MARSHALL McLUHAN AND EDUCATIONAL THEORY: AN INQUIRY INTO THE EPISTEMOLOGICAL AND AESTHETIC FOUNDATIONS OF LEARNING STYLE

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ABSTRACT

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This study explores the character and significance of the work of Marshall McLuhan, with a view to relating his ideas to the fields of educational theory and aesthetic philosophy. The importance of the inquiry lies mainly in the impetus toward a reexamination of the question of perception and learning style that has come from recent developments in philosophy and educational theory.

McLuhan's ideas on media, communication, perception and the formation of consciousness have been presented in a series of works dating from the late 1950's. By 1964, when he published Understanding Media, the basic outlines and the substance of his conceptions had been developed and his work since that time has consisted mainly of elaboration and dissemination of those ideas. His central premise, presented and popularized in such

aphorisms as "the medium is the message (massage)," holds that the behavioral style of a culture is rooted in, and is a consequence of, the ratio between the various senses, as those senses function in perception, imposed by the material characteristics of the technologies present in the culture. Technologies, of whatever sort, "extend" and heighten some aspect of the human organism and, in so doing, move the extended facility into a prominent place in the structures that govern perception. Thus, typography extends vision and generates what McLuhan calls "visual" culture. Television extends all senses, especially the tactile, and generates a very different culture, the "audio-tactile." From this impact of technology on perception all else--religion, education, commerce, government, social structure--flows in an inevitable sequence. The form of technology becomes the engine of all other forms, quite independently of the content uses to which those technologies are put.

While there are several ways in which to analyze McLuhan's notions--social, scientific, biological and so on--the one explored here is that of submitting his main premises to inspection from the vantage point of conventional aesthetic philosophy. It is possible (and possibly profitable) to view McLuhan's work as the skeletal outline of an aesthetic theory and to compare his basic entities and procedures to some comparable

theory. If this is done it becomes apparent that McLuhan has a great deal in common with those aestheticians who have developed and analyzed aesthetic experience as (1) an integrative experience whose integrative power lies in (2) the capacity of the objects to "carry" symbolic meaning in virtue of (3) their sensuous configurations, which, taken as a totality (gestalt), constitute (4) the "form" of the object. McLuhan's work, while not pursuing the problems of that position in that sort of rigorous detail provided by, for example, John Dewey, is flawed by the difficulties inherent in formalist and symbolist aesthetics, especially the difficulty of the ineffability and form and the validation of statements about it.

For McLuhan, the comprehension of the nature and impact of technology lies in the domain of the aesthetic--the privileged observers are artists and the direction by them of the applications of media technology becomes the primary instrument of cultural survival. This platform is the substance of, and provides a certain cast of urgency to, most of social and political prescriptions. While the interpretation and application of McLuhanesque insights to social policy must be tempered with a full recognition of the methodological and theoretical problems built into his thought, it is possible to use his work as the starting point for a critical examination of education.

He reminds us again that learning is a function of the total environment; that the form in which the learning transaction is cast is a significant determining variable in the learning process and that attention to the aesthetic in education is an important, perhaps crucial, imperative.

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CHAPTER I

INTRODUCTION

The question of how people learn what they know has always been of central importance to educational theory. The question has been addressed in many ways, under an almost infinite variety of rubrics. Different periods in the history of educational thought can be characterized by the sorts of questions about learning that were current. In recent years we have witnessed the reemergence of one question about learning that, while it has been a central question at several historical junctures, pretty much disappeared during the ascendency of scientific behaviorism, beginning during the 1920's. That is the question that has become conventionalized under the concept of "learning style."

A confluence of events, including the impact of the work of Jerome Bruner, the push for differentiated programs for the "culturally deprived," the identification of the "counter-culture" and a general dissatisfaction with conventional, behavioristic modes of teaching and measurement forced into the purview of educational theorists the old question of whether there are different ways

in which people learn, and, if so, how can those different ways be analyzed and understood. The question has been studied in a number of ways by different scholars; most frequently from the perspective of either learning theory or anthropology. The question does, as well, raise serious philosophical issues that, at least in the opinion of modern positivism, were thought to have been solved. The philosophical issues are fundamentally epistemological ones: how can modes of learning be characterized and described and what kinds of events and circumstances, either internal or external to the learner, configure modes of learning. More specifically and fundamentally, the issues arise at the conjunction point between epistemology and aesthetic philosophy, since they bear upon perception as the irreducible genesis of cognition.

The philosophical issues that arise from the reconsideration of the question of learning style have been little examined, either by philosophers or by scholars developing the area of learning style in other disciplinary frameworks. Most of what we have had thus far is on the order of superficial and unsatisfactory rhetoric, of the sort advanced by Postman and Weingartner[1] or metaphor, in the style of Theodore Roszak.[2] While the reconstruction of epistemological questions is beginning to figure in the mainstream deliberations of academic philosophy, especially in the work of Noam Chomsky and resultant controversies,

some of the most fruitful attempts at reconstruction have come from scholars of a more generalist persuasion--in the work of Teilhard de Chardin, in Paul Goodman's Speaking and Language and--the subject of this inquiry--in the body of work produced by Marshall McLuhan.

An Introductory Note on McLuhan

"The most important thinker since Newton, Darwin, Freud, Einstein, and Pavlov"; "one of the major intellectual influences of our time"; "the oracle of the Electric Age"; such are the laudations heaped on the shrine of Herbert Marshall McLuhan. Equally hyperbolic epithets have been framed by his critics, of which some of the kindest are "fraud" and "charlatan." A cursory perusal of McLuhan commentators presents the impression that, for McLuhan's theories, reaction is either "hot" or "cold," few could be considered "lukewarm."

At the eye of this storm is a tall, slender, Canadian professor of English literature. Born in Edmonton, Alberta on July 21, 1911, to a Baptist mother and a Methodist father, he spiritually "shopped around" in his youth and eventually embraced Roman Catholicism at the age of twenty-six. While a graduate student, McLuhan married Carinne Lewis, a native Texan. The McLuhans have six children--two sons and four daughters. The family resides in Toronto, where Professor McLuhan has been the Director of the University of Toronto's Center for Culture and Technology since 1964.

