies as a family have relations in widely located places within the contemporary scene. (p. xv-xvi)

Going in more detail, Ihde writes:

A first, low level survey of the field of philosophies would reveal that there are a number of bloodlines [...] A usual grouping of these families would probably identify A) an Anglo-American family under the identification of analytic philosophy. The godfather of this family group is Logical Positivism, but its relations include a second generation which spans a spectrum which includes formalistic and constructionistic philosophies and reaches to Ordinary Language philosophy. B) A second large grouping usually identified as Continental, includes a mixture of existentialism, phenomenology, and an assortment of dialectical philosophies in the Hegel Marx traditions. And although I shall not deal as thoroughly with them, the c) Neo-Thomist and d) American Pragmatist families ought to be mentioned as identifiable... (p. xvi; emphasis mine).

However, he makes no mention of McLuhan – despite the fact that one of his major influences, Harold Innis, was after all a student of Robert Ezra Park and William F. Ogburn at the University of Chicago in the 1920s.⁸ For his part, Heim (1987) writes that “...the reach into the future should not cause us to lose the balance of reflection. Empedocles fell into the volcano and Marshall McLuhan fell into the random, fragmentary world he was describing” (p. 11).

Similarly, McLuhan is absent from much of the 1983 discussion⁹ on the conflict between critical and administrative research (Grosswiler, 1998, p. 185).

As Lapham has declared, however, many of these judgments were poorly timed

⁸ Innis' later work, in turn, influenced Ogburn's theory of "culture lag."

⁹ Grosswiler (1998) writes: "Communication research, which had rejected McLuhan, changed dramatically after the 1960s with the emergence of critical theory approaches. So much so that in 1983, the *Journal of Communication* devoted a special issue to debating the cleavage between the emergent critical theory and its opposite, administrative or mainstream theory. McLuhan received some attention, although not a new reading, as a critical theorist. The journal revisited these issues in 1993, but at this point the authors had abandoned McLuhan as a relevant theorist" (p. 184).

because “much of what McLuhan had to say makes a good deal more sense in 1994 than it did in 1964...” (p. xi). Towards the mid-1990s (“stage two” in James’ model) some of his ideas were rediscovered in the context of some his ‘predictions’ coming into existence, most notably the notion of a “Global Village,”¹⁰ which is attributed to French philosopher and Jesuit priest Pierre Teilhard de Chardin. Once again, however, many of the re-appraisals during this second stage were conducted primarily by non-experts (Shachtman, 2002) amidst the excitement, euphoria, and optimism brought about by the emergence of the Internet as a multifaceted medium. In essence, Lapham’s observation about McLuhan’s followers back in the 1960s, could just as well describe this new generation of supporters:

...they guessed that McLuhan had come upon something important, but for the most part they interpreted him as a dealer in communications and turned his prophecies to practical uses of their own... McLuhan had classified print as a hot medium and television as a cool medium, and although not one critic in five hundred was entirely sure what he meant by the distinction, the phrases served to justify a \$40 million advertising campaign, a novel lacking both a protagonist and a plot, a collage of junked automobiles tires (p. x-xi).

Both in the 1960s and the 1990s, the primary motive was not to advance McLuhan either for its own sake or for the sake of knowledge, and in the 1990s the agenda was really to uphold his image in order to legitimize a new world order in the midst of globalization. Not surprisingly, as we shall see in detail in the next chapter, many of these assessments were overly simplistic in nature and did not do justice to McLuhan. Instead, they added to the confusion.

Only towards the end of the 1990s, as the initial excitement over the dot-com boom gave way to a more realistic view of the Internet in the new media ecology, did we begin witnessing more robust and comprehensive scholarly re-appraisals of McLuhan's work by a new generation of academics who, much like Striegel twenty years earlier, decided to take McLuhan seriously (Meyrowitz, 1996; Grosswiler, 1998; Babe, 2000, Cavell, 2002). Not coincidentally, it was around this same time that we began to learn more about his life, ambivalent views about technology and multifaceted personality (Gordon, 1998; Marchand, 1998; Theall, 2001). As a private individual, McLuhan was both an extremely conservative Catholic convert and a technophobe who despised all innovation and change (Theall, 2001, p. 21); as a corporate individual, he was simultaneously an academic, a media personality and a business consultant. In light of this, to fully understand McLuhan's work it is necessary to make sense of his eclectic personality. It is in the spirit of these contributions that this thesis will align itself, seeking to advance – rather than reduce, simplify, or assimilate – McLuhan by continuing to explore some of the underdeveloped areas of his work and thought.

Prior to these groundbreaking contributions, efforts to understand McLuhan seemed, whether intentionally or unintentionally, to have degenerated into rather futile attempts by followers and critics alike to simplify his intricate work and thought. Striegel (1978) describes the problem of integration in the social sciences as it relates to the academic reception of McLuhan:

In the course of scholarly research, it periodically happens that an apparently new synthesis of diverse and traditionally opposed fields of investigation is

proposed. The constituents of these differing disciplines are confronted with an interpretation of experience which not only challenges received opinion, but – by the nature of its reach across academic domains – demands recognition and consideration. Such new syntheses are necessarily controversial and are usually met with more suspicion and skepticism than enthusiasm. Opinion leaders are often conservative guardians of received opinion, uncomfortable with innovation and invention. (p. 1)

He then goes on to describe the process in detail:

Typically, the opinion leaders study the proposed synthesis in the context of their own definitions and explanations, take from it what can be readily integrated, and put aside the rest as inconsequential or unacceptable. The wider the reach of the new synthesis, the more easily it is apt to be broken up, circumscribed by traditional viewpoints, and put aside – with limited attention to its potential relevance or to the new directions and conclusions it provides. Over time, the bulk of the proposed synthesis may be disposed of in this manner, to become another of many contributing factors, a footnote in the graduate textbooks. This is the process of assimilation and absorption for most new ideas of broad and challenging implications. (p. 1)

As critics and followers have battled for nearly three decades over the work of a man that we've only recently begun to understand (Theall, 2005, p. 49), it becomes apparent that until very recently McLuhan's work has rarely been accepted for what it is; rather, as Striegel suggested, the objective has been to assimilate his contributions into a larger whole.

McLuhan's work remains, despite these attempts, "beyond categorization."

This should come as no surprise since after all McLuhan's general media theory is not quite a classical theory:

The scientific method, narrowly described, requires objective, quantifiable, and reproducible testing of formal propositions which contribute to the affirmation or denial of hypotheses about selected aspects of experience. In a more general sense, scientific investigation (as distinguished from scientific method) requires that observational data be assembled into models of processes that can be used to predict observations. Such investigation is an abstracting of experience: the more detailed the model, the more predictions it can make, which in turn can be tested against further observation. This dissertation attempts to structure McLuhan's work as a scientific investigation in this broader sense, by assembling three models of the general theory based on a predictive of observation. (p. 4)

While models seem instrumental in structuring McLuhan's work into a general media theory, taxonomies, as we shall see in Chapter 3, work only partially in trying to categorize the work of a man who was all about processes rather than product. Furthermore, McLuhan's figure is also too robust, and his 'message' too compelling to end up as a mere footnote in somebody else's oeuvre, as Striegel has feared. We may therefore witness a situation where the battle for assimilation rages on indefinitely, or where a consensus is reached to take McLuhan's work to the next level. In order to advance his work, it is necessary to understand it; to understand it, it is necessary to deal with it on its own terms. In other words, we have already understood McLuhan in various ways; what is needed now is to elevate his general media theory – which as we shall see did have a pragmatic dimension – to the level of implementation and testing.

CHAPTER 3: BEYOND CATEGORIZATION

A dialectical thinker

Robert Babe's, Paul Grosswiler's, and other late 1990s contributions to the field of McLuhan studies – i.e., the notion of a coherent yet dialectical thinker – have unlocked a new way of making sense of the man's paradoxical views on media and technology, forcing us to reconsider past categorizations of his work and thought, derived from inflexible dichotomies and binary oppositions (e.g., instrumentalism vs. technological determinism). Their work has paved the way for a serious re-examination of McLuhan's dialectical thought which – much like the media of communication he sought to understand – remains in “constant flux.”

The notion of a dialectical Marshall McLuhan was first introduced by Paul Grosswiler in his book *Method is the Message: Rethinking McLuhan through Critical Theory* (1998). Finding a common ground between McLuhan and critical theory, the author examined McLuhan's work in the light of theorists such as Theodor Adorno, Walter Benjamin, James Carey and Umberto Eco, and identified a common foundation between McLuhan's communication theory and Marx's dialectics. Two years later, the notion of a dialectical McLuhan was further developed by Robert Babe in his book *Canadian Communication Thought: Ten Foundational Writers* (2000), which constitutes an invaluable reappraisal of the intricate thought and eclectic personality of Marshall McLuhan in the wider context of Canadian communication studies. Moss (2004) called it “a massive

and concise recovery of McLuhan as a dialectical theorist within the context of Canadian communications thought,” noting that, “...by refuting notions of inconsistency in regard to McLuhan's theorizing, Babe reveals McLuhan's reliance on and illumination of the fundamental truth underlying human experience” (p. 3). A review by the *Canadian Journal of Communication* (2000) identified dialectical thought as the single most important theme stressed throughout Babe's book:

What he means by this is more or less a version of the Hegelian dialectic, in which the premises are antithetical, but which, following Innis, favors balance over synthesis. (Dowler, para. 9; my emphasis)

Simply put, the term “dialectic” means both a mode of understanding and a way of describing human existence in the context of conflicting pressures and the clash or tension of opposites, out of which emerges a new synthesis. Dialectics contends that higher truths are attained through “conversations” featuring contradiction (thesis-antithesis) that eventually evolve toward a balanced consensus (synthesis).

Prior to the notion of a coherent yet dialectical Marshall McLuhan, the inability of journalists and academics alike to make sense of the man's controversial work had resulted in a number of overly simplistic interpretations of his paradoxical oeuvre. In an attempt to assimilate his message, critics chose to either dismiss McLuhan's entire work as irrational (Meyrowitz, 1985, p. 21) or simplify it (Theall, 2005) by focusing selectively on individual themes and taking them out of context to fit specific corporate needs – “Hot and Cool,” “The Global

Village” and “The Medium is the Message” being among the most misquoted themes. Let’s take a look at both cases in turn.

An illustrative example of how McLuhan has been misinterpreted by some of his supporters comes from an article entitled “Honoring Wired’s Patron Saint” (2002). In it, *Wired* magazine columnist Noah Shachtman’s commitment to McLuhan ‘the icon’ was accompanied by a rather superficial elucidation of his ideas. As the following passage shows, after nearly a decade since proclaiming McLuhan its “patron saint,” *Wired* magazine’s understanding of his work continues to leave much to be desired:

McLuhan begins with the premise that the tools people create in turn shape us. The most powerful tools are those that help convey ideas, like language. With books like *The Gutenberg Galaxy* and *Understanding Media*, McLuhan argued that the new, “electric” medium, television, would overthrow the linear, rational civilization created over the last 2,500 years by the printed word, and return us to a tribal, pre-literate state. To McLuhan, modern life was like a “global village,” where everyone becomes aware of all news at once (Shachtman, 2002, para. 5; my emphasis).

Shachtman’s commentary represents the mainstream interpretation of McLuhan’s work: the views of the private industrial sector and the technological futurists who saw in his predictions the possibility of advancing the creative thinking today’s managers need in order to succeed.¹¹ Specifically, there are a few problems with this interpretation. First, the medium is not neutral but transformational, in McLuhan’s view; it is more than a mere tool that can “help convey ideas, like language,” it transforms our experience, our perception, as well as the pace of human association and action. Second, McLuhan never conceived of language

¹¹ Editorial copy: see back cover of *McLuhan for Managers: New Tools for New Thinking* (Federman & Kerckhove, 2003). In this context, it is also fair to mention that McLuhan had actively courted the business establishment, albeit with an attitude that working with business executives was like working with children (Marchand, 1998, p. 197).

and ideas as being the same thing, and was arguably concerned more with the former (form) than with the later (content); a professor of English literature with a particular interest in rhetoric rooted in New Criticism – “how” words mean rather than “what” they mean –, McLuhan ultimately came to see language as a medium through which one thinks and that which gives you the *entrée* to an understanding of all media. Third, the notion of the global village as facilitating worldwide communication constituted for McLuhan the immediate impact of this phenomenon; the consequences after impact – what he called effects – were not nearly as utopian as Shachtman suggests.

As we shall see, such a misreading is rooted in a specific philosophical conception of technology known as technological instrumentalism, whereby modern technology and instrumentation are thought of as applied science – or in the words of Don Ihde (1979), as “that dumb brute which is to be the ‘mere’ instrument, tool or slave of science” (p. xix).¹² McLuhan’s views on media and technology are far more complex, however. Whereas the instrumentalist view of technology corresponds to the liberal faith in progress which was a prominent feature of mainstream Western thought until fairly recently (Feenberg, 2003), McLuhan’s relationship with technology was, as we shall see, motivated not by

¹² Martin Heidegger (1977), among others, has criticized this conception of technology, demonstrating that technology and instrumentation precede science ontologically: “Chronologically speaking, modern physical science begins the seventeenth century. In contrast, machine-power technology develops only the second half of the eighteenth century. But modern technology, which for chronological reckoning is the later, is, for the point of view of the essence holding sway within it, the historically earlier” (p. 22). In addition, Ihde (1983) argues that the development of industrial, scientific instrumentation was dependent on pre-industrial and pre-scientific technologies of the Middle Ages, thus showing that technology does precede modern science historically.

the fascination and optimism that is usually ascribed to it, but suspicion, skepticism, and a mild pessimism toward the end of his life.

Babe's demystification of McLuhan's grossly abused notion of the global village is worthy of examination in connection with this point: when seen through the modern ideological prism of technological instrumentalism, the global village tends to be perceived as an optimistic (utopian) notion. The following passage is but one example of such a common misconception; others abound all over the net, primarily in corporate websites and other pseudo-intellectual forums:

The global village, an optimistic projection of the McLuhan era, probably never did exist in fact, and if it was the logical goal of a trend apparent at the time, that trend has long ago hit a detour...Since the time of McLuhan's initial insight, the world has become less a tribal village and more an urban apartment building, where people in adjacent flats cannot recognize one another. (Blake, 1982, p. 433-6; my emphasis)

As it has generally come to be known at least prior to Babe's dialectical reformulation of the term, the global village refers to the notion that electronic communication shrinks distances, while increasing opportunities for global, cross-cultural conversation and sharing. There's an irrefutable element of truth in this definition: these are, after all, the immediate and perhaps the most noticeable symptoms of electronic media and the worldwide connectivity they engender. However, McLuhan was not so much concerned with the impact of media, as with their subtle consequences after impact – what he termed effects. In a 1966 interview with the CBC, McLuhan spoke very eloquently about the difference between impact and effect:

Suddenly, if you noticed, the mood of North America has changed very drastically. Things like the safety car couldn't have happened ten years ago...it's because people have suddenly become obsessed with consequences of things. They used to be obsessed with mere products and packages, and launching

these things out into markets and into the public; now they've suddenly become concerned about what happens when these things [cars] go out on the highway, what happens when this kind of program gets on the air, what happens? They want safety air, safety cigarettes, safety cars, and safety programming. This need for safety is a sudden awareness that things have effects. Now, my writing has for years been concerned with the effects of things; not their impact, but their consequences after impact (This Hour has Seven Days, 1966; my emphasis).

Such distinction is crucial to understanding the true meaning of McLuhan's work; it implies that behind the immediate and most noticeable consequences of globalization (i.e., world-wide communication, interaction, and connectivity) are effects that may not always be as predictable or as benign as expected. What should be noted is that McLuhan was primarily interested in these secondary consequences of media – what takes place when a new technology, while interacting with the existing media ecology that we control, “heats up” to a point of “reversal.”

The global village as an optimistic projection of the future constitutes a misreading of McLuhan's chief prophetic aphorism in a separate yet related sense. Simply put, the notion is not as utopian as it is commonly believed. It is known that, though initially excited about the possibilities for worldwide communication, McLuhan soon grew “apocalyptic” about the consequences of the global village, warning that it was a dangerous, undesirable, claustrophobic, and possibly totalitarian place in which to live (Babe, 2000, p. 279). The following passages portray both a very different McLuhan and a very different notion of the global village:

The more you create village conditions, the more discontinuity and division and diversity. The global village absolutely insures maximal disagreement on all points. It never occurred to me that uniformity and tranquility were the properties of the global village. It has more spite and envy. (quoted in Babe, 2000, p. 279)

And again,

There's nothing at all difficult about putting computers in the position where they will be able to conduct carefully orchestrated programming of the sensory life of whole populations... The computer could program the media to determine the given messages a people should hear in terms of their over-all needs, creating a total media experience absorbed and patterned by the sense (quoted in Babe, 2000, p. 279).