Marshall McLuhan's undergraduate career began with the study of engineering. He later switched to English and earned a B.A. in 1933 and an M.A. in 1934 from the University of Manitoba. The next two years, 1934 to 1936, he spent as an undergraduate at the Trinity College of Cambridge University, England, where he received his second B.A. in 1936. It was during those years at Cambridge under the influence of Wyndham Lewis, I. A. Richards, F. R. Leavis and Denys Thompson, that McLuhan's commitment to literature began expanding to include the study of all media.

In 1936, McLuhan arrived at the University of Wisconsin to teach freshman classes. His study of popular culture was at first a pedagogical maneuver to enhance his understanding of Wisconsin undergraduates. This early analysis of media would eventually result in the publication of his first book, The Mechanical Bride (1951); an exposition of the uses of subliminal sex in advertising.

The same year in which McLuhan entered the Catholic Church, 1937, he began teaching at St. Louis University. He has taught at Catholic institutions ever since. Combining graduate work and a honeymoon with his bride, McLuhan returned to Cambridge in 1939. There he pursued his interest in the investigation of literary influences and received his Cambridge M.A. in 1940. Greatly impressed by the work of T. S. Elliot, Ezra Pound, and particularly,

James Joyce, he traced the beginnings of Symbolist literature back to the Elizabethian writer, Thomas Nashe. His doctoral dissertation, "The Place of Thomas Nashe in the Learning of His Time," was presented at Cambridge in 1943.

After leaving St. Louis University in 1944, McLuhan taught for two years at Assumption College (now Windsor University). He accepted his present teaching position at St. Michael's College, the Roman Catholic unit of the University of Toronto, in 1946. In Toronto, McLuhan's interest in the effects of media were stimulated by Harold Innes, an economic historian, who did a great deal of research on the impact of railroads on social and economic life.

McLuhan's study of media has found expression in an ever-increasing number of publications and projects. He produced the magazine, Explorations: Studies in Culture and Communications, with designer Harley Parker and anthropologist Edmund Carpenter. McLuhan edited eight issues of the journal, which lasted from 1953 to 1957. A collection of some of the contents of Explorations have been published by McLuhan and Carpenter in a 1960 volume entitled Explorations in Communications. DEW Line, Canada's Warning System, was a personal newsletter which McLuhan produced under a subsidy from the Canadian government.

In 1959, McLuhan became Director of the Media Project of the National Association of Educational

Broadcasters and the United States Office of Education. From that effort came the report that formed the basis for Understanding Media: The Extensions of Man (1964). In 1964, McLuhan became Director of the University of Toronto's Center for Culture and Technology. On a sabbatical leave from Toronto in 1967, he accepted the Albert Schweitzer Chair in the Humanities at Fordham University as part of an effort by the State of New York to attract distinguished scholars to the state. (Connor Cruise O'Brien and Arthur Schleisinger were other participants.)

Since his first published essay in 1934, McLuhan has produced hundreds of articles which have appeared in a variety of academic journals and popular magazines. He has ten books to his credit with at least three more in progress. It is not, however, difficult to isolate the most important and comprehensive parts of his work, even given its volume and his continued production. First of all, his mature work can be clearly marked with the production of The Mechanical Bride. It was followed in 1962 by the book that made his initial reputation in the academic world, The Gutenberg Galaxy: The Making of Typographic Man. Galaxy earned several awards, and two years later was followed by Understanding Media. From that time, most of McLuhan's production has been fragmented, repetitious, often cryptic, and more accurately regarded as publicity for his ideas than as further development of his thought.

He has produced a number of books (some of them in collaboration with the designer Quentin Fiore) that attempt to exemplify his notion of "cool media," an intermittent journal, Counterblast, and numerous articles on his perspective for popular magazines. The most systematic restatement of his position since Understanding Media is From Cliche to Archetype (1970). That book, along with Mechanical Bride, Understanding Media and Gutenberg Galaxy provide a fully adequate exposition of McLuhan's thought and they will serve as the foundation of this study.

McLuhan has presented a general theory of enculturation and acculturation. He has tried to say how patterns of perception are formed and shaped, how perception fashions cognition, and how styles of cognition determine cultural character. In an emphatically materialistic vein, he chooses technology as deus ex machina and has generated a far-reaching and controversial thesis: technological media, regardless of content, are the central determinants of human perception and behavior, both corporate and private. That thesis is most succintly, and perhaps most misleadingly, stated in the most frequently quoted McLuhanism, "the medium is the message."

Importance to Education

If McLuhan's theory is accepted on his terms, he would have said a great deal about the variables that bear on the "learning style" characteristic of different cultures,

especially that of what he calls the "television generation." In his not always humble opinion, he has done just that, insisting on a special relevance of his work for educational efforts that involve an interface between mediaistically different cultures. This is particularly true when a variable of media is literacy since McLuhan's analysis of culture often centers around the role of literacy in culture. Thus he homes in on a central and recurrent problem of schools--institutions based on literacy--and raises issues relevant to education in non-literate and what he terms "post-literate" cultures.

McLuhan's importance to educational theory takes at least three forms. First, he raises important questions, demanding a reconstruction and reconsideration of central issues of learning style with concomitant ramifications for practical questions of pedagogy, curricular planning, and evaluation. The exploration of the questions he raises is the main burden of the present study. Second, McLuhan himself has produced a number of provocative and intriguing statements on education. These will not be dealt with in detail in this study, but a sampling of McLuhan's educational thought is included in these introductory comments in order to establish a general feel for his approach to educational problems. Finally, his thought has attracted the attention of a number of writers on education, two of which will be briefly treated in this introduction.

McLuhan on Education: A Sampler

In the introduction to the second edition of Understanding Media: The Extensions of Man, McLuhan indicates what he believes to be a fundamental conflict between the life of today's child and the nature of the school.

> The young student today grows up in an electrically configured world. It is a world not of wheels but of circuits, not of fragments but of integral patterns. The student today lives mythically and in depth. At school, however, he encounters a situation organized by means of classified information. The subjects are unrelated. They are visually conceived in terms of a blueprint. The student can find no possible means of involvement for himself, nor can he discover how the educational scene relates to the "mythic" world of electronically processed data and experiences that he takes for granted.[3]

Later in the same volume, McLuhan diagnoses further the educational problem resulting from television's newly wrought alterations in the learning style of children.

> Since TV, children--regardless of eye condition--average about six and a half inches from the printed page. Our children are striving to carry over to the printed page the all-involving sensory mandate of the TV image. With perfect psycho-mimetic skill, they carry out the commands of the TV image. They pore, they probe, they slow down and involve themselves in depth. This is what they learned to do in the cool iconography of the comic-book medium. TV carried the process much further. Suddenly they are transferred to the hot print medium with its uniform patterns and fast lineal movement. Pointlessly they strive to read print in depth. They bring to print all their senses, and print rejects them. Print asks for the isolated and stripped-down visual faculty, not for the unified sensorium.[4]

These effects of television are what McLuhan believes result in "the fact that, in the visually organized educational and social world, the TV child is an underprivileged cripple."[5]

McLuhan has not only diagnosed the educational problems of our day, but he has also made suggestions for, and predictions about, a future educational system.[6] These he believes will avoid the current conflicts and take full advantage of technology.

McLuhan in the Literature: Two Instances

In citing the intellectual influences of their widely-read book, Teaching as a Subversive Activity, Neil Postman and Charles Weingartner give McLuhan a prominent place. In a chapter entitled "The Medium is the Message, Of Course," they conclude that McLuhan's theory "implies that the critical content of any learning experience is the method of process through which the learning occurs."[7] This conclusion, which, as they correctly point out is encountered in the thought of many other educationists, including John Dewey, is a highly generalized interpretation of McLuhan. While it is not mistaken, it does little to bring into the Postman and Weingartner work the distinctive and special constructions of McLuhan's perspective.

Further on, McLuhan is cited as providing a basis for what they call the "inquiry method."[8] Here the

correctness of their reading of McLuhan is open to serious question since they seem to miss McLuhan's insistence on the point that a medium and its content are quite independent of each other in regard to their enculturative force. Rather, they take McLuhan to be arguing for a rather Deweyian unity of subject matter and method. The enculturative impact of media, on that view, is in ratio to the saturation of the medium with content; the less the content, the more the message of the medium comes through. "McLuhan contends that, without the distraction of a story line, we get a very high degree of participation and involvement in the forms of communication, which is another way of saying the processes of learning."[9] This is essentially contrary to McLuhan's contention that the content of the medium makes no difference in terms of enculturation.

There are numerous other references to McLuhan, most of them by way of adopting McLuhanesque metaphors for incorporation into a highly eclectic, quasi-progressive and often convoluted prescription of what education should be. McLuhan, in this case, enters the realm of educational discourse second hand, primarily as the source of many of the aphorisms that, in the hands of Postman and Weingartner, attempt to pass for a theory of education.

This is fairly important since the sort of use to which McLuhan's thought is put by Postman and Weingartner

is rather frequent and, quite probably, a major reason why McLuhan is not taken very seriously by a great many educational scholars. If we are to profit from the pursuit of the very basic questions raised by McLuhan, we need to approach him in his office of philosopher rather than in his frequently taken role as glib aphorist.

George Leonard is an eclectic, too, and also professes an influence from McLuhan.[10] His posture, however, leads not to "inquiry learning" but to "controlled environments" and the development of "human potential." This seems to be a more consistent interpretation of McLuhan's conception of medium than that given by Postman and Weingartner, and Leonard is at pains to dissociate environment from content, to call our attention to the learning potential inherent in the "naked environment."[11] He does this by rooting his construction of the naked environment in perception: "All environment has the capacity to educate. We are rapidly becoming capable of controlling all environment we can perceive. It may someday turn out that what we can be will be limited only by what we can perceive."[12]

Thus, McLuhan enters the arena of educational thought through the work of at least two significant commentators on educational theory and practice. Though their interpretations of the significance of McLuhan differ rather markedly, there is little doubt that, at

least to some educators, McLuhanesque thought has become an important influence in the ongoing attempt to develop new conceptualizations of the educative process.

Focus of the Study

The general purpose of the study--to examine the epistemological and aesthetic issues raised by McLuhan's analysis of the genesis of learning style--has already been stated. What remains is to spell out in greater detail the specific focus of the study. The thrust of the study derives from the notion that McLuhan's perception-based theory of enculturation is fundamentally an aesthetic philosophy, employing, in McLuhan's distinctive guises, such conventional categories as form, significance, and meaning in order to advance answers to classical questions of epistemology. The main burden of the study will consist of a detailed examination of McLuhan's thought from the perspective of aesthetic philosophy and a critique of McLuhan's theory of enculturation qua aesthetic philosophy. The final part of the study will explore some of the significances of McLuhan's work for educational thought and practice. All that remains to be done by way of introduction is to discuss briefly the aesthetic character of McLuhan's work.

Aesthetic Aspects of McLuhan's Thought

A concern of paramount importance among philosophers of art has been the analysis of human perception and its relation to the aesthetic experience. The general theory of enculturation presented by McLuhan is essentially a theory of perception. It is the supporting structure for his speculations regarding the nature of art and the role of the artist. Therefore, we may legitimately view McLuhan's theory as fundamentally an aesthetic one.

A few examples, taken from the many available in his work, may serve to illustrate McLuhan's primary concern, namely, the technological determination of our sensory modes of perception. In Understanding Media he writes, "The effects of technology do not occur at the level of opinions or concepts, but alter sense ratios or patterns of perception steadily and without any resistance."[13] To interact with our technologies "is to accept these extensions of ourselves into our personal system and to undergo the 'closure' or displacement of perception that follows automatically."[14] McLuhan conceives of technology in the broadest way possible; broad enough to include the spoken word. As a technological determinant, "each mother tongue teaches its users a way of seeing and feeling the world, and of acting in the world, that is quite unique."[15]

A profound respect for James Joyce is evidenced throughout McLuhan's work. He refers to him early in War and Peace in the Global Village:

> Joyce was probably the only man ever to discover that all social changes are the effect of new technologies (self-amputations of our own being) on the order of our sensory lives. It is the shift in this order, altering the images that we make of ourselves and our world, that guarantees that every major technical innovation will so disturb our inner lives that wars necessarily result as misbegotten efforts to recover the old images.[16]

Finally, speaking of our "technologically created" environments in Through the Vanishing Point, he again indicates that "new environments reset our sensory thresholds. These, in turn, alter our outlook and expectations."[17]

One final qualification is necessary, and that is to the effect that there will be no attempt in this study to test or even to discuss in detail the empirical "truth" of McLuhan's formulations. Rather, they will be treated as theoretical hypotheses and will be analyzed in that light. Put another way, McLuhan will be approached as a speculative philosopher rather than as a social scientist.