According to Babe, these warnings respecting the trials and tribulations inhering in the global village can be linked to prophecies concerning the plagues of the Apocalypse, destined to occur prior to the New Jerusalem. What's certain is that McLuhan's views of the future were not as optimistic or utopian as it is commonly believed – but neither were they necessarily pessimistic or dystopian. Marchand (1998) notes that, "When asked if he was optimistic or pessimistic, he inevitably replied that he was neither, he was apocalyptic" (p. 248). In the following passage, Postman (1997) describes the ambivalent essence of McLuhan's apocalyptic views of the future:

...his story would have a happy ending, but only in the sense that there is a happy ending to life for a devoted and righteous Christian. For those who defy God, there is a different ending in store. And so, for McLuhan, the happy ending was not inevitable, not predetermined. Things could turn ugly if we did not understand what was happening. But if we did, we would learn how to control the media ecology, and teach the Promised Land (foreword to Marchand, 1998, p. xii).

Once again, it should be recalled that part of McLuhan's dialectical organization of experience features opposing statements that may very well appear as contradictions to the untrained eye. Faced with the cognitive dissonance generated by his '*ana-logical*' method, mainstream critics have tended to grab onto the statements that made more sense to them and ignore everything else, rather than look more closely at the significance of the processes underlying the seemingly chaotic clash of opposites – "the meaning of meaning is relationship"

(McLuhan & Nevitt, 1970, p. 86). Unfortunately, to de-contextualize the work of a man who believed in the primacy of context – process before product – is a recipe for disaster.

The tendency to associate McLuhan's views on media and technology with a utopian technological instrumentalism is 'logically' derived from his seemingly ambivalent position with regards to technology: after all, how can one devote oneself to the study of technology but not be in favour of it? Yet a quick look at his biographies reveals that, from an early age, McLuhan's engagement with technology had been mostly practical and often motivated by necessity. For example, as part of his plan to escape poverty, McLuhan joined forces with two of his non-academic friends in 1955 to form a company called Idea Consultants. Later on, as he turned his attention to media and technology – and despite an initial enthusiasm and excitement that accompanies any discovery – McLuhan's personal assessment of the new electronic phenomenon became increasingly motivated by suspicion:

Powerful gadgets like television were all the more dangerous, in McLuhan's view, because they fascinated those who used them and often turned those users into dependents. Such gadgets became idols. (Marchand, p. 140)

As the years went on, and McLuhan looked at technology more and more closely through the prism of an evolving dialectical system that tends to single out conflict as a necessary condition of change, he naturally grew more conservative and pessimistic about the future.

One hypothesis to be entertained here is that McLuhan's involvement with technology was for him some sort of necessary evil: the inevitable "dirt

research”¹³ that would eventually lead to an understanding of the technological environments created by the extensions of man. For McLuhan, technology was both a blessing and a curse that haunted him throughout his life.¹⁴ If he was ever enthusiastic about technological progress, it was arguably out of the self-satisfaction that accompanies any discovery – not about the discovery itself. Although he was certainly curious about technology as part of his day-to-day research activities, deep inside McLuhan remained a conservative who was opposed to all technological change: “I wish none of these technologies ever happened,” he told the American critic Richard Kostelanetz:

They impress me as nothing but a disaster. They are for dissatisfied people. Why is man so unhappy he wants to change his world? I would never attempt an improvement – my personal preference, I suppose, would be a preliterate milieu; but I want to study change to gain power over it (quoted in Marchand, p. 140).

Clearly, McLuhan’s views on media and technology amounted to something far more complex than a mere tool that human beings could pick up and put down at will, as the instrumentalist view of technology indicates. Yet despite these indisputable facts, there continues to be a recurring tendency to associate his work with the instrumentalist conception of technology, encouraged in part by the presupposition that his involvement with technology was necessarily a sign of

¹³ “Dirt research” is a term that Innis used to describe his multileveled method of empirical investigation.

¹⁴ It was that same necessary evil which tempted him into considering a career in engineering as a young adult: “Marshall joined them in enrolling in the engineering program at the University of Manitoba in Winnipeg in the fall of 1928. Before he had completed a year, however, he discovered that he was not in his element. Then, as he worked at a summer job among engineers, the misguided choice was confirmed. Some of his coworkers simply ignored Marshall, as he spent every free moment reading, while others resented the presence of the lean, self-absorbed six-footer... In the fall of 1929, he switched to a four-year Bachelor of Arts program that would focus on English, history, and philosophy” (Gordon, 1997, p. 15).

devotion and approval. When asked in an interview what kind of world he would rather live in, however, McLuhan stated his position very clearly:

I'd rather be in any period at all as long as people are going to leave it alone for a while – just let go, just leave it now...I'm resolutely opposed to all innovation, all change, but I'm determined to understand what's happening, because I don't choose to sit there and let the 'juggernaut' roll over me. Now, many people seem to think that if you talk about something recent you're in favor of it. The exact opposite is true in my case. Anything I talk about is almost certainly something I'm resolutely against, and it seems to me that the best way to oppose it is to understand it, and then you know where to turn off the buttons (The Oracle of the Electric Age, CBC, 1966; my emphasis).

Crossing the street to the academic camp, we find a large number of criticisms which, though much more sophisticated than the simplistic mainstream journalistic interpretations of McLuhan's work, are nonetheless often too quick to dismiss his entire work on the grounds of technological determinism. Vogler (2000) writes:

There is a theory of technological determinism, popularized in a rather crude and utopian form by Marshall McLuhan, which teaches that many of our most cherished, most commonplace ideas and attitudes toward literature and literary production turn out to be the result of that particular form of information technology and technology of cultural memory that has provided the setting for them. (p. 448; my emphasis)

To classify McLuhan as a hard, utopian technological determinist is problematic for at least two compelling reasons. Firstly, Babe (2000) has shown that – in accordance with the dialectical nature of his thought – McLuhan was neither utopian nor dystopian, but “apocalyptic” with regards to the future (p. 279). Similarly, Postman (1977) pointed out that McLuhan's apocalyptic view of the future is necessarily ambiguous in that there's no inevitability; the end of the story could turn out either way. An ardent convert to Catholicism, McLuhan saw humanity's story as being necessarily ambiguous: on the one hand, Christians

believe that human beings will inevitably face Judgment Day; on the other hand, God loves us and forgives us and there's time to repent. In McLuhan's own words, "if we understand the revolutionary transformations caused by new media, we can anticipate and control them; but if we continue in our self-induced subliminal trance, we will be their slaves" (McLuhan, 1969; my emphasis).

Sadly, many critics have failed to see the bidirectional causation implied in McLuhan's most fundamental premise: "we shape our tools and thereafter our tools shape us." In fact, Marchand (1998) notes that when McLuhan first began to explore the basic dynamics of sensory experience and sensory balance – the idea that the senses interact – he started out by postulating that any extension of a sense via a medium (what he called the "structural impact" of a medium) was not the same as the altered pattern of the senses as a whole that resulted from that extension. "The altered pattern was the combination of structural impact and "subjective completion" of that impact within the sensorium," says Marchand (p. 150). However, he goes on to explain:

"The whole business of structural impact and subjective completion (ultimately derived from Hilderbrand's ideas about the unity of vision and other sense impressions and also from Bacon's *vestigia communis*) is one of those areas in McLuhan's thought that will not bear much scrutiny. McLuhan himself said very little publicly about subjective completion in the years after 1960." (p. 156)

A greater emphasis on this notion may have spared McLuhan from the charges of technological determinism, as it was possible for McLuhan to resist the influence of the media. As Marchand (1998) notes:

McLuhan once applied this notion when a disciple of his, a Toronto businessman, complained of problems speaking to his superior over the telephone. In person,

the man had no trouble dealing with the superior, but over the phone he felt extremely nervous. His voice shook and his breathing became difficult. McLuhan advised him to try to visualize his superior as he spoke. The telephone, McLuhan suggested, was an extremely intense auditory medium; an increase in the visualizing faculty would serve to water down that auditory intensity. This suggestion doubtless would have sounded farfetched to many people, but the businessman tried it, and it worked. (p. 150)

This passage clearly shows that there is room for human agency and intentionality in the relationship between technology and humanity painted by McLuhan. Another sadly neglected sign of intentionality and agency in McLuhan's work was the complete form of his chief aphorism: *The Medium is the Message: The Content is the User* (Striegel, 1978), which later, perhaps for editorial purposes and brevity's sake, became quite simply "The Medium is the Message." The reduction of this proposition downplays the inherent dialectical (structural-impact-vs-subjective-completion) nature of McLuhan's general theory, and seems as a result to eliminate the possibility of human agency. By contrast, the extended version of the formulate makes it clear that "content" (the series of messages exchanged) and "message" (the change of scale or pace or pattern that it introduces into human affairs" (McLuhan, 1964, p. 8)), are two different variables; the former depends upon the user and does not follow directly from the later. As we shall see in chapter 3, part of the challenge of understanding and testing McLuhan's system is that words have a tendency to take on idiosyncratic meanings. Angus (2000) recognizes this difficulty when he proposes that "the medium is the message" should be viewed as "the message is the medium," because it "emphasizes that the rhetoric of media forms is only itself expressible as, or through, a content." (p. 41) In this context, content is only unimportant to the extent that it distracts us from "the message" – i.e., the "effects" or

consequences of a given medium. Unfortunately, these and other clarifications are lacking throughout McLuhan's oeuvre, which may have led to the misunderstanding, misquoting and misapplication of his work.

Still, despite this, there is enough explicit evidence in McLuhan's work to absolve him of the charges of determinism. Speaking of human agency, the duration implied in the word "thereafter" was to some extent contingent on our self-induced state of alienation – i.e., the state of "narcissus narcosis trance" which precedes understanding. Secondly, McLuhan never sought to legitimize or naturalize our state of alienation; on the contrary, his position was that, with understanding came hope:

Media determinism, the imposition willy-nilly of new cultural grounds by the action of new technologies, is only possible when the users are well-adjusted, i.e., sound asleep...there's no inevitability, however, where there is a willingness to pay attention. (McLuhan, 1989, p. 11-12).

More importantly, from his position as a university professor, he sought to challenge and empower people to get out of their comfort zone – first rhetorically, by means of provocation and satire;¹⁵ later pseudo-scientifically,¹⁶ with the tetrads.¹⁷

¹⁵ Marchand (1998) notes that sometimes McLuhan called his non-conventional approach "satire": "He meant that simply putting the spotlight on the features of a situation that most people ignore tends to bring out the latent ridiculousness of the situation – in the way that advertisements, when studied very objectively, often become ridiculous. There was nothing particularly more about the process. The eye of the satirist did not always conduce to peace of mind, but then McLuhan felt that anxiety was sometimes necessary for the survival of the species in this age" (p. 130).

In short, for as long as McLuhan's views on technology and media is approached through the prism of an instrumentalist/determinist dualism, a large amount of vital information about his work will continue to be filtered in the process. A new paradigm – a new set of interpretative tools – is urgently needed in order to capture the true essence of his oeuvre.

An alternative path

Much has been said and written about McLuhan since the *Gutenberg Galaxy* (1962).¹⁶ Yet in a recent essay entitled "Beyond McLuhanism" (2005), Donald Theall charges against assertions that McLuhan is simple and easy to understand, arguing that, "more than 40 years after the *Gutenberg Galaxy*, scholars have only just begun to understand his relevance to the emergence of informatics and cyber-culture" (p. 49). Despite repeated attempts to simplify his work, Theall believes that McLuhan's simplicity has not been all that obvious:

Certainly since the 1960s there have been attempts to simplify McLuhan – which unfortunately he often failed to discourage – but his work, although not

¹⁶ Although McLuhan claimed that the laws were arrived at through the scientific method, Marchand argues that, "In a way, it was absurd for McLuhan to think that his laws of media were any more 'inductive' or 'scientific' than any of his other pronouncements. They could not be disproved, only endlessly argued. There were too few factual constraints on this tetrad for it to resemble, however faintly, a true scientific hypothesis" (p. 253).

¹⁷ In the following passage, Marchand (1998) notes the accessibility of the tetrads: "the tetrad was not terribly hard to comprehend, and yet it seemed to resonate with limitless and fruitful intellectual applications," adding that, "once McLuhan devised the tetrad [...] it became something of a parlor game in McLuhan's company to come up with tetrads for things, from the wheel to the novel; visitors were always in danger of being asked to play" (p. 252-253; my emphasis).

¹⁸ See www.spectersofmcluhan.net, a project researched, compiled, and maintained by Richard Cavell (one of the more astute recent commentators on McLuhan) and Jamie Hilder, funded in part by a grant from the Social Sciences and Humanities Research Council of Canada. This site provides an historical overview of theoretical engagements with the work of Marshall McLuhan from 1981 to the present. Rather than aiming to be comprehensive, it seeks to track specific patterns of engagement in areas such as the body/sensorium/affect; globality and locality; mediation and immediation; visuality, avisuality and audility; and so on. Excerpts from key works are provided to substantiate these patterns and to facilitate further research.

conventionally academic, nevertheless exhibits its own unique and complex intellectuality – the often unrecognized intellectuality of the learned artist and satirist. McLuhan's strength in understanding the contemporary and future implications of the emerging techno-culture depended on his complexity and his ambivalence. (p. 49)

With this in mind, why do a variety of critics, many with different disciplinary points of view and commitments, find it important to categorize and even reclaim McLuhan? Why do they want to find a "message" (content) in his paradoxical approach – the approach of a man who conceived of human experience as process as opposed to product (Gordon, 1997; Curtis, 1981, p. 147)? Reducing something too complex into something more accessible and universally recognizable reassures us. But how does one categorize the work of a man who thought of himself as having no theories and no point of view?¹⁹ Babe himself acknowledges that,

The corpus of McLuhan's writing is like a minefield, sown not only with serious, indeed profound, insights, but also with satirical, hyperbolic bombs, making him a difficult author to systematize or summarize... (2000, p. 297-298).

By the same token, however, he speculates that:

Perhaps all of these McLuhans, and others, are equally true – and false. It is a principle of systems theory that, when a researcher changes levels of analysis, everything he or she surveys changes too...McLuhan insisted that he was a systems analyst, addressing the interactions of large structures and how they mutually transform one another. Perhaps in his mind, at the highest level of Being, the contradictions that he displayed and seemed to embody are resolved...Living in paradoxical times cannot help but result in paradoxical scholarship – and in immense creativity! (p. 297-298).

¹⁹ Prime Minister Pierre Elliot Trudeau once said of McLuhan: "When we began to meet he would say, 'don't worry about contradictions,' look at them as probes, don't try to put me into conflict with my own thoughts. I found it a freeing experience. His thoughts were not essentially political, but they were an effort to explain human behavior under the impact of a new technology, and I think that some of his intuitions were those of a genius" (Marshall McLuhan, "A McLuhan Symposium," *The Antagonistic Review*, 1988, p. 119; quoted in Federman, 2003, p. 2).

In short, the notion of a dialectical McLuhan suggests that continued attempts to confine McLuhan's work to one single category are unlikely to yield a fair interpretation of his thought. To understand McLuhan one must first recognize that that the elusive nature of his thought is "beyond categorization."

This essay proposes an alternative path: using a principle borrowed from phenomenology, the objective is to use variations in order to reveal invariant structures, focusing on differences rather than similarities. Don Ihde (1983) writes:

A metaphor establishes both a likeness and a difference. Our penchant, however, is consistently to dwell on the likeness. This was the case in the earlier theologies dealing with the analogies concerning God. It took a David Hume to point out the logical equivalence of metaphorical analogies – god could be as much like a spider as like a human as like a machine... it may turn out, however, that the more interesting and the genuinely new will come more out of the differences [...] I suggest the use of critically applied variational method is the therapy which makes the first step in this direction [...] I'm suggesting that we take the difference seriously, and call for phenomenological investigation of a new set of possibilities. (p. 78; my emphasis)

Respecting the differences is respecting the similarities, which means accepting their finitude and particularity, not blowing them out of proportion, through generalization and conceptualization. Accordingly, perhaps the true essence of McLuhan's 'message' is likely to be revealed by focusing not on what he is, but on what he is not. Trying to determine what McLuhan *is not* allows – in the spirit of phenomenology – for a more flexible, less prejudiced engagement with his paradoxical work. The first step in this direction is to try and approach the phenomenon ("the man and his message") without the interference of false dichotomies and binary oppositions generally, which, as we shall see, filter enough information to only yield simplistic interpretations of McLuhan's work.

Andrew Feenberg's model of orientations toward technology, extracted from his lecture, *What Is Philosophy of Technology?* (2003), has been selected as an alternative analytical ground against which McLuhan's view on media and technology can be played.

Feenberg's model

In a lecture entitled "What is Philosophy of Technology?" (2003), Andrew Feenberg situated the relatively new field of Philosophy of Technology and introduced a taxonomy that summarized four possible conceptions of technology, expressed in graphical terms thusly:

Technology is:	Autonomous	Humanly controlled
Neutral	Determinism	Instrumentalism
Value Laden	Substantivism	Critical Theory

According to this model, technology is defined along two axes reflecting its relation to values and human powers. The first variable (human powers) has two categories, whereby technology can be either autonomous or humanly controlled.

According to Feenberg,

To say that technology is autonomous is not of course to say that it makes itself. Human beings are still involved, but the question is, do they actually have the freedom to decide how technology will develop? Is the next step in the evolution of the technical system up to us? (2003, para. 23)

If the answer is "no" then technology can rightly be autonomous in the sense that invention and development have their own immanent laws which humans merely follow in acting in the technical domain. On the other hand, technology would be

humanly controllable if we could determine the next step in its evolution in accordance with our intentions.