CHAPTER I: FOOTNOTES

[1]Neil Postman and Charles Weingartner, Teaching as a Subversive Activity (New York: Delacorte Press, 1968).

[2]Theodore Roszak, The Making of a Counterculture (New York: Random House, 1968).

[3]Marshall McLuhan, Understanding Media: The Extensions of Man (New York: The New American Library, 1964), pp. viii, ix.

[4]Ibid., pp. 268-269.

[5]Ibid., p. 289.

[6]George Leonard, "The Future of Education, The Class of 1989," Look, February 21, 1967, pp. 23-25.

[7]Postman and Weingartner, op. cit., pp. 16-24.

[8]Ibid., p. 19.

[9]Ibid., p. 29.

[10]George Leonard, Education and Ecstasy (New York: Dell Publishing, 1968).

[11]Ibid., p. 51.

[12]Ibid.

[13]McLuhan, Understanding Media, op. cit., p. 33.

[14]Ibid., p. 55.

[15]Ibid., p. 83.

[16]Marshall McLuhan and Quentin Fiore, War and Peace in the Global Village (New York: Bantam Books, Inc., 1968), p. 5.

[17]Marshall McLuhan and Harley Parker, Through the Vanishing Point (New York: Harper & Row, 1968), p. 253.

CHAPTER II

OVERVIEW OF McLUHAN'S THEORY

McLuhan's writings, as most of his readers will testify, are often difficult and confusing. No doubt, part of the difficulty rests with the novelty of his analysis of media and the inherent complexity of some of the themes he takes under consideration. I am convinced a larger measure of the confusion is due to his style which is disconnected and repetitious. At times he is overly expansive on a point while on other occasions he can be frustratingly abrupt. His admirers euphemistically refer to the latter as being cryptic. McLuhan's style, semantics, and organization (or lack of it) have been widely criticized. McLuhan himself has either explicitly or implicitly admitted that his work is difficult, his ideas may be inconsistent, his method is repetitious, his facts sometimes wrong, his statements often exaggerated, and his arguments not necessarily logical. Maybe I am belaboring the point or perhaps I have not yet made it. The point is, as the literary critic George Elliot has said, "It is not possible to give a rational summary of McLuhan's ideas. His writing is deliberately antilogical: circular, repetitious, unqualified, gnomic, outrageous."[1]

If Mr. Elliot is right, then this chapter is an attempt to do the impossible.

Acting out of the obvious academic necessity to pretend that Mr. Elliot was mistaken, let me begin by summarizing what I believe are the four basic ideas that comprise McLuhan's theory, stating what seems to me to be the theory of history he employs in his work. These five sections should serve as a fairly comprehensive overview. The first three: "The Medium is the Message," "Media, Hot and Cold," and "Media are Extensions of Man" are most directly approachable through his book Understanding Media: The Extensions of Man. This volume, although fairly rambling and somewhat obscure, remains his most concise and systematic presentation of his theory of enculturation. The fourth idea "The Concept of Sensorium" is a recurrent theme throughout his works. Finally, McLuhan's theory of history, while also abundantly available among his works, is most clearly reflected in The Gutenberg Galaxy: The Making of Typographic Man, which is a kind of cultural history, and From Cliche to Archetype.

The Medium is the Message

Of that vast repertory of McLuhan aphorisms, "the medium is the message" is no doubt the most familiar. This is due, in part, to the strikingly contra-conventional ring of the statement. However, I believe it is the most

widely circulated McLuhanism because it is central to his general theory. It is, as well, the least understood of his postulates.

To say that "the medium is the message" is, in McLuhan's words,

> . . . merely to say that the personal and social consequences of any medium--that is, of any extension of ourselves--result from the new scale that is introduced into our affairs by each extension of ourselves or by any new technology.[2]

The medium then is any technological extension of ourselves such as speech, print, clothing, money, automobile, telegraph, radio, television, etc. Hence, "medium" as a term in McLuhan's theory, means <u>any</u> human invention from speech to automation.

This needs to be clearly understood since McLuhan's frequent use of words such as "communication" and "information" seems to place his comments in a limited context--that of "communications technology." But, for McLuhan, the limitations we place on "communications" in common language do not seem to apply since, for him, <u>all</u> technology can be understood in terms of their incorporation, treatment, and manipulation of information. (This is only one of several cases in which McLuhan's special use of common words generates perplexity for the reader. Given his comprehensive use of "information," his often quoted aphorism, "the electric light is pure information" makes at least a modicum of sense. Given the more

restricted use of "information" in common parlance, the statement is more or less incomprehensible.) McLuhan then proceeds throughout his work to pursue his personal strategy of inquiry--the exploration of the human consequences of technology in terms of the epistemological character of cultures.

It is possible, given the analysis above, to place McLuhan's work in a context that is more familiar than the semi-occult one in which, as media savant, he is usually placed. Although he can be, and usually is, regarded as a major hagiographer of pop culture, he may also be understood as a scholar of culture--an anthropologist or social philosopher--who studies the impact of technology on epistemology in much the same way that other scholars study the impact of technology on economic organization, on social life, or on styles of art. His program of investigation shapes his selection of objects of inquiry. His concern with the epistemological leads him, as it has philosophers since Plato, to a posture of assigning primacy to the forms of technology, as against the content of it, in much the same way that philosophers concerned with the epistemology of art are attracted to "form." Hence, "the medium is the message."

We typically define as "consequences of media" those conscious or intended uses and effects of our technology. That is, we tend to believe that the content

of a book or a television program is the important or influential aspect of our experience with either of these media. According to McLuhan, this approach doesn't begin to reveal their important consequences. Speaking of our machine technology in general he says, "In terms of the ways in which the machine altered our relations to one another and to ourselves, it mattered not in the least whether it turned out cornflakes or Cadillacs."[3]

Our technology, as McLuhan points out, becomes a part of our environment and exercises a formative power over us. From their office as environment they legislate the "scale, pace, or pattern" of human association as well as our very awareness and mode of perception. We are as blind to these environmental influences on our human condition as "fish are to water." Now, this environmental conditioning of our perception and the ensuing personal and social consequences are the real meanings or "messages" of media. With respect to such consequences, the intended uses or "content" of media are quite inconsequential.