The second set of variables also has two categories: technology can be neutral or value-laden. Accordingly, if technology is said to be neutral, then there is a complete separation of means and ends; if, on the other hand, technology is value-laden, means form a way of life that includes ends. Feenberg recognizes that the later choice is not obvious:

From one perspective a technical device is simply a concatenation of causal mechanisms. No amount of scientific study will find in it anything like a purpose. But from another perspective this misses the point. After all, no scientific study will find in a 1000 yen note what makes it money. Not everything is a physical or chemical property of matter. Perhaps technologies, like bank notes, have a special way of containing value in themselves as social entities. (2003, para. 22; my emphasis)²⁰

In McLuhanesque parlance, technology has – beyond its impact – invisible yet real effects which work us over completely. In the following passage extracted from *Take Today: The Executive as Dropout* (1970), McLuhan appears in agreement with Feenberg's point, as he argues that the effects of technology have less to do with the technology itself – the “physical property of matter” Feenberg speaks of – and more to do with a relationship between the technology (figure) and its context (ground):

The people served are the content of any service environment whatever. The meaning of the service is the relationship that it forms with the person served. The message of the service as a man-made medium is the totality of its effects. (p. 219)

²⁰ Incidentally, this is what Heidegger (1977) meant when he pointed out that, “Technology is not equivalent to the essence of technology...the essence of technology is by no means anything technological” (p. 4).

In short, Feenberg's model proposes four positions humans may adopt with regards to technology, each falling somewhere at the intersection of the four axes: instrumentalism, determinism, substantivism and critical theory. In an attempt to situate McLuhan's true standing about media and technology, part of the exercise is to analyze how his views play against each of these four categories in turn. However, it shall not be the aim of this paper to force McLuhan into one of the four categories provided by Feenberg; rather, the objective is to use Feenberg's model phenomenologically – looking for variations in order to reveal invariant structures in McLuhan's work or, put slightly differently, *focusing not on what McLuhan is but on what he is not*.

Due to its four-fold design, Feenberg's model has a satisfying numerological shape and is perfectly suited for an examination of the tetradic organization of technological effects proposed by McLuhan. According to Marchand (1998), McLuhan saw his tetrad – with its four-part structure – as being superior to Hegel's triad of thesis, antithesis, and synthesis:

Indeed, McLuhan considered that Hegel's triad was merely a truncated version of his tetrad, obtained by eliminating his third law, the law of retrieval. The triad was a tool for visual man, concerned more with forming conclusions than with teaching understanding. By contrast, the four parts of the tetrad constituted a kind of total perception of things (p. 252).

As with many other key insights in McLuhan's work, clarification would come posthumously. An in-depth account of this notion appears in *The Global Village* (1989):

Until now, the conventional form in analysis or exposition has been triadic and logical, as in the syllogism. It is a propositional left-hemisphere form, rigid and connected, in the pattern of efficient cause. Whether syllogistic or Hegelian-dialectical, for some inherent reason the triad eliminates ground. When a fourth term is added the structure becomes resonant and appositional and metaphoric:

simile, metonymy, synecdoche yield to metaphor. The tetradic representation of processes had led us to an awareness that all our artifacts are in fact words. (p. 7)

The decision to deploy a four-fold analytical model to match up with McLuhan's 'tetradic' organization of experience was motivated neither by chance nor convenience, nor superstition, but common sense. To paraphrase Martin Heidegger (1977), we must arrive at the true by way of the correct; the correct always fixes upon something pertinent in whatever is under consideration, and it is by way of the correct that the truth ultimately comes to pass (p. 6). If McLuhan is correct in pointing out that technology has four separate but related powers (enhancement, obsolescence, retrieval, reversal), then it makes sense that the basic human orientation or view with regard to technology, as Feenberg suggests, is also four. While this matching may neither be truthful in itself nor lead to the truth, it is nevertheless correct to the extent that it allows for the necessarily flexible engagement required to interpret the work of a man whose thought was in constant flux. Compared to other analytical models and interpretative tools relying on rigid dichotomies based on binary oppositions – in which McLuhan is usually portrayed either as a firm technological determinist or a utopian technological futurist – Feenberg's model seems to display considerable comparative advantages.²¹

²¹ From McLuhan's statement, it can be inferred that the tetrads – which constitute the culmination of his entire thought – also ensure an equal consideration of all four causes enunciated by Aristotle, including the long neglected *causa finalis* that phenomenology identifies. According to Aristotle, the *causa finalis* is the end, aim, or purpose. Heidegger (1977) observes that "for a long time we have been accustomed to representing cause as that which brings something about. In this connection, to bring about means to obtain results, effects. The *causa efficiens*, but one among the four causes, sets the standard for all causality. This goes so far that we no longer even count the *causa finalis*, telic finality, as causality" (p. 7).

McLuhan as an instrumentalist

The first category in Feenberg's model is instrumentalism. According to this view, technology is a means to an end, and media technologies are mere hardware whose primary function is to make life easier and to represent (extend, amplify) reality. This is the standard modern view, whereby technology is simply a neutral and harmless tool through which human beings satisfy their needs. According to Feenberg, this view of technology can be traced back to the Enlightenment and corresponds to the liberal faith in progress, which was such a prominent feature of mainstream Western thought until recently. More specifically, the fundamental prerequisites for the instrumentalist view of technology are: 1) a separation of means and ends and 2) a certain faith in technological progress. As far as the first point is concerned, let's consider McLuhan's colorful rebuttal of General David Sarnoff's statement with regard to technology:

In accepting an honorary degree from the University of Notre Dame a few years ago, General David Sarnoff made this statement: "We are too prone to make technological instruments the scapegoats for the sins of those who wield them. The products of modern science are not in themselves good or bad; it is the way they are used that determines their value." That is the voice of the current somnambulism [...] There is simply nothing in the Sarnoff statement that will bear scrutiny, for it ignores the nature of the medium, of any and all media [...] General Sarnoff went on to explain his attitude to the technology of print, saying that it was true that print caused much trash to circulate, but it had also disseminated the Bible and the thoughts of seers and philosophers. It has never occurred to General Sarnoff that any technology could do anything but add itself on to what we already are. (1964, p. 11; my emphasis)

This single passage shows that it is problematic to classify McLuhan as a mere instrumentalist. In his view, technology was transformational, not additive; it was

something much more complex than a mere tool that humans could pick up and put down at will without consequences. As for the second point, it shall suffice to point out once again that McLuhan's excitement with technology probably had more to do with his own self-indulgence at being able to understand technological innovation than with innovation itself. He was certainly engaged with and curious about technology, both as part of his research and as a commentator upon it; but deep inside he remained a conservative in the sense of being resolutely opposed to technological change.

That McLuhan was not an instrumentalist seems quite obvious to everyone except *Wired* magazine. Despite having been appointed "Patron Saint" of the famous technology magazine and website, McLuhan was never the technophile they think he was, at least not in the sense of being optimistic or having positive views about technological development. McLuhan's suspicion about technology is well documented, especially in his later work, which tends to be overshadowed by the popular *Understanding Media*. In *The Medium is the Massage* (1967), co-authored with Quentin Fiore, he writes:

Innumerable confusions and a profound feeling of despair invariably emerge in periods of great technological and cultural transitions. Our 'Age of Anxiety' is, in great part, the result of trying to do today's job with yesterday's tools – with yesterday's concepts [...] Wars, revolutions, civil uprisings are interfaces within the new environments created by electric informational media (p. 8-9).

And again,

These are difficult times because we are witnessing a clash of cataclysmic proportions between two great technologies. We approach the new with the psychological conditioning and sensory responses of the old. This clash naturally occurs in transitional periods (p. 94-95).

Unfortunately, these not-so-utopian statements have been largely overlooked, as most critics remained focused on McLuhan's earlier and more optimistic writings.

Condensing McLuhan's biographers, Onufrijchuk (1998) writes:

At first he saw in the electronic something potentially spiritual, corporate, congregational, and mystical. Later McLuhan grew pessimistic observing that the advent of the electronic media also brought barbarism and a discarnantism that threatened the psychic and social stability of the species. (p. 197)

It is not unfair to argue that McLuhan grew more conservative over the years, which in turn, implies that his views on media and technology are dialectical not only in themselves, but also over time. McLuhan's views on technology have evolved since the *Gutenberg Galaxy*, yet many of his critics and followers remain focused on *Understanding Media*. Ultimately, although at different stages of his evolving work, media technologies appeared as both a blessing and a curse. What remains constant throughout the oeuvre is that they were seen as more than mere instruments that human beings could use and put down at will – they are extensions of our own selves, and we are responsible for their understanding and maintenance in the ecology of media.

McLuhan as a technological determinist

Feenberg's second category is technological determinism, a widely held view in the social sciences since Marx, which sees technology as the main force of change in society. Feenberg (2003) observes:

Determinists believe that technology is not humanly controlled, but that on the contrary it controls humans, that is, it shapes society to the requirements of efficiency and progress. Technological determinists usually argue that technology employs advancing knowledge of the natural world to serve universal features of human nature such as basic needs and faculties. Each worthwhile discovery addresses some aspect of our nature, fulfills a basic need or extends our faculties. Food and shelter are such needs and motivate some advances.

Technologies like the automobile extend our feet while computers extend our brains. Technology is rooted on the one side in knowledge of nature and on the other in generic features of the human species. It is not up to us to adapt technology to our whims but on the contrary, we must adapt to technology as the most significant expression of our humanity. (para. 25)

Whereas business people and journalists tended to regard McLuhan as a technological futurist, consistent with the instrumentalist conception of technology, many scholars, academics and pseudo-intellectuals saw McLuhan as a prime example of a technological determinist. Daniel Chandler (2000) writes:

Various non-Marxist theorists such as Sigfried Giedion, Leslie White, Lynn White Jr., Harold Innis and Marshall McLuhan have adopted the stance of technological determinism. In a reduction ad absurdum, Marshall McLuhan interprets Lynn White's book, *Medieval Technology and Social Change* as suggesting, in McLuhan's words, that "such inventions as the horse collar quickly led to the development of the modern world" (McLuhan & Watson 1970, p. 121). Technological determinism is also commonly associated with futuristic commentators regarding what they refer to as "the micro-electronic revolution (e.g. Large 1980)." (para. 4; my emphasis)

Chandler's critique is illustrative of the slightly more refined yet still quite simplistic misinterpretations of McLuhan cluttering the Internet.²²

A much more convincing argument, however, came from none other than Williams (1974) who provided one of the first arguments for classifying McLuhan as a technological determinist:

The work of McLuhan was a particular culmination of an aesthetic theory which became, negatively, a social theory [...] It is an apparently sophisticated technological determinism which has the significant effect of indicating a social and cultural determinism [...] If the medium – whether print or television – is the cause, of all other causes, all that men ordinarily see as history is at once reduced to effects. (p. 126-7)

²² See www.spectersofmcluhan.net for similar examples.

In retrospect, Williams' take on McLuhan is much more compelling in part because of his understanding of the dual-nature of determinism. Six years after his critique of McLuhan, Williams (1980) wrote the following passage acknowledging difference between hard and soft determinism:

Now there is clearly a difference between a process of setting limits and exerting pressures, whether by some external force or by the internal laws of a particular development, and that other process in which a subsequent content is essentially prefigured, predicted and controlled by a pre-existing external force. (quoted in Durham and Keller, 2006, p. 131)

Concerned primarily with Marxism, Williams did not reconsider McLuhan's critique in light of this duality. In part because of this, Angus (2000) argues that Williams' 1974 argument misses the point about McLuhan. Angus, who followed the Williams-McLuhan debate closely and devoted an entire chapter of his book *Primal Scenes of Communication* to the question of McLuhan and technological determinism, notes that

In the critique of Marshall McLuhan's media theory by Raymond Williams there is an instructive confrontation between a postmodern theory of media and a Marxist theory that recognizes the constitutive power of communication. (p. 102)

According to Angus (2000), McLuhan's approach to media can be called postmodern because it does not situate media within any larger totality but uses the plurality of media itself as the basis for an investigation of culture – that is, media constitute reality. Williams, on the other hand, comes from a neo-Marxist background and sees media as a force of production; this is the modern conception of media – i.e., that media merely represent reality. Angus observes that, for Williams, social institutions provide the limits and pressures within which a technology of communication develops and therefore determines the content of

the medium – the uses to which it is put and its effects. On these bases, Williams accuses McLuhan of making it appear as if the technology itself were the cause of its uses and effects; he claims that there is no principle of intentionality in McLuhan's thought and sees his work as apolitical.

In order to assess the accuracy of Williams' critique, Angus proceeds to ask whether Williams presents an adequate view of McLuhan's theory. Unlike Williams, Angus identifies a notion of intentionality in the thought of Marshall McLuhan: it is contained in one of the four Laws of Media – namely, that when pushed to the limits of its potential, the new form will tend to reverse what had been its original characteristics.²³ Angus goes on to argue that Williams and McLuhan are really talking about two different aspects of technology:

There's a notion of intention in McLuhan. The first use of a technology is always the result of a social group pursuing a defined purpose that has become thematic in cultural life, but McLuhan goes on to claim that a medium of communication has two cultural effects, a first effect and a later one that is a reversal of the first. The first effect is due to the fact that a technology is introduced by specific social groups in order to fulfill intentions that they already have . . . McLuhan is not very interested in this first effect, while Williams certainly is. (2000, p. 104)

This leads Angus to believe that Williams' understanding of technology as mere hardware is much more simplistic and far less complex than McLuhan's, who views technologies as extensions of ourselves involving social relations:

It is this understanding of technology in a popular sense as simply hardware that can, of course, contrast the same hardware being used in different ways. (2000, p. 109)

²³ Babe (2000) notes that the reversal (chiasmus) quality of media is original in McLuhan: "There is also a marked difference between Innis and McLuhan with regard to the linearity of their analyses. Adopting the stance of literary critic, McLuhan applied the rhetorical term chiasmus to media to indicate that, at high intensity, there is a reversal in a medium's effects. Innis, to the contrary, never argued that a space-binding medium pushed to the limit becomes time-binding!" (p. 299).

Angus concludes,

On this point, Williams seriously misunderstands and misinterprets McLuhan, whose understanding of technology is far wider and deeper than this...For McLuhan, a technology is not simply a hardware, it is the explicit purpose thematized against the background of culture. (2000, p. 109)

According to Feenberg's model, a determinist sees technology as being autonomous and value free. Now, if something autonomous is something independent, something self-sufficient, something which makes itself, then, according to this definition, technology is not entirely autonomous in McLuhan's view. As Munday (2003) suggests, if technology is an extension of ourselves, then it cannot make itself and it is neither natural (only nature makes itself) nor autonomous:

It is difficult to pin the charge of hard technological determinism on McLuhan, because he never ascribed any autonomy to the technologies he described. They were always the extensions of man, and thus always directed and utilized by man. McLuhan's determinism was that the affordances and constraints of a given technology create the boundary conditions in which an individual can operate. Electronic man wore his nervous system on the outside of his body, therefore he was liable to react to his surroundings in a different way to his pre-electronic "internalized" predecessors. (para. 19)

Humans may not have much of an influence over technology once created, but he remains the creator and so, at least, indirectly has some control over the ecology of media.

Another important point that distances McLuhan from technological determinism is the fact that he never sought to legitimize, naturalize or perpetuate the state of alienation via technology (i.e., the narcissus narcosis trance). "There is absolutely no inevitability as long as there is a willingness to contemplate what is happening," he once wrote (McLuhan & Fiore, 1968, p. 25). Unfortunately, however, such statements were not always clear, timely or

systematic.²⁴ Still, the point to be made is that McLuhan saw hope in understanding. Onufrijchuk (1998) writes:

From our informed, if guarded, perspective, McLuhan was a technological determinist. If the literature and record tell us anything, then we can safely say that McLuhan saw unhappy consequences in the proliferation of our stuff. But even as we end, we remind ourselves that it was also McLuhan who said repeatedly that nothing need necessarily happen if people remain awake. (p. 208)

Similarly, Postman (1997) points out that McLuhan cannot be a technological determinist because his story would have a happy ending even though this happy ending was neither inevitable nor predetermined (p. xii).

McLuhan as a substantivist

The third category in Feenberg's model is substantivist technological essentialism (substantivism). According to Feenberg (2003), substantivism attributes a more than instrumental – a substantive – content to technical mediation. Technology is not neutral, and the tools we use shape our way of life in modern societies. In this situation, means and ends cannot be separated; how we do things determines who and what we are. Technological development transforms what it is to be human.

Feenberg goes on to argue that most substantive theorists are determinists as well, the difference between the two being rather subtle: determinism is usually utopian, optimistic and progressive, whereas substantivism tends to have a more dystopian, pessimistic and skeptical outlook about the future in the context of technological change. Feenberg writes:

²⁴ The quote can barely be found in *The Medium is the Message* – an iconic book which can be hard to read due to its unconventional design.

Both Marx and the modernization theorists of the post-War era believed that technology was the neutral servant of basic human needs. Substantive theory makes no such assumption about the needs technology serves and is critical rather than optimistic. In this context the autonomy of technology is threatening and malevolent. Once unleashed technology becomes more and more imperialistic, taking over one domain of social life after another [...] In the most extreme imagination of substantivism, a Brave New World such as Huxley describes in his famous novel overtakes humanity and converts human beings into mere cogs in the machinery. This is not utopia — the “no place” of an ideal society, but dystopia — a world in which human individuality has been completely suppressed....” (2003, para. 27)

Feenberg's prime example of a substantivist thinker is the late Martin Heidegger, who, in his last interview, stated that "only a god can save us" from the juggernaut of progress (Heidegger, 1977b). Feenberg (1996) writes:

Heidegger claims that technology is relentlessly overtaking us (Heidegger, 1977a). We are engaged, he argues, in the transformation of the entire world, ourselves included, into "standing reserves," raw materials mobilized in technical processes. We have become little more than objects of technique, incorporated into the very mechanism we have created. The essence of this technology is the methodical planning of the future. Planning operates on a world tailored conceptually at the outset to the exercise of human power. The reordering of experience around a plan does inadmissible violence to human beings and nature. Universal instrumentalization destroys the integrity of all that is. An "objectless" heap of functions replaces a world of "things" treated with respect for their own sake as the gathering places of our manifold engagements with "being". (para. 9)

Now it should be noted that, although Feenberg's taxonomy is not directly concerned with McLuhan, he does bring up McLuhan, along with Jacques Ellul, as other examples of a dystopian substantivists:

Jacque Ellul, another major substantive theorist, makes that link explicit, arguing that the "technical phenomenon" has become the defining characteristic of all modern societies regardless of political ideology. "Technique," he asserts, "has become autonomous." Or, in Marshall McLuhan's more dramatic phrase: technology has reduced us to the "sex organs of the machine world". (1996, para. 9; my emphasis)

While Feenberg does not elaborate on McLuhan's position, he seems to place him somewhere in the substantivist category, alongside Heidegger and Ellul. This association shows that to classify McLuhan as a mere instrumentalist or

technological determinist is to simplify and reduce the complexity of his thought. It also suggests an important connection between McLuhan and Heidegger.

Indeed, there are in fact important points of contact between McLuhan and phenomenology which are worth exploring for the mutual benefit of both. In *The Global Village* (1989), for example, McLuhan claims that "...insofar as the tetrads are a means of focusing awareness of hidden or unobserved qualities of our culture and its technologies, they act phenomenologically" (p. 6), while Kornelsen (1991) considers the implications of this claim,

By focusing on four (albeit broad) usually overlooked areas of investigation, the tetrad, in effect, performs the function of phenomenological reduction where usual assumptions about the world are put in bracket so fresh insights may be had. (p. 6)

Additionally, McLuhan's later work – especially his inquiries into the right and left hemispheres of the brain and the notions of the "discarnate being" – was congruous with Merleau-Ponty's views on embodiment and perception. There is furthermore a great affinity between many phenomenological themes and McLuhan's insights: 1) the idea of technologies being extensions and 'outering' of ourselves and the notion of transcendence and intentional consciousness; and, 2) the Husserlian idea of a noema-noemata correlate and McLuhan's notion of "structural impact" and "subjective completion." Striegel (1978), Kornelsen (1991), Onufrijchuk (1998), Vieta (2004) and Anton (2005) have all explored the connections between existential phenomenology and McLuhan via perception and senses with interesting parallels. Yet despite these efforts, it is interesting to note that, by and large, philosophers of technology have chosen to dismiss or ignore McLuhan. Heim (1987) writes:

...the reach into the future should not cause us to lose the balance of reflection. Empedocles fell into the volcano and Marshall McLuhan fell into the random, fragmentary world he was describing. My study is not part of the genre of futurism, which celebrates with euphoria wondrous gadgets that may come to exist as technology develops. Nor does it examine philosophically the question of whether or not the computer can be said to think or, conversely, whether in fact human thought is based on sequences of formal operations, much like programmable algorithms. Nor is the inquiry into whether or not the human spirit is threatened by its interaction with artificial intelligence. (p. 11)

In the remaining pages, I shall argue that McLuhan – and his work – were neither celebratory, nor blind to the darkened horizons technology might imply.

For his part, although Ihde (1979) recognizes a connection between phenomenology and American Pragmatism and acknowledges the relative importance of the later in the development of a philosophy of technology, he makes no mention of McLuhan – or Innis²⁵ for that matter:

Although the dominant Anglo-American traditions of philosophy fall into the idealist alternative concerning technology, there is a whole family of philosophies which may be called *praxis philosophies* which have dealt with technology. This family is the family of so-called Continental philosophies, primarily existentialism, phenomenology and the dialectical tradition in its Marxian forms. Near relatives would also include some strains of Pragmatism. (p. xxiv; my emphasis)

A connection between McLuhan and phenomenology via symbolic interactionism and the ethnomethodologists has already been outlined by Striegel (1978), a student of McLuhan who wrote his dissertation under McLuhan's supervision, which suggests that McLuhan himself was aware of the connection. Striegel's sadly neglected yet extremely valuable connection between McLuhan and phenomenology deserves a serious reappraisal for the benefit of both the phenomenological movement and the media ecology tradition. That said, the

²⁵ It should not be forgotten that Harold Innis – whose later writings deeply influenced McLuhan – was a student of Robert Ezra Park and William F. Ogburn at the University of Chicago in the 1920s. Innis' later work, in turn, influenced Ogburn and his theory of culture lag.

most obvious connection is through Danish phenomenologist Edgar Rubens, from whom McLuhan borrowed the notion of figure/ground. While McLuhan may have been critical of phenomenological jargon, he was not opposed to its method.

While examining McLuhan through the substantivist prism may do more justice to his work than previous interpretations, it should be noted that McLuhan did not quite share in Heidegger's pessimistic belief that, when it comes to technology, "only God can save us." Like Heidegger, McLuhan was a Catholic; however, despite being a conservative, McLuhan's views with regard to technology were ultimately not as pessimistic. Whereas Heidegger thought that only God could save us, McLuhan believed that God eventually would. Through understanding, McLuhan believed, came hope. Arguably, it is McLuhan's faith in understanding, and the tools and techniques he designed to enhance it (his probes and aphorisms, and later his tetrads), that brings an important part of his oeuvre into close association with Feenberg's last category: critical theory.

McLuhan as a critical theorist

Paul Grosswiler was arguably one of the first scholars to go beyond the instrumentalist/determinist dichotomy when it comes to McLuhan. It has already been pointed out that in *Method is the Message: Rethinking McLuhan through Critical Theory* (1998), Grosswiler attempted to reconcile McLuhan with critical theory:

The purpose of this book is to reconcile McLuhan and Marxism in order to contribute to the history of critical communication research, including qualitative and Marxist-based research. In faulting method and other normative values of administrative methodology, mainstream positivist

research has been able to dismiss McLuhan. An argument can be made that McLuhan offers fertile ground for empirical social science research, however, McLuhan's dialectical theory and qualitative approach makes him better suited in alliance with the critical communication theorists. By illustrating the methodological foundation shared by McLuhan and Marxism, McLuhan's media theories may find a home in Marxist-based research and cultural studies. (p. 3)

In a nutshell, Grosswiler's view is that McLuhan's dialectical methodology, allied with other critical theory paradigms and their dialectical methods, offers a bond that would bridge diverse researchers:

Stripped of mythology and reinforced in his dialectic and historical methodology, McLuhan's work offers a theory of media evolution and human intervention that Marxism has missed. McLuhan's methodology forms a bond with Hegelian and Marxist dialectics and its descendants in the critical theory of Benjamin, Adorno, and Horkheimer as well as in the new generation of cultural studies scholars, postmodernists and more generally, in Canadian media theory. (Method is the Message, 207)

In spite of the affinity between McLuhan and phenomenology, the problem with classifying him as a substantivist is that, in his own way, McLuhan sought to empower people. At first this was done rhetorically, by encouraging people to pay attention via provocation and satire. Marchand (1998) notes that sometimes McLuhan called his non-conventional approach 'satire':

He meant that simply putting the spotlight on the features of a situation that most people ignore tends to bring out the latent ridiculousness of the situation – in the way that advertisements, when studied very objectively, often become ridiculous. There was nothing particularly more about the process. The eye of the satirist did not always conduce to peace of mind, but then McLuhan felt that anxiety was sometimes necessary for the survival of the species in this age. (p. 130)

Despite being a rhetorician who often came to be perceived as a charlatan, the fact remains that McLuhan's work had a pragmatic motivation:

I'm making explorations. I don't know where they're going to take me. My work is designed for the pragmatic purpose of trying to understand our technological environment and its psychic and social consequences. (McLuhan, 1969, para. 1; my emphasis)

Later the encouragement came 'pseudo-scientifically,' with the tetrads.²⁶

Corporations have long realized the value of McLuhan's tools to brainstorm the possible outcomes of technological innovation and design; and advertising and business pundits tend to revere McLuhan for his "Four Laws of Media," which they consider the foundation for evaluating and predicting change sparked by new media developments and uses. Feenberg shares in this utilitarian belief, and in a similar vein sees critical theory as being able to inflect thought on technology:

Critical theory of technology opens up the possibility of thinking about such choices and submitting them to more democratic controls. We do not have to wait for a god to save us as Heidegger expostulated but can hope to save ourselves through democratic interventions into technology. (2003, para. 42)

Marshall McLuhan shared in this believe: "We can think things out before we put them out," he once wrote (1964, p. 49). The theories and points of view he denied, as well as the methods and techniques he used for elucidating effects and brainstorming the possible outcomes of innovation, can contribute a great deal to the trend toward greater participation in decisions about design and development. For McLuhan, understanding was the key to freedom and hope – or, as Postman (1997) put it, "things could turn ugly if we did not understand what

²⁶ Marchand (1998) notes that, "In a way, it was absurd for McLuhan to think that his Laws of Media were any more 'inductive' or 'scientific' than any of his other pronouncements. They could not be disproved, only endlessly argued. There were too few factual constraints on this tetrad for it to resemble, however faintly, a true scientific hypothesis. And yet, no more than the rest of McLuhan's work, it could not be dismissed as simply fanciful. There was too much intellectual life compressed within it" (p. 253). In fact, the tetrads do not reveal actual causes but the "multi-stability" of things. As Kornelsen (1991) points out, "By focusing on four (albeit broad) usually overlooked areas of investigation, the tetrad, in effect, performs the function of phenomenological reduction where usual assumptions about the world are put in brackets so fresh insights may be had. Although the tetrad was presented as a set of scientifically rigorous "Laws", I will be considering it only as a construct for generating questions for further discussion and not as a method of scientific investigation" (p. 6).

was happening. But if we did, we would learn how to control the media ecology, and teach the promised land” (p. xii). Since, as Feenberg (2003) suggests, understanding is key to designing possible strategies for controlling and democratizing technology, certain elements in the thought of McLuhan could bring him in close association to a critical theory of technology – a connection already explored by Grosswiler (1998) with compelling results. However, to continue with the phenomenological approach articulated by Ihde, it must be recalled that the most important connection between McLuhan and critical theory is the pragmatic (problem solving) nature they both share – the method, as Grosswiler suggests – not the underlying ideologies. What should be made clear is that, in exposing the affinity between McLuhan’s method and critical theory, it was not Grosswiler’s intention to dress McLuhan in the robes of a critical theorist. An appreciation of the similarities necessitates a respect for the differences.

Conclusion

In order to take McLuhan seriously, one must learn to deal with his work on his own terms. Prior to Babe’s and Grosswiler’s and other recent contributions to the field of McLuhan studies, critics and followers alike were not so much concerned with understanding or advancing McLuhan, as with trying to place his work into one of two categories: instrumentalism or technological determinism.

As suggested in this essay, however, precise categorization would be a mistake when it comes to McLuhan and his oeuvre. He was an elusive, multifaceted thinker whose thought remains in constant flux, as fluid and dynamic as the technologies he sought to understand. So powerful was the dialectical

nature of his thought, that he was able to be and not be without contradicting – but rather reinforcing – himself; and that’s one of the reasons he’s still discussed today and will continue to be well into the future. Future interpretations of his work and thought should begin with a set of interpretative tools that allow for a more nuanced engagement with his intricate thought. As demonstrated throughout this essay, there are several points of contact between McLuhan and phenomenology, especially Heidegger and Merleau-Ponty. These connections should be explored further, partly because the approach of the phenomenologist ensures enough flexibility to approximate McLuhan’s dialectical thought.

In short, perhaps the key to a successful interaction with McLuhan – in the spirit of phenomenology – is not to try to determine what McLuhan is, but what he is not. Feenberg’s model has been extremely valuable here in that it helped widen and clarify the debate about technology and showed us a different McLuhan. Likewise, the objective of this paper has been to demonstrate that McLuhan’s work and thought are beyond categorization, escaping determinism/instrumentalism and falling somewhere in between substantivism and the critical theory – belonging perhaps to both, perhaps to neither.

CHAPTER 4: OPERATIONALIZING MCLUHAN

Operationalization is the process of defining a fuzzy concept so as to make the concept measurable in the form of variables consisting of specific observations. Indeed, there are numerous challenges associated with testing the validity of McLuhan's general theory scientifically – a task which McLuhan would surely classify as trying to do today's job with yesterday's tools. How does one go about testing the work of a man who, to name but a few constraints, claimed to be both a generalist and an artist; whose prose was filled with puns and aphorisms; who maintained he had no theories and no point of view; who thought of himself as a structuralist when in fact his work was primarily concerned with the sensory experience; whose analogical/qualitative method with which he sought to understand the effects of electronic media is not conducive to scientific investigation, whose conception of numbers²⁷ – the main vehicle of statistic analysis – was quite different from the social scientist's conception, and whose general media theory is not quite a classical theory? This chapter is a natural extension of Chapter 3 in that, to apply and even consider the possibility of testing McLuhan, it is first necessary to fully understand this and other puzzling aspects of his dialectical system.

²⁷ "The ancient world associated number magically with the properties of physical things, and with the necessary causes of things, much as science has tended until recent times to reduce all objects to numerical quantities. In any and all of its manifestations, however, number seems to have both auditory and repetitive resonance, and a tactile dimension as well" (Understanding Media, p. 108).

Arguably, the main challenge with testing McLuhan is the fact that, within McLuhan's non-linear system of thought, things are not always what they seem. For example, Theall (1971), Striegel (1978), Grosswiler (1998) and Babe (2000) have all more or less recognized that, McLuhan's works may have been somewhat obscured by his use of a technical vocabulary derived from common language. Theall (1971) observes that terms such as visual, acoustic, and tactile in McLuhan's work have idiosyncratic meanings that, on the surface, appear wrong (p. 85-89), or, as Grosswiler (1998) puts it, in McLuhan's system vision could be visual or tactile (p. 11). For his part, Marchand (1998) explains that "for McLuhan, 'tactile' meant not so much the sense of touch as the interplay of all the senses, and instance of his confusing tendency to invest words with a meaning peculiar to himself" (p. 152), whereas Striegel (1978) believes that it is necessary to appreciate these terms in light of McLuhan's general theory:

Such terms as visual, audile-tactile, and acoustic have technical meanings and implications within the context of the general theory that may not attach to them or be recognized in common usage. Although the technical definitions have been repeated throughout McLuhan's works [...] most readers have tended to overlook or ignore these important distinctions. (p. 46; his emphasis)

The fact of the matter is that, when appreciated as part of a larger dialectical system, McLuhan's rhetorical flourishes suddenly seem to make much more sense:

McLuhan certainly was dialectical in the Hegelian sense: figure-ground, eye-ear, hot-cool, logical-analogical, phonetic-non-phonetic, print-manuscript, medium-message – these are but a few of the bipolarities that he held in tension to forward his media analysis. (Babe, 2000 p. 268; my emphasis)

Clearly, understanding the dialectical nature of McLuhan's thought is the first step toward a more thorough understanding of his oeuvre. As we shall see in the next

chapter, Grosswiler, and Babe were among the first to do so systematically, and as a result their efforts have paved the way for a more serious reappraisal of Marshall McLuhan.

There are of course other challenges associated with understanding, testing, and applying McLuhan. In addition to the dialectical nature of McLuhan's work, Babe (2000) has also identified McLuhan's artistic/literary approach to the study of communication – an approach which does not appear conducive to scientific investigation – as a challenge to traditional scholarly examination:

Marshall McLuhan, through his use of puns, aphorisms, metaphors, and other figurative devices; his juxtaposition of seemingly unrelated thoughts; his employing of qualitative analytical techniques such as figure/ground, 'probes,' and 'tetrads; and his deferring to the authority of the poets and to the methods of literary criticism, was quintessentially an artist as a communication scholar (p. 12; my emphasis).

In this context, it should be noted that McLuhan thought of the artist as "the antennae of the race" and even called himself an artist. Let's consider the following excerpt from an interview with the CBC entitled "McLuhan reacts to his critics," broadcast on October 16, 1967:

Interviewer: Can you look ahead beyond the twentieth century?

McLuhan: The future of the future is the present, in any age. All you have to do in order to predict the future quite accurately is to look at the present, what's under your nose. Wyndham Lewis once said, "The artist is engaged in writing a detailed history of the future because he's looking at the present."

Interviewer: and you look at the present in much the same way as an artist...

McLuhan: As an artist, yes. You don't have to paint in order to be an artist.

During the course of the same interview, the link between his artistic approach and the problem of an idiosyncratic literary terminology becomes more evident:

Interviewer: Now why did you invent this language to talk about the things you do – was it a necessary thing you had to do?