McLuhan has an interesting interpretation of "content." He holds that the content of any medium is always another medium. On this account the content of the telegraph is print, the content of print is writing, and the content of writing is speech. While we focus on

the "content" or uses of a medium, the true nature of the medium escapes us. This is what McLuhan means when he asserts that "the content of any medium blinds us to the character of the medium."[4]

The "character of the medium" is its formative power, and, for McLuhan, "the formative power in the media are the media themselves."[5] As we have seen, the formative power of a medium is its real "message"; therefore, "the medium is the message," a fact, says McLuhan, of which most men have been ignorant.

McLuhan's work is replete with examples. The following one deals with some of the effects of the railroad and airplane. It illustrates that the "message of any medium or technology is the change of scale or pace or pattern that it introduces into human affairs."[6] In his chapter entitled "The Medium is the Message" he writes:

> The railway did not introduce movement or transportation or wheel or road into human society, but it accelerated and enlarged the scale of previous human functions, creating totally new kinds of cities and new kinds of work and leisure. This happened whether the railway functioned in a tropical or a northern environment, and is quite independent of the freight or content of the railway medium. The airplane, on the other hand, by accelerating the rate of transportation, tends to dissolve the railway form of city, politics, and association, quite independently of what the airplane is used for.[7]

Since the dawn of man, there have only been a few technologies that have had such a profound and pervasive message as to configure major portions of human history. The invention of the Gutenberg press heralded the birth of one of these technologies--the technology of mechanization. For centuries following the Gutenberg press, the human psyche and social organism were the blind servants of mechanization. It determined our conceptions of time and space, our politics and economics, and our religion and philosophy. Even our concept of rationality did not elude its radical influence. The analysis of the Gutenberg technology--its message--is the nucleus of McLuhan's famous book The Gutenberg Galaxy.

The linear, repeatable medium of typography with its attendant homogeneity eventually created in us the illusion of continuous space as container, the illusion of logic as rationality, the illusion of time as endurance, and the illusion of the universe as a Newtonian mechanism. It also created the "public," a collectivity of individuals who were separate, homogeneous and possessed of a "point of view."[8] It fragmented and multiplied human functions in the manner of an explosion.

The language of "illusion" is, of course, McLuhan's, but here, too, the language is perhaps misleading since he does not seem to mean that we possess

an "illusion" that is contrary to "reality." Rather, a given culture is imbued by characteristic, technology-based illusions that differ from those of other cultures with other technologies. Although this point is not always clear in McLuhan's writing--he sometimes gives the impression of wishing to be regarded as being uniquely and quite specially in touch with a "reality" accessible only to himself and a few other privileged initiates--its acceptance can clarify some McLuhanesque perplexities. Our illusions in regard to space, time, rationality, mechanism and so on are the foundations of our epistemology and they are "illusions" only to the extent to which we fail to recognize their bases in technology and the fact that they are artifacts of a given technological world and not immutable generalizations from some "real" world of eternal verities.

It is only recently that electric technology has begun to reverse this fragmenting, explosive process. With the imploding effects of electric circuitry, we are being "retribalized." The "public" has given way to the "mass"; mechanical lineality has succumbed to electric all-at-onceness. Our world has become a "global village."

Now, for the first time, we have a vantage point no other men have ever had. Our vantage point is the result of the present interfacing of two great technological ages, and it is enhanced by the speed of electrically

induced change. It is this shift from mechanization to electric technology and the rapid succession of media and their effects that has sharpened our perception. With new insight we announce "the medium is the message."

Media Hot and Cold

To fully appreciate McLuhan's media analysis, we must understand his reference to media as either "hot" or "cool." By characterizing media in this fashion, McLuhan is distinguishing between what he sees as two fundamental types of media. He employs three criteria in making the distinction between "hot" media and "cool" media. First, he considers the sense or senses that are engaged by the medium; second, the amount of participation that is evoked by the medium; and third, the kinds of effects (message) engendered by the medium. These three aspects of a medium are closely, if not inextricably, interrelated in such a way as to color the nature of the medium, making the "hot" and "cool" distinction possible.

In the following passage McLuhan defines "hot" and "cool" media and indicates how the three above mentioned criteria are interrelated.

> There is a basic principle that distinguishes a hot medium like radio from a cool one like the telephone, or a hot medium like the movie from a cool one like TV. A hot medium is one that extends one single sense in "high definition." High definition is the state of being well filled with data. A photographs is, visually, "high definition." A cartoon is "low definition," simply because very

> little visual information is provided. Telephone is a cool medium, or one of low definition, because the ear is given a meager amount of information. And speech is a cool medium of low definition, because so little is given and so much has to be filled in by the listener. On the other hand, hot media do not leave so much to be filled in or completed by the audience. Hot media are, therefore, low in participation, and cool media are high in participation or completion by the audience. Naturally, therefore, a hot medium like radio has very different effects on the user from a cool medium like the telephone.[9]

The effects of a "hot" medium are directly related to the medium's extension of a single sense in "high definition" and its incapacity to evoke participation. "Hot" media lead to specialization and fragmentation in our lives just as they are a specialization and thereby a fragmentation of our senses. The fragmentation effect of hot media has resulted in the rise of individuality and the individual "point of view." McLuhan refers to this rise of individuality and fragmentation as "detribalization." Since hot media do not permit participation or involvement, they encourage and produce detachment. They enable the individual to break away from the organic wholeness of the group and develop an independent "point of view." The posture of viewing society and the world in an involved, objective, independent manner has become a respectable model for civilized men as they have been conditioned by the bombardment of hot media. The great esteem given the stereotyped profile of the pure scientist in our society indicates the value we place on such a posture.

Primitive or "tribal" man, on the other hand, is not as fragmented as civilized man. Here, the individual is an organic and integral part of that whole which is the group. He is totally involved in the group life. There are no "private points of view." Specialization of the senses in perception has not occurred to the degree it has for societies shaped by mechanical technologies. Consequently, in the tribe we do not find the fragmentation and specialization of life that manifests itself in what we call "jobs." Rather, in tribal cultures we find "roles" which are more inclusive and integrated approaches to life.