McLuhan: You might as well ask why did Picasso invent those forms, those hideous forms, in order to report on the world he lived in? He wasn't trying to express something inside himself. He was reporting on this new tactile world that we live in, which is electronic.

This artistic/literary approach, in turn, goes hand in hand with the analogical method, which McLuhan began to develop with the publication of *Take Today: the Executive as Dropout* (1970). Striegel (1978) describes the analogical model as it relates to McLuhan's general theory as follows:

Analogy is the modality of consciousness by which the object of attention is recognized not by its logical connection to other objects in hierarchy, but by the relationships of the objects of attention to its environment, its context. Analogical definition involves the process of comparison rather than the processes of description. As such, analogy is a function of the right cerebral hemisphere and is contrasted to logic, which is a function of the left cerebral hemisphere: logic requires connection, sequence, and lineal progression; analogy requires pattern recognition, relationship and balance (p. 100).

Striegel goes on to argue that the tradition of analogical investigation, as ancient as history itself, has been largely ignored during the past three centuries of Western print culture (p. 103).

What McLuhan did was to rediscover this analogical tradition in the context of the information age, arguing that in an advanced technological society, characterized as it is by rapid change and information overflow, objects cannot be perceived – only the relationship (“interval”) between them. Thus the only way to make sense of a postmodern world overloaded with information is pattern recognition, and McLuhan relied on the analogical method – which would later develop into the tetrads – as a way of anticipating these rapid changes. Striegel (1978) writes:

The analogical method of research provides an alternative to the visual, left hemisphere emphasis of scientific method. It emphasizes effects rather than cause, perception rather than conceptualization, and process rather than product. It focuses on relationships and patterns among objects rather than lineal or logical connections between objects. As such, it attempts to foster the reemergence of right cerebral hemisphere modes of cognition and to promote a relative balance between the modalities of consciousness. (p. 103)

Still, again, according to Babe, this methodology poses certain challenges to conventional scholarly research:

McLuhan's research and analytical techniques, furthermore, were highly subjective and analogical, and his conclusions testable primarily through introspection and intuition, not through laboratory experiment and observation, pathways associated with science and social science. (p. 12; my emphasis)

It is obvious that McLuhan's 'triple threat' system – his general media theory resulting from a dialectical system, artistic approach, and analogical method – while remaining rational, defies linear thinking and poses serious challenges to a thorough understanding of his system, compromising in turn the possibility of testing it.

In dealing with McLuhan's non-linear system of thought and unorthodox methodology, one important question must be addressed: is it possible to present a non-linear and non-sequential argument that is nonetheless rational and functional? Meyrowitz (1985) has noted that the tendency of critics to take McLuhan too seriously – i.e., looking for a linear, sequential, orderly analysis where there isn't one – often leads to frustrations and even the ultimate dismissal of his entire work as both irrational and incoherent:

McLuhan suggests that traditional scholarly analyses are based on a false assumption that linear thinking is the only way to reason...Scholars who approach McLuhan's work for evaluation, therefore, are faced with a peculiar paradox: they have to call on their traditional rational critical skills to criticize a work that questions the necessity and universal value of such skills. Ironically, but predictably, the response of many critics has been emotional, hostile, and, at times, irrational. (p. 21)

“Taking McLuhan seriously” (Meyrowitz, 1996) does not mean taking him literally or explicitly. As Onufrijchuk (1998) points out, “...a significant aspect of McLuhan’s contribution to media theory,” he writes, “may also be found in what he did not say but implied throughout his work” (p. 202). In other words, the true message behind McLuhan’s work is bound to reveal itself in full force once we understand that any strictly linear interpretation of his work and thought is bound to be unproductive; after all, it should be remembered that McLuhan – from his fashion sense²⁸ to his rhetorical style to his overall approach – did not believe in matching.²⁹

Undeniably, part of the confusion and frustration vis-à-vis McLuhan derives not from imperfections in the work itself, but from the inability of followers and critics alike to accept McLuhan and deal with his oeuvre on its own terms, i.e., accepting that an alternative encoding system, with its conceptual and methodological tools, demands an alternative decoding framework. For the classically trained academic, so accustomed to logical analysis, linear thinking, objective reasoning, and rational detachment, thinking outside the box can constitute a daunting task. This is not to say that there aren’t contradictions, errors, and inconsistencies in McLuhan’s work, but just as we must re-examine McLuhan, it is equally important that we re-examine the rigidity of our approach.

²⁸ Marchand (1998) explains that McLuhan’s “attitude toward clothes had always been complex and remained so even when he could afford to wear whatever he desired” (p. 187). Among other things, McLuhan wore “a tie with fire engine red maple leaves all over it, or mismatched socks, or a fedora that was too small for his head” (p. 188).

²⁹ Kerckhove (1981) writes: “Contrary to the Shannon-Weaver model of communication devised in the late forties for application to information theory and machines, McLuhan’s interpretation was that in communication there is no transportation of information (concepts or ‘content’) from a source to a target, but a transformation of the source and target simultaneously.

Once again, Striegel's interpretation and construction of McLuhan's body of work as a non-linear yet coherent general theory is worthy of examination, partly because it does not amount to an attempt to structure McLuhan's work as a scientific investigation in the strict sense, and neither does he try to break with McLuhan's artistic past in order to gain credibility. On the contrary, the author goes on to argue that "McLuhan's substantial work in literary criticism – concentrated in the years before he turned to studying media, but continuing to the present day – must be considered the foundation of his general theory of experience" (p. 26). Much like the electric circuitry which McLuhan sought to understand, his work pulls you in and demands a specific kind of participation and involvement. To understand McLuhan and begin to explore the possibility of testing his work empirically, one must enter his world – in the spirit of phenomenology – with an unprejudiced eye; in other words, it is necessary to deal with the man and his message on its own terms, to think *mcluhanistically*.

It is in the process of applying McLuhan, however imperfectly, that we shall come to see the full message behind his work. Put differently, understanding McLuhan requires a different approach, one that is less theoretical and more practical, bearing in mind that the point is not so much to prove whether McLuhan was right in the sense of how his system governs a specific dynamic as to show how it can shed light on a specific event. If the work of a man who is about processes rather than product will fully reveal itself through action, through praxis,³⁰ one must choose an interpretation (an understanding) of his

³⁰ After all, didn't McLuhan claim that advertisers understood his work better than anybody else?

work and proceed with it. McLuhan was, after all, a cool author, and engagement with his work demands a “U-Think approach to moving ideas,” whereby “the reader is given the task of closing the circuit” (Gow, 2004, p. 186).

In order to facilitate a theoretical engagement with McLuhan and pave the way for the possibility of testing his work, the remainder of this chapter shall attempt to 1) make some sense of McLuhan’s non-linear system of thought, controversial personality and unorthodox style in the context of what I shall refer to as “mismatches” – another way of thinking of the dialectical “clash of opposites”; 2) speculate as to the logic and function behind these mismatches within McLuhan’s system of thought; and 3) understand what sort of general challenges they can pose to the possibility of testing McLuhan empirically, and propose ways to overcome these obstacles.

Subjective perception over objectification

As mentioned earlier, the first “mismatch” takes place at the intersection between the nature and timing of his dialectical system, artistic approach, and analogical methodology and the intellectual context in which McLuhan designed it. Lapham said that McLuhan’s judgment was poorly timed, with his work making “more sense in 1994 than in 1964” (p. xi), whereas Grosswiler (1998), referring to the emergence of critical theories after the 1960s, points out that “McLuhan’s weaknesses might have been interpreted as strengths had he developed his media theories in a time more receptive to his critical dialectical approach” (p. 184). For his part, Striegel (1978) explains that McLuhan’s innovative methodology was introduced at a time when scholarly research in the United

States was largely based on the positing of society as an objective reality, and social interaction as directly observable, testable and quantifiable (p. 10). Striegel goes even further and suggests an affinity between McLuhan and the Ethnomethodologists:

Ethnomethodologists reassert the investigatory primacy of perception over conception and effect over conception and effect over causation in the examination of dynamic processes...These emphases on subjective perception and interpretation over objectification, effect over cause, and process over product are important elements of Marshall McLuhan's general theory...the objective of this discussion is simply to indicate that mutually shared ground, an interface, and the context of an interaction situation already exists between the previously segregated fields of social science research and Marshall McLuhan's work in communication – a bridge of enormous potential to both. (p. 20; emphasis mine)

Where the possibility of empirical testing becomes problematic is in that McLuhan did not believe in a fixed, objective reality out there that is easily predicted. Instead – in the spirit of phenomenology and ethnomethodology – the emphasis of his general theory is on subjective perception and interpretation over objectification, effect over cause and process over product (Striegel, 1978). In addition, to McLuhan, “rationality or consciousness is itself a ratio or proportion among the sensuous components of experience, and is not something added to such sense experience” (McLuhan, 1964, p.112). Thus, in an electronic environment where changes happen so quickly, and individuals are overwhelmed with information, objects cannot be perceived first hand – only the relationship between them (the “resonating interval”).

A controversial, multifaceted personality

Marchand (1998) notes that McLuhan's first opportunity to present his work before an American audience came in November of 1955, when Louis

Forsdale, then a young instructor at Columbia University Teachers College and reader of *Explorations*, invited McLuhan to speak on the topic of communication at a seminar at Columbia, whose attendance included academic heavyweights such as Robert Merton, perhaps the most distinguished American sociologist at the time (p. 141). Marchand writes:

When McLuhan finished, Forsdale asked if there were any questions. Robert Merton, his face flushed with emotion, was the first to speak. 'Well, Professor McLuhan,' he said, 'there were many things about your paper that need cross-examination. It's so chaotic, I don't know where to begin...with your title or your first paragraph' [...] Merton continued, vibrant with the resolution of an umpire about to eject a manager who'd gone too far. 'You don't like those ideas?' McLuhan interrupted with a shrug. 'I got others.' It is the kind of remark that is repeated and relished for a long time afterward in faculty lounges. 'McLuhan's response was really outside the academic pale,' Forsdale comments 'What you do in academia is debate. You go over points and you describe things carefully, you define and you come to an agreement or you lock horns and you talk about the research that you can bring to bear on this point of view or the research that you can bring to bear on that point of view, and McLuhan wasn't doing it. He was just saying 'this is my idea.' At that point, McLuhan was deliberately trying to violate the rules of academic debate. His particular response was the one that happened to occur to him. Later, of course, he cultivated the technique of the outrageous brush-off in encounters of this sort. He could not bear to have his thought cross-examined. (p. 142, emphasis mine)

These brush-offs, in addition to McLuhan's failure to discourage other such falsities and over-simplifications of his work (Theall, 2005, p. 49), may have contributed to the belief that McLuhan had no rational coherent system, arguably one of the reasons his oeuvre was ultimately rejected by a large majority of the academia. Grosswiler (1998) writes:

Reacting against his style, scholars also dismissed McLuhan because he refused to be made accountable for his theory and because he became a popular culture figure in the mass media, which was considered to be an unorthodox way to promote scholarly activity. (p. 183)

This, in turn, made McLuhan more hostile and defiant: he became known for his polemical statements – this despite the fact of maintaining that he had no values and no fixed point of view.

As McLuhan fought to legitimize his work, he also became quite vocal in expressing his contempt for a generation of intellectuals that, in his view, was willing to let literate values go down the drain without a fight. The following excerpt was extracted from an interview with the CBC entitled “McLuhan reacts to his critics,” broadcast on October 16, 1967:

Interviewer: “Now sir, you can’t be unaware that there is a growing chorus of criticism and annoyance at things you’ve been saying among literary circles. The Nation had a rather vitriolic editorial which accused you of being a bore, the kind of man you find yourself inevitably seated next to at a dinner. How do you react to all this sort of thing?”

McLuhan: I try not to. I can say these bitter things more bitterly myself because I’m after all a Professor of English Literature and very much involved in the backlog of values of literacy, and I’m rather disturbed that people are content to see all those values going down the drain without turning a hand.

Interviewer: Do you regret their passing?

McLuhan: Of course. The whole western world is retribalizing; we’re going Oriental with our own electronic technology while trying to foist western forms on Vietnam; the old 19th century forms we’ve pushed down their craw while orientalizing ourselves from within with the latest technology. These forms of behavior, when pointed out to other people, send them into a rage. People never want to look at the present; people live in the rear-view mirror because it’s safer: they’ve been there before, they feel more comfortable. Anybody who looks at the present is a threat, is a nuisance in the extremist degree. The present is an area that people have always avoided throughout all human history...”

Interviewer: Now, you say we are getting more and more orientalized. Do you think anything that can be done about this?

McLuhan: Of course. The first thing is to notice it. If you’re steering a strange course without being aware of it, it helps to know where you’re steering...”

This passage shows that, despite his claims of having no theories and no point of view, McLuhan did have an agenda in a sense – an agenda which becomes evident in his quarrels with scholars and literati. It is also important to distinguish his controversial public pronouncements aimed at questioning the old ways of the

academic establishment, as they often tended to provoke and obscure the integrity of his theoretical views (Marchand, p. 238).

Such public pronouncements go hand in hand with McLuhan's multifaceted public persona, which evolved hand in hand with his discoveries about media. As this evolution took place, McLuhan's own self-perception often failed to match reality. For example, Gordon (1997) notes that in 1974 James M. Curtis published an article on McLuhan in relation to French structuralism, to which McLuhan reacted favourably:

"Your piece on me and French Structuralism pleased me a good deal...The most controversial area of my structural approach concerns the factor known only to James Joyce, the greatest of all Structuralists, namely the conflict and complementarity of audible and visible space," McLuhan wrote in a letter to Curtis dated September 12th, 1972. (p. 321)

But according to Gordon,

To Curtis, McLuhan revealed his apprehensions and reservations about European structuralism: "So far as I can discover, the European Structuralists work with a set of archetypes as paradigms, this ensures that there be a minimum of exploration and a maximum of mere matching in their activities." (p. 321)

Gordon further observes that, throughout 1978, McLuhan gave particular attention to Structuralism and managed to find enough hours to investigate the writings of Jacques Derrida, Michel Foucault, Jean-Marie Benoist, and Paul Ricoeur. However, Gordon notes that

McLuhan was not about to convert to structuralism; he was more interested in converting structuralism to his purposes, in setting the Structuralist approach to language and literature alongside all the other large ideas he had been trying to tie together – cause and effect, formal and final causality, figure/ground, left hemisphere/right hemisphere. (p. 284)

At the end of the day, I prefer the interpretation of him provided in *McLuhan's Wake* (McMahon, 2002), whereby he comes to be defined neither as a

structuralist nor a deconstructionist, but as a “synthesizer” – someone who thought of social phenomena as being inter-connected, and who came up with a grand theory to account for a multitude of variables regarding human-technology interaction. Furthermore, his work was really concerned with perception, experience and the senses.

A separate, yet related mismatch is the fact that McLuhan’s ideas about technology did not always reflect his personal views and beliefs about technology. In his own words,

Many people seem to think that if you talk about something recent you're in favour of it. The exact opposite is true in my case; anything I talk about is almost certainly something I'm resolutely against, and it seems to me that the best way to oppose it is to understand it, and then you know where to turn off the buttons. (The Oracle of the Electric Age, CBC, 1966)

Before a dialectical interpretation of his work (Grosswiler, 1998; Babe, 2000) and knowledge of his personality (Marchand, 1998; Gordon, 1997), this ambivalence about technology was perceived as pure contradiction. It should be noted, however, that despite this mismatch, McLuhan did try his best to get out of his comfort zone. Although a conservative, a technophobe, and a devoted Catholic, McLuhan – in the spirit of phenomenology and its pure *'pressupositionless'* outlook on the world – was by and large successful in setting his personal beliefs aside in order to better attend to his academic pursuits.

Besides being an academic, McLuhan was also a business consultant and media icon – yet another mismatch. Grosswiler notes that scholars dismissed McLuhan in part because “he became a popular culture figure in the mass media, which was considered to be an unorthodox way to promote scholarly activity” (p.

183). He dismissed his personality as unimportant when, in fact, understanding his public persona was a key to understanding his work. The fact remains that McLuhan was simultaneously a scholar and a media personality, often caught between audiences, and there are important discrepancies at the personal and rhetorical levels, between McLuhan the scholar and the public persona. McLuhan often justified his multifaceted personality – and the multidisciplinary approach and multileveled methodology that came with it – by arguing that he considered himself a generalist, “not a specialist who ha[d] staked out a tiny plot of study as his intellectual turf and [was] oblivious to everything else” (Playboy, 1969). “As an investigator,” he claimed, “I have no fixed point of view, no commitment to any theory – my own or anyone else's [...] any approach to environmental problems must be sufficiently flexible and adaptable to encompass the entire environmental matrix, which is in constant flux.” McLuhan went so far as to make the claim that he had no theories and no fixed point of view (Playboy, 1969), despite available evidence suggesting otherwise (Striegel, 1978). Understandably, many of his critics resented his eccentric persona and the financial benefits that came with it.³¹ This raises the question: to which extent were some of the negative criticisms and misrepresentations of his work and thought influenced by this resentment?