Just as primitive man is in contrast to civilized man in these respects, so "cool" media are in contrast to "hot" media in terms of their effects. "Cool" media interrelate our senses and provide a balanced perception. They create involvement in depth as they seduce our participation. The effects of cool media are antithetical to separateness, fragmentation, and individuality. They have the inclusive character of an icon. They are mythical and lead to corporateness.

"In terms of the theme of media hot and cold, backward countries are cool, and we are hot."[10] As hot media "detribalize," cool media have the power to "retribalize."

Enormous disruptions in society occur when a medium of a different "temperature" is introduced into a culture. That is, a hot mechanical medium results in social turmoil when introduced into a "cool" tribal culture. Likewise, television, a cool medium, has been causing a tremendous upheaval since its introduction in our hot society. The "generation gap" is actually the difference between a new generation raised with the influence of television and electric technology and the older generation whose perceptions, goals, beliefs and attitudes have been created by the effects of print and mechanical technology. The electric media cultivate involvement, a concern for the present, a "nowness." They bestow a mythical dimension on experience and cause a need for integration. McLuhan thinks it only natural that children raised with the dominant influence of electric media should eschew "jobs" and distant goals which belong to the past mechanical age of fragmentation and lineality. The new "now" generation are in search of roles and are concerned with the immediate.

At this point, McLuhan's theory of history, which will be discussed in detail further on, begins to emerge. History, at least the history of the West, can be understood as a series of transformations of culture that flow from changes in the epistemological forms that inhere in technology. These changes, in turn, are manifested in

political, social, and economic transformations, often ones of great magnitude. It was the application of this theory, in Galaxy, to the Reformation epoch that established McLuhan as a major thinker, and he has maintained it through his later work even when he has turned from history to "futurism." It is especially interesting, in light of the position taken here, that McLuhan's main concerns are aesthetic, to note that historiography, on his view, becomes an emphatically aesthetic enterprise; i.e., the identification of the epistemological forms of technological transformations, at least at those points when the "temperature" of media is radically altered. Indeed, McLuhan is insistent that at such times it is uniquely the "extra-environmental artist"--especially the "avant garde," such as Joyce, Picasso and Eisenstein--who is best equipped to understand and interpret the foundations of social, political and economic changes.

Media as Extensions of Man

The concepts of medium as message and hot and cool media subsume McLuhan's treatment of one term of the transaction between medium and person. It is here that McLuhan attempts a turn calculated to counter the unrestricted relativism and nascent mysticism of his concept of medium by introducing a biologically based construction

of the person. Technology, it turns out, does not flow from an infinitely variable world of unrestrained imagination. Rather, it is shaped by and grounded in the biological character of man. Media are extensions of man. Too, our response to media--our bundle of "illusions"--constitutes a sort of quasi-biological entity--the "sensorium"--which mediates our "takings" from the total possible world of perception.

All media are extensions of man. That is, any medium extends one or more of our human organs or functions in some material other than ourselves. Two of the clearest examples McLuhan offers in support of this assertion are clothing and the wheel. Clothing is an extension of skin which functions to conserve body heat and energy. The wheel extends the function of transportation, which is a function of the foot.

If this were all McLuhan wished to convey regarding media as extensions of man, my task would be easily concluded. However, he attempts to explain the causative principle behind all extensions of ourselves and their effects upon our sensory lives as well as the reason we are "somnambulists" when it comes to our perception of the nature of media. Addressing himself to these matters he writes:

> In the physical stress of superstimulation of various kinds, the central nervous system acts to protect itself by a strategy of amputation or isolation of the offending organ, sense, or function. Thus, the stimulus to new invention is the stress of acceleration of pace and increase of load. For example, in the case of the wheel as an extension of the foot, the pressure of new burdens resulting from the acceleration of exchange by written and monetary media was the immediate occasion of the extension or "amputation" of this function from our bodies. The wheel as a counter-irritant to increased burdens, in turn, brings about a new intensity of action by its amplification of a separate or isolated function (the feet in rotation). Such amplification is bearable by the nervous system only through numbness or blocking of perception. . . . Self-amputation forbids self-recognition.[11]

In other words, all media are extensions of those parts of ourselves which have been overstimulated to the point of threatening the coordination function of our central nervous system. The strategy of placing the organ outside ourselves is a quest for equilibrium. The "amputation" relieves the strain on the central nervous system by causing a numbness with respect to the threatening organ (sense or function) that is extended. However, the extended organ is thereby accelerated and intensified, becoming a specialist irritation. The central nervous system responds with a generalized numbness. This numbness blocks recognition of the effects of the accelerated function of the extended organ. When the acceleration places a burden upon, or overstimulates, another organ, sense or function, a new "autoamputation" or extension is necessary.

Throughout this process there is a shifting of sense ratios. The equilibrium that is sought by the process of extension is an equilibrium among the senses, for the central nervous system is the coordinator of the senses. As extension amputates an overstimulated organ, a new sense ratio or "closure" is established. The extended and thereby accelerated organ has its own sensory bias which has been intensified by the extension. As a new component of our technological environment, it takes part in the latest transfiguration of our sensory lives.

Thus, it is the interaction of our senses with our technologies and the new scale, pace, or pattern they introduce into our lives that give birth to new technological extensions of ourselves. This interaction and its result prompted McLuhan to say that

> Physiologically, man in the normal use of technology (or his variously extended body) is perpetually modified by it and in turn finds ever new ways of modifying his technology. Man becomes, as it were, the sex organs of the machine world . . . .[12]

The significant reversal from the rapid multiplication of mechanically accelerated and extended human organs to the present implosion came with electric technology. In one of the very few passages in which his attitude toward this phenomenon seems to be apprehensive rather than enthusiastic, McLuhan considers the

new technology in terms of his musings about technological origins in general. He writes:

> With the arrival of electric technology, man extended, or set outside himself, a live model of the central nervous system itself. To the degree that this is so, it is a development that suggests a desparate and suicidal autoamputation, as if the central nervous system could no longer depend on the physical organs to be protective buffers against the slings and arrows of outrageous mechanism. It could well be that the successive mechanizations of the various physical organs since the invention of printing have made too violent and superstimulated a social experience for the central nervous system to endure.[13]

McLuhan believes there is only one extension of man to come, and that seems to be somewhat destined to occur. As he put it in his introduction to Understanding Media:

> After three thousand years of explosion, by means of fragmentary and mechanical technologies, the Western world is imploding. During the mechanical ages we had extended our bodies in space. Today, we have extended our central nervous system itself in a global embrace, abolishing both space and time as far as our planet is concerned. Rapidly, we approach the final phase of the extensions of man--the technological simulation of consciousness, when the creative process of knowing will be collectively and corporately extended to the whole of human society, much as we have already extended our senses and our nerves by the various media.[14]

This final extension of ourselves will be accomplished, according to McLuhan, via the computer. The interplay between man and his technology, broken in all previous stages by the intervention of the human nervous system as a mediating agent, becomes, with electronic

technology, a closed system--a "feedback loop" in computer parlance.