³¹ Marchand (1998) recalls that McLuhan's nomination for an Albert Schweitzer Chair in the Humanities at Fordham University in 1967, the Chair was meant to be accompanied by a grant of \$100,000 – for personnel, research facilities, and so on (p. 204). Marchand goes on to note that, due to bureaucratic complications, McLuhan actually ended up with a \$40,000 salary that year; however, “the figure of \$100,000 in particular, mentioned in the lead sentence of innumerable news stories about McLuhan and Fordham, was as much a curse as a benefit. To McLuhan's colleagues, toiling away in English departments at \$14,000 a year or less, it was evidence that he had been drawn into the crasser zones of celebrity. Those who hated him were confirmed in their belief that he had sold out, abandoning the effort to explicate Francis Bacon in favor of tickling the fancy of advertising men” (p. 205).

And did McLuhan truly believe in the validity of his counter-statements – or were they part of a larger strategy?

Levinson (1981) provides one plausible explanation: “part of this [McLuhan’s] attack on logic and traditional discourse is no doubt a reflection of the uncomprehending criticism his work continues to receive from much of the literary and academic establishment” (p. 182). An alternative interpretation may be that such attacks were part of a larger rhetorical strategy devised to draw public attention both to his work by way of provocation and controversy – a strategy which may have derived from the notion (possibly adopted during his work on or his involvement with advertisers) that “no publicity is bad publicity.” In any case, it is evident that controversy plays an important role in McLuhan’s system. In fact, upon closer examination, both interpretations appear to be complementary in the sense that the best defense may have been proven to be the attack. However, while McLuhan’s controversial statements may have contributed to attracting media attention in the short run, it is difficult to say how well either strategy worked out in the end. Levinson goes on to suggest that too much controversy may have compromised his reputation and the validity of his entire oeuvre: “...but of far greater significance is the extent to which McLuhan, in setting himself not only apart from but against traditional modes of discourse, may have been a victim of his own metaphors and discoveries” (p. 182). In understanding and testing McLuhan, it is important to separate his insights from his personal, conservative views about technology.

A unique style, a secondary interest

McLuhan has been accused of being a charlatan, a word merchant, and a communications expert who communicated poorly. Admittedly, McLuhan's interest in communications was actually secondary and his unique style and values were from a different field and tradition altogether – yet another mismatch:

I personally prefer detachment and the most conventional literary values to any others. On the other hand, I live in the 20th century and I don't imagine I will ever live in any other century, so it seems natural to pay some attention to what's going on in the 20th century. (McLuhan reacts to his critics, CBC, 1967)

Long before he began writing about advertising and television, McLuhan was recognized in the field of literary investigation as a prolific scholar and critic. By 1951, he had already achieved a place in literary scholarship (Striegel, 1978, p. 25-26). Unfortunately, however, his prominence as a literary critic may have led many of his followers to regard him strictly as a rhetorician. Marchand (1998) writes:

McLuhan maintained until the end that his theories of communication were "Thomistic" [...] Nonetheless, he always remained rooted in the tradition he admired, that of the Sophists and rhetoricians, rather than in the more logical and dialectical tradition of Aquinas. (p. 82; my emphasis)

The notion of a strictly rhetorical Marshall McLuhan constitutes a misconception, which, in the end, has served to perpetuate the idea that McLuhan was a charlatan without a system. McLuhan's controversial style also included an obscure writing style. According to Babe (2000), "the corpus of McLuhan's writing is like a minefield, sown not only with serious, indeed profound, insights, but also with satirical, hyperbolic bombs, making him a difficult author to systematize or summarize..." (2000, p. 297-298). Without the framework of a

dialectical/analogical/artistic approach accounting for the significance/role of provocation, confrontation, and the constructive nature of a “clash of opposites” in McLuhan’s work, his oeuvre seems erratic and chaotic. Understanding McLuhan’s system requires an understanding of his unique style, where his pun-filled prose constitutes an autonomous system of signification in itself. In a system where each word plays an active role and has a unique significance, taking things out of context is a sure recipe for disaster.

A Professor of English literature by training and a student of I.A. Richards, New Criticism and Leavis, McLuhan was certainly interested in rhetoric. Babe (2000) notes that, “implicit in his rhetorical strategies was the supposition that language, or the use of language, helps construct reality. How we describe things, McLuhan maintained, is as important, or more important, than what is described” (p. 12). However, in the years following the Second World War, as the formalist school tended to give way to the Chicago School of critical pluralism and McLuhan discovered Harold Innis’ empirical, historical, multileveled, “dirt research” method, McLuhan’s outlook on things slowly began to change. The advent of *The Mechanical Bride*, in particular, constituted a turning point in McLuhan’s intellectual pursuits. Marchand (1998) notes that:

The actual publication of the book in the fall of 1951 was something of an anticlimax and brought no particular satisfaction to McLuhan after his six years of struggle with Vanguard Press. Years later he felt this book ‘appeared just as television was making all its major points irrelevant.’ He published it, he thought, ‘just under the wire,’ just when the Mechanical Bride was being replaced by the Electronic Bride. [...] He was soon to discover that the automatism portrayed in *The Mechanical Bride* was yielding to a new tribalism. The study of this new tribalism would strip the last traces of moral earnestness from his prose and immerse him completely in the role of explorer, the relentless seeker of insights unhindered by the striking of moral attitudes. (p. 119)

Marchand's statement would seem to support the idea of an evolution in McLuhan's thought following the publication of *The Mechanical Bride*, although he does go on to deny, for the second time, the dialectical character of this evolution: "[*The Mechanical Bride*] was, in any case, his last protest against the ravages of capitalism, industrialism, dialectical thinking, and mechanistic automatism in general" (p. 119).

As Grosswiler (1998) and Babe (2000) have successfully demonstrated, however, McLuhan's work on media is inherently dialectic – which is not to say that his interest in rhetoric was completely lost following the publication of *The Mechanical Bride*. Once again, McLuhan did not believe in lineal matching or sequential progression; when it comes to his work, there is no black and white. Yet there seems to be a recurrent, erroneous tendency among critics and followers alike to approach his oeuvre through the prism of inflexible binary structures and dichotomies, in a futile attempt to categorize his paradoxical message. Writing about the evolution of McLuhan's thought following his discovery of communication via Harold Innis, Gronbeck (1981) suggests that McLuhan lost all interest in rhetoric after the publication of *The Gutenberg Galaxy* (1962):

He obviously was enamored with rhetoricians in his younger days, and wrote fondly of them [.]. In many ways, at least after *The Gutenberg Galaxy*, which had some superb sections reviewing classical and post-classical rhetorical theory, he abandoned rhetorical studies, so fully was he caught up in the communications game of media and technology. (p. 126, emphasis mine)

In light of Grosswiler's and Babe's reappraisals of McLuhan as a dialectical thinker, it seems more plausible to argue that McLuhan's interest in rhetoric was

not lost but rather, incorporated, if not “hybridized,” into a larger dialectical system that favours balance over synthesis.

This alternative interpretation suggests that, when it comes to McLuhan’s system, the rhetorical-dialectical divide is in fact a false dichotomy. In actual fact, McLuhan’s interest and resort to rhetoric continued throughout the sixties and seventies, as evidenced by his use of probes, puns, metaphors, and aphorisms. This in turn became an integral part of a newly evolving system of qualitative research which would eventually culminate in the tetrads. Contrary to common belief, there was ample room for rhetoric in McLuhan’s dialectical system: not only were the media of communication regarded as metaphors capable of translating experience, but the way in which McLuhan communicated and guarded his insights relied heavily on rhetorical devices: *satire*, often involving complex rhetorical flourishes, was an integral analytical component of this emerging system;³² *provocation*, involving humour³³ sophisticated word play, and sometimes even bad puns,³⁴ was meant to create awareness about the consequences of media and free audiences from the “narcissus narcosis trance” they were in, whereas *controversy*, sometimes involving outrageous and

³² Marchand (1998) writes: “Sometimes McLuhan called his non-moral approach ‘satire.’ He meant that simply putting the spotlight on the features of a situation that most people ignore tends to bring out the latent ridiculousness of the situation” (p. 130).

³³ Marchand notes that “like most speakers, McLuhan valued jokes as a way of easing into a lecture and getting a feel for the audience, but he took this ploy to extraordinary lengths. For years he collected cartoons and jokes from newspapers and magazines and put them in a special file, along with jokes he had heard and written down on scraps of paper” (p. 188).

³⁴ According to Marchand, “part of the appeal of bad puns for McLuhan was precisely their ability to evoke groans from literary souls. There was nothing like a bad pun, after all, to tear from words the aura of respectability conferred on them by print – to destroy what I.A. Richards had called the ‘proper meaning superstition.’” For Richards, rhetoric is not so much about what words mean, as about how they mean.

contradictory statements,³⁵ served to generate intrigue and interest about his work. As Striegel (1978) suggests, “McLuhan's statements are practical rather than metaphorical” (p. 6); as an integral part of his new system of thought, they amounted to more than mere rhetorical flourishes.

In short, rhetoric – not “what” but “how” words mean – gave McLuhan the *entrée*, through language, to the possibility of a literary analysis of technology based on an extensive and expansive notion of media. When applied to the media of communication, the formalist idea that a great part of the meaning of words is derived from their interaction with one another (context) gave way to a general media theory, a system with its emphasis on form and process (ground) rather than content. In applying McLuhan, it is important to understand that, within his larger dialectical system, words have a special idiosyncratic meaning of their own. In addition, it must be understood that provocation plays an integral part in this system, and that his public pronouncements aimed at academics and literati are not necessarily part of that system.

Specific studies, specific challenges

According to Striegel (1978), “McLuhan has been misquoted, misapplied, and misunderstood since he began writing about communication techniques and technologies over 25 years ago” (p. 2). The aim of this section is to acknowledge past attempts to test McLuhan and identify the difficulties encountered. Having

³⁵ Marchand writes: “McLuhan was certainly never tempted by the academic habit – or virtue – of carefully qualifying his statements... After introducing himself to an audience with bad puns and jokes, McLuhan usually proceeded to offer a volley of what many considered to be outrageous and contradictory statements” (p. 189).

acknowledged the multifaceted nature of McLuhan's general media theory, it follows logically that there are many things to test in McLuhan: Striegel's notion of a tripartite program – consisting of a perceptual model, a historical model, an analogical model – to structure McLuhan's general media, can assist us in putting the various aspects of the theory into perspective. Specifically, what studies have been conducted?

An early attempt to test McLuhan's insights was undertaken by his colleague Edmund Carpenter in the mid 1950s. Through a grant McLuhan and Carpenter received from the Ford Foundation, an experiment was conducted with one hundred students at the local studios of the Canadian Broadcasting Corporation in 1954. The students were divided into four groups: one group watched a lecture delivered on television, a second attended the same lecture delivered in a television studio, a third listened to it over the radio, and a fourth read it in printed form. All groups then took an exam to test their comprehension and retention of the contents of the lecture. It was the group watching the lecture on television that scored highest in the test. The print group scored lower than even the radio listeners. The results of the test seemed to support McLuhan's hypothesis; however, as Marchand (1998) reports:

The experiment was like many other academic attempts to investigate McLuhan's ideas "scientifically": it was intriguing but not very conclusive and ultimately not very helpful. The experiment did, however, draw attention to the work of the seminar. The march 4, 1954, edition of the New York Times ran a small story on the experiment headlined VIDEO BEST TEACHER RESEARCHERS FIND, with the lead "Television is a first-class teacher, easily surpassing books and its elder cousin, radio." Already McLuhan and his associates were being seen as apostles of the tube. (p. 134)

A second attempt at testing the perceptual model via the interaction of the senses was conducted in 1960 by McLuhan himself who, while working on a project for the National Association of Educational Broadcasters (NAEB), enlisted some of his friends at the University of Toronto to test his hypotheses using computers. Marchand (1998) notes that

“By the early sixties a small coterie of science-oriented professors at the university, mostly engineers, had formed around McLuhan...some of the scientists in McLuhan’s coterie used computers to measure the degree of the tactile, visual, and audible in the auditory image of telephone conversations or radio broadcasts or whatever...the process would open up the mysteries of the human sensorium for the first time.” (p. 151-152)

Like other efforts at testing McLuhan scientifically, this attempt did not yield any tangible results.

A third attempt at testing McLuhan, this time his insights into the nature of print and television, was conducted three years later, in 1963, when the Time-Life Corporation employed a young psychologist in market research, Daniel Yankelovich. Marchand (1998) reports that, according to Silberman, a writer for *Fortune*, Yankelovich tested McLuhan’s ideas by exposing audiences to both television and print advertisements (p.167). “The central insight that emerged from these tests,” Silberman recalls,

Was that people acquired far more information from the print form than from television and that the television form conveyed a far more visceral appeal than print advertisement. Viewers were much more aware of the surge of the salt spray, the foam on the beer – but they had far more knowledge of what the product was from print. So the tentative hypothesis Yankelovich drew was that, for print advertising one ought to focus on products whose sale required consumers to have more information rather than products whose sale depended on a visceral appeal. (quoted in Marchand, 1998, p. 167-168)

According to Marchand, “it was an interesting test, coming virtually to the opposite conclusion of the test set up by Carpenter in 1954” (p. 168).

What should be noted is that all three experiments enumerated above focused on trying to test what Striegel calls the “perceptual model” of McLuhan’s general theory. Granted, these tests have shown that the notion of sensory balance could neither be proved nor disproved by scientific means, and even with today’s technology (e.g., the costly use of MRI technology to measure the activity of the brain in order to map sensory activity), it is unlikely that the perceptual model of McLuhan’s general theory can be tested and proven. As Marchand (1998) points out, “McLuhan’s studies of media tended to emphasize the sensory effects, but not the sensory effects as measured, say, by a clinical psychologist” (p. 104). The question then is, are there other aspects of McLuhan’s general theory that would yield themselves more readily to scientific testing? Although the perceptual model of McLuhan’s general theory is not conducive to scientific testing, I believe another aspect of his theory – namely, the analogical (relational) model: McLuhan’s notion of figure/ground, the tetrads, and the situational implications derived thereof (Meyrowitz, 1985) – can be tested or, at the very least, applied as a supplement to scientific inquiry.³⁶ In other words, an attempt to test McLuhan’s general media theory scientifically, as though it were a classical theory, is contrary to dealing with McLuhan’s work on its own terms. Having acknowledged the challenges associated with testing McLuhan’s work *in toto*, Chapter 4 shall limit itself to testing the utility³⁷ – as opposed to the overall validity

³⁶ Much like the Husserl, Heidegger et al., McLuhan was not opposed to science; he just thought that science needed to be put in its place.

³⁷ Utility is one criteria that may be used to evaluate a theory. Richards (2002) defines utility as follows: Does the theory, like the USS Enterprise, go “where no one has gone before”? Does it explain previously inexplicable phenomena? Does it present a parsimonious explanation for a set of phenomena previously thought to be unrelated? Does it have heuristic value—does it set

– of his general theory as it relates to media and pedagogy generally, and to the instructional analysis of a particular learning model specifically (Chapter 4).

the stage for further conceptual developments and empirical research? Should anyone care about the theory? Does it matter? Is it likely to have any effect on their lives?

CHAPTER 5: APPLYING MCLUHAN

This chapter summarizes the findings of an exploratory,³⁸ idiographic research study whose purpose was two-fold: at the applied end of the spectrum, the goal was to 1) document the application and determine the effectiveness of a Wikipedia-centred learning design in the context of a first-year university course; 2) identify and rationalize the challenges associated with its implementation; and 3) suggest possible solutions to these challenges and alternative courses of action to guide the refinement of the learning design. At the theoretical end of the spectrum, the objective is 1) to utilize the implementation of the instructional design under examination as a case study – a ‘lab’ – to apply and test not the universality but the utility³⁹ of Marshall McLuhan’s general media theory, and the accuracy of some of its predictions and, 2) to demonstrate that – despite its qualitative, analogical, dialectical nature – Marshall McLuhan’s general media theory can be used side by side with quantitative, statistical analysis to make sense of a wide array of phenomena in the realms of human-technology interaction generally and educational technology in particular.

³⁸In *The Zen of Empirical Research* (2002), Dr. Bill Richards writes: “Some research is *exploratory* in nature, going where we haven’t been before. We don’t know what to expect here, so we go with open eyes and ears and, we hope, minds. What kinds of issues are important to examine? How should these issues be approached? What kinds of obstacles must be overcome to do this kind of research?” (p. 3).

³⁹ The idea is not to demonstrate that his theory governs the phenomenon under examination, but that it can be used to shed light upon it by interpreting the results of statistical analysis.

The learning model

In the spring and fall semesters of 2007, Simon Fraser University Communication Professor Roman Onufrijchuk implemented an innovative, Wikipedia-centred instructional design to assist him in teaching a first-year level university course, (CMNS 110: Introduction to Communication Studies). Specifically, students were assigned weekly readings from Wikipedia, which were organized using a web-based, hyperlinked thematic table of contents as guide. Prior to discussing them in class and tutorials, students were expected to consult a specialized dictionary (James Watson's and *Anne Hill's Dictionary of Media and Communication Studies*, 6th ed.) and cross-check the content of the Wikipedia articles. During an interview, the instructor explained his rationale for having students check all of the linked entries against Watson and Hill:

In the introduction to the TOC – that's my nickname for the table of contents – I stipulated that they should be checking the Wikipedia articles against their dictionary of media studies and against other sites. Because there's a resistance among students, fostered by the academia, and rightly so, against the use of encyclopedia which are "pre-digested knowledge."