The Concept of Sensorium

McLuhan's concept of sensorium, its variegations and determinative power over perception, is the foundation of his system. This foundational concept is what authenticates McLuhan's theory as an aesthetic theory, and therefore, it will be addressed again in Chapter III. However, given its import for the total system, it could not be excluded from consideration in any sufficient overview of McLuhan's theory.

The sensorium is composed of the five senses. The ratio between the senses varies in this composition whenever a particular sense is intensified. Synesthesia, the interplay or mutual involvement of all the senses, is achieved when there is a balanced ratio among the senses. In this respect, the sense of touch has a special place in the human sensorium. McLuhan asserts that "tactility is the interplay of the senses, rather than the isolated contact of skin and object."[15] Tactility then is itself synesthetic. This, in part, accounts for the fact that tactility is the first casualty among our sensory modes of perception when the visual sense is extended. As we saw earlier, the extension of any sense demands a new closure or ratio among the senses. Furthermore, the

specialized intensification of a single sense disrupts the sensorium, and by fragmentation, thwarts synesthesia.

The technologically extended sense is removed from the human sensorium and interaction with the other senses is thereby prevented. In his "Prologue" to The Gutenberg Galaxy, McLuhan discussed this point.

> ...the principle of exchange and translation, or metaphor, is in our rational power to translate all of our senses into one another. This we do every instant of our lives. But the price we pay for special technological tools, whether the wheel or the alphabet or radio, is that these massive extensions of sense constitute closed systems. Our private senses are not closed systems but are endlessly translated into each other in that experience which we call consciousness. Our extended senses, tools, technologies, through the ages, have been closed systems incapable of interplay or collective awareness.[16]

Although an extended sense is objectified and thus abstracted from the sensorium, it nonetheless effects the sensorium. The new closed system requires sensory closure. Simply stated, the intensification of a sense manifest in any media demands a new ratio among the senses. The reproportionment of the sensorium is thus effected.

In the earlier examination of the phrase "the medium is the message," it was mentioned that a few technologies have been so profoundly influential in human affairs as to pattern major segments of history. The omnivorous effects of such technologies are rooted in the particular disposition of the human sensorium in the

prevailing technological age. Note the following passage from The Galaxy:

> . . . manuscript culture is intensely audile-tactile compared to print culture; and that means that detached habits of observation are quite uncongenial to manuscript cultures, whether ancient Egyptian, Greek, or Chinese or medieval. In place of cool visual detachment the manuscript world puts empathy and participation of all the senses. But non-literate cultures experience such an overwhelming tyranny of the ear over the eye that any balanced interplay among the senses is unknown at the auditory extreme, just as balanced interplay of the senses became extremely difficult after print stepped up the visual component in Western experience to extreme intensity.[17]

In other words, tribal man, presumably through the technology of speech, exaggerated the audile sense. This unbalanced the sensorium which colored his perception and therefore his world. Medieval man's strong oral traditions were balanced by the introduction of writing; the extension of vision. In his discussion of "light through" vs. "light on," McLuhan says "manuscript culture had no fear of tactility."[18] This interplay of the senses means that the medieval man had achieved a balanced sensorium. But his synesthetic experience was fractured when print technology intensified the visual sense. Modern man's distorted sensorium is the necessary result of centuries of visual dominance born of the Gutenberg technology.

The new electric age is relentlessly restructuring the human sensorium, most notably through the synesthetic

quality of the television image. The present electronic revolution is a revolution in perception which portends a radically new personal and corporate future.

The Theory of History Employed by McLuhan

McLuhan employs a dialectical rather than linear theory of history. This is most immediately revealed in his analysis of content. His statement that "the content of any medium is always another medium"[19] is emphatically dialectical in essence. In this context, let us attend for a moment to the development of specific media.

As thesis, we may consider the homeostasis of human functions. Our antithesis then is clearly the environmental overburdening of one of these functions. In a struggle for equilibrium or relief from irritation, we externalize the function in some material other than ourselves. This technological synthesis provides the relief from irritation which McLuhan refers to as "narcosis." However, the relief is short lived, for this technological extension of ourselves is an acceleration of the function so extended in an environmental form. As environment, it creates new burdens and thus becomes its own antithesis requiring a new synthesis. This being the case, the content of a medium is a medium that had been overtaxed by accelerated environmental stresses and was

therefore itself accelerated and intensified to meet the environmental challenge via the current medium.

Now, if we widen our scope to ponder in this same light the history of major technological ages, we will again recognize a dialectical movement that is almost compelling in its neatness.

To begin at the beginning, we may take as thesis the "state of collective awareness (that) may have been the preverbal condition of men."[20] As thought processes become more complex and less readily contained, there develops an impetus toward utterance ("outerance"). The spoken word as a technological extension represents the birth of that long period of preliterate yet verbal man. His extreme audiality is antithetical to the balanced sensorium of his preverbal ancestor. As writing is invented and spreads, a temporary synthesis is achieved in medieval culture. Enter the printing press; the new antithesis--accelerator of the visual sense, greatest of all fragmenters, archetype for all mechanical extensions of bodily organs and functions. The following centuries of mechanical fission witness the age of increased outering of human senses, which, in turn, places increased burden upon the integrating function of the central nervous system and is therefore antithetical to it. The temporary synthesis of the electric technology is the

extension of the central nervous system itself. The electric age evolves into a new antithesis as it cries out for the final synthesis--the technological extension of consciousness. The millenium is reached. A ". . . by-pass [of] languages in favor of a general cosmic consciousness . . . the condition of speechlessness that could confer a perpetuity of collective harmony and peace."[21]

The dialectical character of McLuhan's theory should be quite clear even though it is not unusual to find commentators who seem to think that McLuhan is a cyclic theorist and that the "global village" is a metaphor for some sort of return to primitivism. That is simply not the case since the content of electronic media is print, while the content of verbal media in primitive culture is thought.