While the instructor seemed well aware of the issues surrounding Wikipedia – accuracy, credibility, and reliability – he made the following argument in favour of its use:

Now, there's a lot of stuff that gets said about Wiki: good and bad. My opinion of Wiki is that, yes I agree with reports that corporations mess up entries of themselves with propaganda, there's no doubt of that. On the other hand, not many people mess with entries on Harold Adam Innis, which they should, because the entries are pretty lamentable. That's my other point: that not all the general entries are good, but most of them are quite adequate at the 1st year level, as an introduction to what McLuhan, Innis or Benjamin had to say. Now, in addition to that, what's good about Wikipedia is that it provides a lot of external links; it takes you to external sites.

Perhaps a more compelling argument is that having to cross-check the Wikipedia articles with a specialized dictionary provides the students with an opportunity to develop a new skill – one which is not only essential in a postmodern age characterized by information overflow, but arguably constitutes an integral part of what it means to be literate today: interpretation and assessment. In this context, Wikipedia can be said to facilitate a “reversal” of roles: suddenly, students become more and more the evaluators of their course material – a role traditionally associated with the instructor.⁴⁰

Beyond, and despite, the issue of content, there are other benefits associated with Wikipedia. The original motivation for the implementation of this design was the instructor’s desire to address financial as well as format, structural, and even environmental issues:

What did you have in mind before going into this project?

Okay, I had taught CMNS 110 one semester prior and I had really not had time to prepare for it by reading all the literature that my colleague...used in this course. So, I taught that course kind of by the seat of my pants, using his literature, which was a set of courseware – and I should probably indicate at this point that I personally detest courseware: the reason for that being that I find it hard to read personally, rarely reproduced well, invariably meant to fall apart, and very costly for students. So I didn’t follow the courseware option to begin with (my emphasis)

The instructor then went on to explain that

Okay, so, to construct a textbook...there was a lot of photocopying, this and that, so that got me thinking, and since my research work over the last five years in emerging media, and I know the discourse of distance education in the sense of thinking of the Internet as a potential supplier of what is referred as granular information – information available in little blocks – I began to search the Web, looking around how I could construct a textbook of this sort, and I stumbled onto Wikipedia...I decided to leave the entire textbook on the Net, so they had to either read it off the Net; or they had to take the time to copy it and paste it and print it themselves.

⁴⁰ Reversal is one of the Laws that McLuhan (1988) attributed to media, whereby through the process of “heating up” a technology flips into its opposite. The process can be applied to roles via Meyrowitz (1985) who claimed that when media change, situations and roles change.

Undoubtedly, this novel design amounts to a worth-documenting, major epistemological and methodological shift with regards to the way that CMNS 110 and other courses are normally taught at SFU. Let's take a closer look at its significance.

Instructional vs. constructional design

In *Epistemology and the Design of Learning Environments* (2007), Hannafin and Hill introduce the notion that different epistemologies have corresponding psychological frameworks, each of which has in turn particular implications for instructional design. Two major epistemological perspectives – and their implications for learning design – are described in their book: *positivism* and *relativism*. The differences are clearly outlined by the authors as follows:

Inasmuch as positivists believe that knowledge exists independently of the individual, it follows that they generally employ instructional methods designed to transmit knowledge, so as to help individuals 'learn' or acquire it. Conversely, inasmuch as relativists believe that knowledge is not absolute, but rather what the individual constructs, they typically rely on instructional methods intended to promote judgments and evaluations that facilitate personal interpretations and refine understanding. (p. 54-55)

Whereas the authors point out that formal education and training have traditionally largely reflected objectivist approaches to instruction consistent with the behavioral and cognitive psychological foundation and assumptions, whereby objectivist learning environments are generally structured and prescribed to facilitate the acquisition of knowledge and skills deemed important by teachers and/or subject matter experts, with an emphasis placed on the product resulting from the instruction, and the tasks and activities used to move the learner toward creation of the product (Hannafin & Hill, 2007 p. 57), the instructional design

under examination seems to find its justification in the relativist epistemology, which the authors elaborate upon:

Relativists believe that reality is not directly knowable, and can only be inferred or assigned by convention or consensus. They assume that individuals actively assign different meanings to common objects, events, and circumstances that cannot be judged simply as "correct" or "incorrect" by comparing to convention [...] Knowledge therefore is uniquely constructed rather than uniformly transmitted. *Learning* involves the individual's negotiating meaning in an effort to evolve personal understanding; *design* involves the creation of materials and activities that assist learners in constructing and refining individual representations and personal understandings. (p. 55)

According to the criteria provided by the authors, then, the instructional design under examination can be reasonably classified as an actual "constructional design," characterized as follows (p. 54):

1) A constructivist design framework whose objectives are

- ✓ to guide the learner in constructing knowledge and
- ✓ to provide a rich context for negotiation and meaning construction

2) A constructional design practice whereby

- ✓ the environment (as opposed to the classroom) is favoured,
- ✓ learning is learner centred
- ✓ the teacher facilitates, the learner controls
- ✓ Learning goals are negotiated
- ✓ Learning problems and context are authentic
- ✓ Activities, materials, assessments are context driven and individually constructed
- ✓ Artifacts are shared and reflected on, collectively and individually

Whereas objectivist design frameworks and instructional design practices find their rationalization in behaviorist and cognitive psychology and their

corresponding positivist epistemology, the framework and constructional learning practices of the constructivist design under examination are inspired by a non-behaviorist epistemology and seem to find their substantiation in the spirit of phenomenology, whereby the observer is supposed to look at the world with an unprejudiced eye in order to know his way around. This seems to be supported by one of the TAs involved in this case study, who, when asked about the instructor's teaching style during the interview, made the following comment:

Well, as you probably know, Roman [the instructor] is big on phenomenology, so saying that, part of his approach is to deal with concepts as something pure, in a sense, that you don't read about semiology through the eye of some guy who's being writing on it; you read about semiology by going back to the person that actually wrote about semiology [...] What Roman had in mind is for people to kind of dive into this pool or net of knowledge, and find answers and get their hands dirty" (my emphasis).

L: And how does Wikipedia fit that approach?

TA1: It gives you the core in a sense and then it allows you to make a decision on which way you want to go with it in a sense. It doesn't give you that interpretation that another author would give you, so I think it's partially because of that that he chose Wiki...

Where principles of phenomenology have inspired the instructor to devise a Wikipedia-centred constructional design, Marshall McLuhan's general media theory shall serve as the theoretical framework to examine it and ultimately assess the effectiveness and appropriateness of its implementation.

The theoretical framework

Admittedly, the following quote by McLuhan inspired the use of his general media theory as the theoretical framework to assess the implementation of the design under examination:

Books are still very important, but their role is changing; the nature of their importance is changing. Remember that books were our first teaching machine, and during the Renaissance our only teaching machine. Books are what gave the Renaissance its peculiar state: we had to see the world and each other through the printed line on the page. But today there are many media of information, many teaching machines...the book's role has diminished because of all the other actors. It's no longer king but subject. (McLuhan: The Global Village, CBC, 1960)

Like any theory, McLuhan's general media theory is by no means a perfect theory in the sense that it cannot explain every single phenomenon in the social world. Meyrowitz (2005) acknowledges the limitations of medium theory:

Medium theory tends to pay insufficient attention to the role played by powerful political and economic interests in the development of communication technologies and in the way media are employed. Medium theory tends to downplay the significance of cultural and individual differences in the use of a reaction to communication technologies. And Medium theory tends to be overly linear and causal in its structure. (p. 35)

Yet despite its limitations, medium theory offers valuable insights into general patterns of human-technology interaction that are often invisible within other schema. Twenty years earlier, Meyrowitz had noted that,

...there is a general tendency for people, including many scholars and researchers, to ignore or even deny the effects of the invisible environments of media simply because they are invisible...material changes are concrete and imaginable; informational changes seem very abstract and mystical. And even within informational changes, people are more likely to grasp onto those aspects of the information environment that are most visible: particular messages. (1985, p. 20)

Ultimately, the validity of a theoretical framework depends to a great extent on its utility, which is often dictated by its correctness. To paraphrase Martin Heidegger (1977), the correct always fixes upon something pertinent in whatever is under consideration, and it is by way of the correct that the truth ultimately comes to pass (p. 6). Accordingly, the objective is not to verify the validity of McLuhan's general (analogical, artistic, dialectical) theory through the scientific testing of a

hypothesis derived thereof, but to show that his insights can be used side by side with social science methodology to shed light – through interpretation – on specific phenomena in the realm of educational technology. Accordingly, the implementation of the learning design under examination was documented in the context of the following, two-fold research question: *How can McLuhan's general media theory inform the challenges of design and implementation of a Wikipedia-inspired constructional design?* Specifically, I shall focus on three areas of inquiry: 1) whether Wikipedia as a delivery medium is in fact appropriate to support the instructor's instructional design; 2) whether under examination the “ecology of media” (electronic text, traditional print, orality, and the particular settings in which the class took place) underlying the design under examination provides the necessary balance⁴¹ this design requires in order to be effective.

The methodology

The data-gathering phase for each of the two rounds of testing took place at the end of each respective semester. The data-gathering was carried out using a battery of standard social science procedures, namely:

- ✓ **Written surveys** – 197 written surveys were administered during the penultimate week of each semester. In accordance with the conditions set out by SFU's office of research ethics, the instructor was absent during the administration of written surveys. The written surveys have been transcribed and tabulated using standard social science procedures; a summary of the

⁴¹ The dialectical notion of balance over synthesis comes from Innis; he believed that the relative stability of cultures depends on the balance and proportion of their media. In this study, Innis' notion of balance will be applied at the 'micro' level.

results is available in Appendix A, and their general significance – when appropriate – will be discussed throughout this chapter.

- ✓ **Interviews** – individual interviews lasting approximately one hour were conducted with three of the four TAs responsible for the course over the last two weeks of the first semester. An additional interview was scheduled and conducted with the instructor himself, approximately three months after the end of the first round. Transcripts of each of the four interviews are available upon request, and their general significance – when appropriate – will be discussed throughout this chapter.
- ✓ **Focus groups** – three focus group sessions lasting approximately one hour in which feedback was collected from 25 students were conducted during the last week of each round. The students volunteered to participate and were offered refreshments in return for their time. Transcripts of the focus groups are available upon request, and their general significance – when appropriate – will be discussed throughout this chapter. The identity of the focus group participants shall remain anonymous.
- ✓ **Grades** – the number of “A” letter grades and “F” letter grades awarded at the end of both courses were tracked for each sample. A full break down of the grades for CMNS 110 (Spring and Fall of 2006) are registered at the School of Communication.

Results and interpretation

The objective of this section is two-fold: 1) to compare and contrast the two rounds of measurement described above and validate them against the

grades for each sample; and, 2) to introduce various insights derived from McLuhan's general media theory to shed light on the patterns emerging therein, so as to provide an account of some of the challenges associated with implementing the design, as well as to suggest recommendations for future research.

The main pattern emerging from the cross-checking, cross-examining, and cross-referencing of survey, interview, and focus group data from the two rounds of measurement is the variation in levels of acceptance of, or satisfaction with, the new design between the first and second sample:

- ✓ Survey question #4 asked the students if they used the Internet resources. 100% of participants in the first sample answered "yes," 95% of participants in the second sample responded similarly.
- ✓ Survey question #5 asked the students to rate the usefulness of the Internet resources. The mean for the second sample was 7.5 out of 10, as opposed to 6 out of 10 for the first sample.
- ✓ Survey question #6 asked the students if they preferred studying off the screen or they chose to print the weekly readings. 79% of the second sample chose to either read off the screen or combine off the screen with print reading, as opposed to only 72% for the first sample.
- ✓ Survey question #10 asked participants what delivery medium they would have preferred. 51% of the second sample was satisfied with things as they were, as opposed to only 35% of the first sample. Conversely, only

14% of the second sample would have preferred a textbook, as opposed to 24% of the first sample.

- ✓ Survey question #11 asked students about the credibility of the Wikipedia articles. 73% of the second sample found the Wikipedia articles either “credible” (68%) or “very credible” (5%), as opposed to only 43% for the first sample.

As these numbers clearly show, the levels of acceptance are noticeably higher for the second group. Most importantly, there is a positive correlation between levels of acceptance and overall performance, as measured by the number of A letter grades and F letter grades awarded at the end of each course. On the one hand, only 7.5% of the first samples received As, compared to 23.6% for the second sample; on the other hand, only 2.7% of the second sample received Fs, compared to 5.97% for the first sample. What these figures suggest is that identification with the learning model (i.e., levels of acceptance) had an impact on overall performance. What follows are some of the factors that may have accounted for this variation in levels of acceptance.

The socialization factor

The first independent variable is the socialization factor, and is evidenced in the disparity of the academic levels across groups. In the second sample, the surveyed population was distributed evenly and was almost exclusively comprised of first- (41%) and second-year (51%) students, with only 8% of students in their third year of study. In the first sample 24% of the population was distributed among third-year and higher level students. The pattern suggests that

the student population in the first sample was slightly more advanced in their course of study, possibly more mature, and arguably more socialized into the literate values of the academia than the student population in the second sample group. How can this correlation be interpreted?

McLuhan had great hope for youth: he believed that children, like business executives, were less invested in print culture and had a greater desire to keep in touch with social change than did academics and that, therefore, they would be more receptive to his discoveries (Marchand, 1998, p. 149), and that younger students were more receptive than their elders to matters of new media technologies (Marchand, 1998, p. 157). Furthermore, McLuhan believed that it would be the youth who would be the first to “retribalize” and naturally adopt the new electronic values of the global village (The Oracle of the Electric Age, CBC, 1966). These insights may account in part for the positive correlation between level of studies and acceptance of innovation and change. The higher the level of education, the higher the level of socialization into the literate values of traditional academia, the higher the resistance to alternative (electronic) forms of media that may contravene these literate values.

The question then becomes one of values and appropriateness. One of the TAs suggested that Wikipedia posed a threat to the process of socialization as we know it, and thus was not appropriate for a first year course:

TA3: I'm not in favour of using Wiki for CMNS 110, because CMNS 110 is a course that attracts students who haven't decided what their major is going to be, and after taking CMNS 110 almost 50% of students decide to take CMNS as a major field. CMNS 110 is one of the main attractions...

L: So if that's the purpose of CMNS 110, how should CMNS 110 be and why doesn't Wiki work in your view?

TA3: CMNS 110 should be more about the interaction between the professor and the students, and at a CMNS 110 level students want to understand very basic things and they want to listen to their professor and their TAs...We cover everything in CMNS 110 in terms of communication, so basic notions. Wikipedia is very sketchy...if it were organized in a more logical way, with more academic entries, then it could be; but I think for CMNS 110, it should be very organized, and this course right now it lacks organization and a clear-cut direction and clarity.

A similar position was taken by another TA:

I would use it for upper-level courses perhaps, maybe 3rd year courses...because in a 3rd year course, and this is my perception, I could be wrong, but I think in 3rd year people are more comfortable with less structure type of research and type of reading, so let's say you have a similar course offered in third year, and you have some set of broad themes or areas that you refer to and they're responsible for doing the readings in Wikipedia, and perhaps get them to record how they go about finding sources to map out how people use Wikipedia.

But these statements may in fact be relative, as the variation in levels of acceptance between the two samples suggests. Rather than affirming that Wikipedia is not appropriate for a first-year course, it seems plausible to say that it is perhaps inappropriate to instruct a specific audience (one that has already been socialized into the literate, traditional values of academia), but quite appropriate to instruct the technological savvy "digital natives" – also known as the "millennium youth."

The vocational factor

A separate yet related independent variable is the vocational factor. Just as McLuhan thought that an artistic/dialectical/analogical approach was necessary to the study of electronic media, so it is possible to speculate that those students with an interest in the visual arts, the humanities, and even those undecided (who have not yet been fully socialized into the system and in their desire to pick and choose naturally tend to try things and approach them with an

open mind) will be more receptive to the design under examination. During an interview that took place between the first and second rounds of measurement, the instructor made an educated guess about the characteristics of the two populations:

I will be teaching it [CMNS 110] again in the Fall, in the SIAT program at Surrey, to what I assume will be a bunch of first-year students, who are not going to be big on scholarship, they're going to be big on design and technology, because they're mainly students at a communication department mainly concerned with interactive arts and design. These are all CMNS students, but they're CMNS arts students, as opposed to our bunch which are more CMNS scholarship students. A lot of their people will be probably going on to the industry I suspect. I suspect that those people, because of their interests and their connection with computers, are probably going to be more Internet, software and technology savvy than the people I taught last Spring" (transcripts available upon request; emphasis mine).

The instructor's guess was confirmed by the written surveys, which indicate that the second sample had twice the number of undecided students (28%), and a greater number of students in Interactive Arts, Computer Science, and Engineering. Conversely, the first sample had more students in what can be considered "highly literate," social science professions (English, Psychology, Criminology, and Political Science.) These distributions – along with the fact that 51% of the second sample as opposed to only 11% of the first group uses a laptop as opposed to a desktop – suggest that the second group was more technologically savvy than the first; felt more comfortable with technological innovation and was less threatened by the displacement of literate values in the classroom – accounting for the positive correlation between vocational choice and levels of acceptance of the constructional design. This also seems to support the conclusion that the use of Wikipedia, rather than altogether

inappropriate, may in fact be quite appropriate to instruct particular audiences with specific vocational backgrounds.

The organizational factor

Yet another independent variable is the “organizational factor,” which relates in part to a certain lack of planning and/or underestimation by the instructor prior to the first round of implementation. In sharp contrast to the technological instrumentalist conception of technology, whereby the media is perceived as neutral and humanly-controlled – a means to an end – McLuhan believed technological innovation ought to be accompanied by careful planning in order to prevent unexpected effects. In McLuhan’s own words, “we must think things out before we put them out” (The Playboy Interview, 1969). Without careful planning and foresight, the implementation of the instructional design under examination unleashed a number of somewhat adverse, unexpected effects that could have influenced the levels of acceptance during the first round of measurement.

The first organizational issue was the excessive amount of information.

One student who participated in the focus groups commented:

That’s the thing, there’s like tons of information...I think Wikipedia could be valuable as a great textbook, it could work out, but you’d need to cut down the information for sure...it was like, read the entire history of communication, read everything up to, you know, the different schools...and it’s so much...I know maybe 10% of what I could have know from this course.

A related issue was the considerable size of the table of contents (TOC).

While a technological determinist would have been too quick to blame Wikipedia and its circularity and the predisposition to “hyperlink everything,” McLuhan

would have claimed that the “structural impact” of the medium could have been offset or exacerbated by the “subjective completion” of both instructor and students. During the interview, the instructor assumed his responsibility and described the process that led him to include excessive amounts of information in the TOC:

Now, once I got rolling on this project...once I started to build the table of contents, I let my own predilections, my own interests in first principles and ancient history take over. I made a mistake. I built a front end that was probably most suited to a course in ancient civilization than it was for the average person's perception of what might be CMNS studies.

Question here: did the form of the medium contribute to this lack of organization in the content?

Well, yeah, what happened was that once I got rolling I realized that I could hyperlink everything else (laughs). And once that happened, that was it. Once I put the entry on Sumerians, then the Acadians... So I let myself be carried away, and I constructed a table of contents, which ran about 12 or 13 pages single-spaced of links...pretty sizable.

But was there really too much information – or was there a problem with expectations and perception? According to McLuhan, technologies are ways of translating one kind of knowledge into another: “All media are active metaphors in their power to translate experience into new forms,” he said (1964, p. 57). If this is correct, then it follows that the nature of the same information is bound to be transformed when migrating from one medium to another. Accordingly, the students were not required to digest large amounts of information as if they were reading a textbook; rather, what was required of them was to read more selectively and focus more on the connections between the readings. Unfortunately, however, our expectations and perception of the transformed information are not automatically accommodated (i.e., the “narcissus narcosis

trance”); in McLuhan terms, it was the instructor’s role to manage the transition by helping the students break free from their “somnambulism.” Arguably, then, the frustration among students had less to do with the amount of information, and more to do with not knowing what was required of them.

A separate yet related organizational issue pertained to the kind of information selected and the way in which that information was presented and organized. One TA pointed out

TA3: Yeah, the students were overloaded and the readings are so fragmented that half the students complained. So I think Wikipedia can provide a functional textbook, but the instructor should organize or rearrange the ideas based on Wikipedia.

After the fact, the instructor himself acknowledged “the way I stacked them up, which was the way I guess a historian might, was chronologically. So I ended up with this huge table of contents...” It should be recalled that McLuhan associated sequence and fragmentation with hot media. Accordingly, the first problem is that Wikipedia, which has in fact all the characteristics of a cool electronic medium, demands a thematic/iconic rather than a lineal/sequential outline.

Wikipedia, with its digested information, its hyperlinks, and its circular structure, seems to be more conducive to the dissemination of granular – self-contained as opposed to sequential – information. The evidence available suggests that the instructor was aware of the notion of “granular information” when he chose Wikipedia as the delivery medium for his constructional design; yet he made the mistake of trying to disseminate highly sequential information via Wiki. Thus, there seems to be a tension between the new medium and the

expectations of the instructor with regard to content. As McLuhan suggested, when a new medium is introduced, there's always a natural tendency to confuse its role, as the user looks into the rearview mirror in an attempt to decipher its function. Arguably, part of the confusion with regard to Wikipedia was the tendency to see it as just another encyclopedia. Although print is generally considered a "hot" medium, McLuhan would have considered Wikipedia a "cool medium", demanding high participation and involvement both inside and outside of the classroom.⁴² Accordingly, a lengthy, sequential, chronologically-sorted table of contents – coupled with the highly literate values that this form of organization embodies – seem to be at odds with Wikipedia's inherent (cool) bias to disseminate granular information, its inclination to lead everywhere – and sometimes nowhere – via hyperlinks, and the phenomenon of reading off the screen. Thus there was a tension between older values and expectations, and new media that may have been the major contributing factor to the generalized confusion experienced by first-year students who were not familiar with advanced research methods and techniques.

The relational factor

In No Sense of Place: The Impact of Electronic Media on Social Behavior (1985), Meyrowitz introduces an alternative explanation to McLuhan's idea of sensory balance as a way of accounting for the influence of media. Meyrowitz

⁴² Levinson (2005) sees online communication – email, group discussions, chatting and digital text in cyberspace – as "the most fully interactive medium in history and much more ephemeral, sketchy, wide-ranging, fast-moving than print fixed on any paper" (p. 271), which leads him to conclude that online text (Wikipedia would follow under this category) is in fact a cool medium: "Online text thus seems cool to the point of approaching Kelvin's zero," he writes (p. 271).

proposes that the impact of media rests in its ability to transform situations (who does what, when, where, how and why): “When situations change, roles change,” he claims. Thus, it can be argued that the introduction of Wikipedia in the context of CMNS 110 caused a change of situation, which in turn necessitated a corresponding change in roles and relationships (i.e., a different dynamic in the interaction among professor, students, and TAs) in order to be fully realized.

Specifically, the first relational issue to consider is the fact that the instructor was too quick to adapt to the new role that was demanded of him by the new ecology of media created with the introduction of Wikipedia as an alternative (cool) delivery medium. In his conviction that a constructional design and a cool medium like Wikipedia required that students take on an active role in the learning environment, the instructor gave too much freedom too quickly, i.e., leaving the students to their own devices to figure out how the new instructional design worked and “filling in the gaps” when it came to what was expected of them:

...I made the mistake of doing what I tend to do with books and students, which is, I don't spend too much time explaining the book; I just push them off the edge of the boat into the water and tell them to try and keep their head above surf and not drown. If somebody starts to sink then I go after them, but normally I don't; I leave them alone. Well, I told the students: “follow the links until you're satisfied that you understand what is about” – another big mistake! So that leads to your second question: within the first month, by the fourth week, I had a mutiny on my hands.

Evidently, more guidance was needed to navigate and survive as a student in the new environment, considering that it was the first time Wikipedia had been used as a delivery medium in a first-year course. Among other things,

the available evidence suggests that the freedom and flexibility granted by the instructor in the context of the constructional design under study was perceived by the students as a chaotic situation characterized by a lack of structure and organization. "He could have also made sure that the info[rmation] that he was getting us to read from Wiki was accurate, so we wouldn't have to waste our time cross referencing," one student commented. It should be noted that testing Wikipedia's content through cross-referencing was in fact part of the overall pedagogical intent; however, for some reason, students failed to see this task as part of the exercise. This leads us back to the socialization factor.

Many of the student complaints implied that there was a certain pre-conceived notion of what the role of an instructor must be, as well as how the relationship between students and instructor should be articulated. For example, one student commented: "Better communication was needed between teacher and student. The readings were relatively easy, but having the professor say, 'read it until you feel you understand it' is a bit vague..." "Better communication," of course, means traditional, face-to-face communication, traditional roles, and traditional relationships which, as McLuhan would suggest, can be linked to the "hot"⁴³ literate values of traditional print (i.e., books, courseware) and the lineal, sequential type of interaction described by the Shannon-Weaver model of communication. Thus, the population of the first sample group, already socialized into the literate values predominant within academia – and the type of roles and

⁴³ McLuhan writes: "A hot medium is one that extends one single sense in 'high definition.' High definition is the state of being well filled with data...Hot media are, therefore, low in participation..." (1964, p. 22-23)

hierarchical relationships they engender – failed to take on a more active role and seize control of their own education.

The situational factor

Another factor that may have led students to refuse to take part in the new Wikipedia-centred constructional design may be attributed to the setting in which the experiment took place. McLuhan said that, “any hot medium allows less participation than a cool one, as lectures make for less participation than a seminar, and a book for less than a dialogue” (1964, p. 23). It should be noted that the first round of implementation took place in a large auditorium at SFU Burnaby, whereas the second round took place in a seminar room at SFU Surrey. Thus, there is a positive correlation among the levels of acceptance, student participation and adaptation, and room size. A seminar room seems more appropriate for the implementation of a constructional design that demands student participation.

Conclusion

McLuhan believed that a medium imposed its own assumption on the unwary. This means, not that a medium “determines,” but that it “inclines” certain uses: in McLuhan’s view, the “structural impact” of a medium could be offset by the individual’s “subjective completion.” Accordingly, Wikipedia itself was not and cannot be wholly responsible for the lack of organization and the adverse effects we have seen during the first round of implementation (the medium inclines but it does not determine). As we have seen, the relative failure of the first round of

implementation was not the result of Wikipedia's unsuitability, but of various factors three factors acting in a complex configuration – of which Wikipedia's "structural impact" and the "subjective completion" or lack thereof (unmanaged expectations, lack of planning and organization) are deeply intertwined and equally responsible. The fact that the instructor was able to review the dynamic of the constructional design prior to the second round of implementation (Fall, 2007) contributed to counterbalancing Wikipedia's "own assumptions," and shows the importance of human foresight, planning and organization ("we must think things out before we put them out," says McLuhan). This surely accounted for the variation in levels of acceptance across both samples, which are positively correlated with levels of performance. Unlike the first round of implementation, the instructor went into the second round knowing the exact nature of the student population and the class took place in a small seminar room as opposed to a large lecture auditorium. More guidance was provided by the instructor in order to familiarize the student with the new system. Only when the student body became more or less aware of the new environment, was it possible for the instructor to withdraw and allow them to take on a more active role.

In applying McLuhan to make sense of this particular case study, it is hoped that this thesis has also contributed to shedding light on the potential of McLuhan's oeuvre, beyond the realm of theoretical speculation and into that of application. Though there is no doubt that operationalizing and testing McLuhan's general theory is problematic, if not impossible, making its overall

validity hard to ascertain, this thesis has demonstrated that its utility is nonetheless unquestionable. The objective has been to demonstrate that the various postulates of his general theory can be used alongside standard social science procedures as an invaluable diagnostic tool, aiding in the interpretation of statistical analysis. Richards (2002) expressed the following about the quantitative vs. qualitative debate in social sciences research:

Many people feel this issue is important enough that they identify strongly with one approach in favor of the other. I have known people who consider quantitative research to be useless, irrelevant, weak, and wrong, while they feel qualitative research is valuable, relevant, socially important, and good. At the same time, I have known other people who consider research that doesn't have a mathematical basis to be useless and of no value. For them, the presence of numbers is a sure sign that the research and its conclusions are valid and good. In some places there seems to be a war between the two camps. "Whose side are you on? Are you one of us or one of them?" My own position is that Quantitative vs. Qualitative is a false dichotomy. These two perspectives are complementary; they are the two sides of the coin. Each one by itself is incomplete and can only give part of the picture. The prudent researcher will combine the two perspectives and produce better results. Much research is both qualitative and quantitative at the same time. Finally, the presence of numbers does not necessarily mean that the research is quantitative (p. 12-13; emphasis mine).

This thesis both supports and is supported by Richards' argument. Ultimately, in showing that McLuhan's methods are not incompatible with, but complementary to, the scientific method, this thesis suggests that McLuhan was not so much at odds with the scientific method (after all, it should be recalled that McLuhan thought of his Laws of Media as a scientific tool and welcomed the idea of testing his insights empirically), as its proponents were at odds with McLuhan. Arguably,

much like Husserl and in the spirit of phenomenology,⁴⁴ McLuhan was not opposed to science per se, but thought rather that it should take its place in the world, i.e., as one useful approach in a plurality of many approaches, none of which has anything to say about reality in any ultimate way.

⁴⁴ Sokolowski (2000) writes: How does phenomenology deal with the problem of the difference between the objective, scientific world and the subjective, lived world? It attempts to show that the exact, mathematical sciences take their origin from the lived world. They are founded on the life world [...] Then, phenomenology claims that the exact sciences must take their place within the life world. They are one of the established institutions within it, but they never replace the life world by another one. We could not live in a world; we can only live in the life world, and this basic world has its own forms of truth and verification that are not displaced but only complemented by the truth and verification introduced by modern science" (p. 147-148).

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APPENDIX A: SUMMARY OF WRITTEN SURVEY RESULTS

Population size			
First sample: 160 students (Winter, 2007)		Second sample: 37 students (Fall, 2007)	
What year are you in?			
First sample		Second sample	
First year	50%	First year	41%
Second year	26%	Second year	51%
Third year	17%	Third year	8%
Fourth year	3%		
Fifth year or higher	1%		
No answer/error	3%		
What's your major?			
First sample		Second sample	
Business	24%	Business Admin	24%
Communication	19%	Communication	16%
Undecided	14%	Undecided	28%
English	8%	English	3%
Psychology	7.5%		
Criminology	6%	Criminology	3%
General studies	2%	General studies	3%
Film	2%		
Geography	1%	Geography	3%
Humanities	1%		
Kinesiology	1%		
Political Science	2%		
Computer Science	1%	Computer Science	3%
Engineering	1%	Engineering Science	3%
Economics	2%	Economics	3%
French	0.5%		
History	0.5%		
Physics	0.5%		
Interactive Arts	1%	Interactive Arts	8%
Music	0.5%		
No Answer/Error	3.5%		
		Sociology	3%

What's your course load?

First Sample		Second Sample	
Course load	Percentages	Course load	Percentages
1 course	0.5%	One course:	5%
2 courses	1.5%	Two courses:	0
3 courses	27%	Three courses:	24%
4 courses	56%	Four courses:	62%
5 courses	13%	Five courses:	9%
6 courses	1.5%		
No answer/error	0.5%		

Did you use the Internet resources for CMNS 110?

First sample		Second sample	
YES	95%	YES	100%
NO	5%	NO	0%

On a scale of 1 to 10, how useful did you find these resources?

First sample		Second sample	
Mean	6	Mean	7.5

Did you print the week's readings or did you study off the screen?

First sample		Second sample	
Off screen	63%	Off screen:	57%
Print	17%	Print:	11%
Both	9%	Both:	22%
Neither/error	11%	Neither/error:	11%

Which of the following might be called "limitations" to using electronic text?

First sample		Second sample	
Difficult to mark:	38%	Difficult to mark, comment, highlight	62%
Workspace with computer not conducive to study:	28%	Workspace with computer not conducive to study	5%
Difficult to move:	18%	A difficult to move around	8%
Hard on the eyes:	8%		
Too much information:	3%		
Too many distractions:	3%		
Hard on the back (bad posture):	1%		
All of them		All of them	19%
Error:	1%	No answer/error	6%

List any benefits that you think came with an electronic text			
First sample		Second sample	
Fast, easy accessibility and increased mobility:	23%	"Easily accessible from anywhere"	35%
Good organization/easy to navigate, easy to find information quickly:	10%	"Ability to expand on a given topic through links"	30%
Free, saved money:	28%	"It's not necessary to buy expensive textbooks"	11%
Saved paper:	6%	"Good for the environment, less paper wasted"	11%
Easy to understand, resourceful and/or contextual information:	7%		
Editable/always updated:	3%		
Don't have to carry books	5%	"Easy to generate notes"	5%
No Answer	18%	No answer	8%

The computer that I use for most of my work is			
First sample		Second sample	
Desktop:	84%	Desktop	43%
Laptop:	11%	A laptop:	51%
Both:	2%	Both:	6%
No answer:	3%	Other:	0%

I would have preferred...			
First sample		Second sample	
A published textbook	24%	A published textbook	14%
A courseware version of all readings	29%	A courseware version of all readings	35%
A combination of both	9%	A combination of both	0%
Was okay with things as they were:	35%	Was okay with things as they were	51%
No answer/error:	3%	No answer/error:	0%

How credible or reliable did you find the Wikipedia articles?			
First sample		Second sample	
Very credible:	8%	Very credible:	5%
Credible:	35%	Credible:	68%
Somewhat credible:	44%	Somewhat credible:	27%
Not credible:	4%	Not credible:	0%
Error/No answer:	8%	Error/no answer	0%

How often did you cross check the content of the assigned Wikipedia material?			
First sample		Second sample	
Often	11%	Often	16%
Rarely/hardly ever:	34%	Only before the exam	30%
Only before the exam:	20%	Rarely/hardly ever	32%
Never:	28%	Never	22%
No answer/error:	7%	No answer/error	0%

How often did you consult Watson and Hill (Dictionary)?			
First sample		Second sample	
Often	3%	Often	16%
Only before the exam	9%	Only before the exam	0%
Rarely/Hardly ever	26%	Rarely/Hardly ever	70%
Never	59%	Never	14%
No answer	3%	No answer	0%