It is important to note again that the foundations of historical study are, for McLuhan, material conditions; that is, the technological condition of a given culture. If we take care to notice this, the historical analysis given by McLuhan can be seen as falling, insofar as objects of inquiry are concerned, within the same domain as cultural historians such as Julian Steward, Bernard Wittfogel, and Leslie White (as well as his former associate, George Innes). His emphasis, however, is more

squarely upon the epistemological consequences of material conditions than it is upon the economic and political consequences. Thus, there is a somewhat curious similarity between McLuhan's history and that produced by Marxists working in the tradition of Marx's early work. (The most familiar example to American scholars is Herbert Marcuse.) There are interesting and striking parallels with certain sections of Marx's preliminary study for Das Capital, published under the title of Grundrisse, and with some of Marcuse's work, especially An Essay on Liberation.

The doctrines of medium as message, of cultural transformation through the interplay of hot and cool media, and the concept of the sensorium all flow from an historical vision that is both dialectical and materialist. It is fairly important to keep this well in mind when addressing McLuhan's theoretical hypotheses since to ignore it is to run the risk of isolating McLuhan from his intellectual underpinnings, converting him from a scholar to a mystic. As a kind of dialectical materialist though not a Marxist one, McLuhan can be seen as having approached the problem of extrapolating future cultural configurations from present material conditions, utilizing an aesthetic methodology to analyze the character of media which, for McLuhan, constitute the most relevant material conditional variables.

CHAPTER II: FOOTNOTES

[1]"The Message of Marshall McLuhan," Newsweek, March 6, 1967, p. 53.

[2]McLuhan, Understanding Media, op. cit., p. 23.

[3]Ibid., p. 23.

[4]Ibid., p. 24.

[5]Ibid., p. 35.

[6]Ibid., p. 24.

[7]Ibid.

[8]McLuhan argues that the significance of "point of view" is not that a man may possess one (content) but rather the "point of view" mentality possessed man.

[9]McLuhan, Understanding Media, op. cit., p. 36.

[10]Ibid., p. 40.

[11]Ibid., p. 52.

[12]Ibid., pp. 55, 56.

[13]Ibid., p. 53.

[14]Ibid., p. 19.

[15]Ibid., p. 273.

[16]Marshall McLuhan, The Gutenberg Galaxy: The Making of Typographic Man (New York: The New American Library, 1962), pp. 13-14.

[17]Ibid., p. 39.

[18]Ibid., p. 131.

[19]McLuhan, Understanding Media, op. cit., p. 23.

[20]Ibid., p. 83.

[21]Ibid., p. 84.

CHAPTER III

PERCEPTION AS A CULTURAL ARTIFACT: McLUHAN'S AESTHETIC THEORY

The central problem for McLuhan, probably in all respects, and certainly in terms of his importance for educational theory, is the contention--always at least implicit--that perception is a cultural artifact, formed by the contact of the person with his technological environment. As indicated in Chapter I, the analysis of human perception has long been of central concern among philosophers of art. It has figured into the core of aesthetic theories from Plato through Dewey, and persists as a central problem in the work of contemporary aestheticians. Therefore, in his theory of perception, McLuhan may be viewed as addressing a conventionally aesthetic question, and to the extent that his contention regarding the formation of perception supports his notions concerning the function of art, its appropriate subject matter, its form, and the role of the artist, it provides the basis of an aesthetic theory. Let me extrapolate this aesthetic theory from his work, state it in some detail, and inquire into its significance for, and necessity to, his general theoretical framework.

Perception

Perception is not a constant given, identical in manner for all men regardless of historical or cultural setting. Rather, it is relative and contingent. The variable that determines how we will perceive our world is the particular sensory mode that has been exaggereted in our perceptual habits by the formative effects of environing forces. In The Republic, Plato speculates that the soul of man is comprised of three spirits: the philosophic, the pugnacious and the commercial. When one of the three dominates the others, it thereby characterizes the attributes and interests of the individual. Similarly, when one of the senses constituting the human sensorium dominates the others, it characterizes human perception in a manner consistent with its bias. Like Plato's "spirit," it has attributes and inclinations which it exerts on the whole from a position of superior influence. However, unlike Plato's spirit, a particular sensory mode does not dominate the sensorium from birth. The ratios among the senses are themselves relative to, and contingent upon, yet another set of variables. These are material variables; the technological environments and their attendant forces alluded to above. As explained in the discussion of "Media the Extensions of Man" in Chapter II of this paper, all technological environments are but the externalizations of intensified sensory modes.

Thus, inherently, they contain sensory biases. It is precisely these biases, so extended and materialized as environment, that act as the forces determining our sensory modes of perception. Furthermore, as environment, these technological forces operate so pervasively as to be generally unperceived. To the extent that we are unaware of their conditioning effects upon us, our perception is determined by them, and we must blindly suffer the consequences.

When a radically different technological environment collides with the existing technological environment, enormous social energy is released. Because we are blind to the operant forces of environmental technology at any given time, we are caught unprepared by the clash of environments. Due to our blindness, we lack the control necessary to adjust our sensory threshold and thereby avoid the catastrophic blow of the new technology. So it is, that, historically, the great energies released at such junctures have had among their bitter fruit: wars, revolutions, personal and corporate dislocation and alienation. As McLuhan puts it, we have been "taking it on the chin." However, we need not continue to suffer such consequences, for there are those among us whose powers of perception are beyond the reach of the environmental forces that enslave most men. Their vision is clear and accurate. If we would only let them, they could help us

"to maintain an even course toward permanent goals."[1] They are the artists.

The Role of the Artist and the Function of Art

McLuhan has an abiding respect for artists rooted in his view of them as masters of media possessing uniquely sensitive perceptual powers. In Understanding Media he writes:

> The effects of technology do not occur at the level of opinions or concepts, but rather alter sense ratios or patterns of perception steadily and without any resistance. The serious artist is the only person able to encounter technology with impunity, just because he is an expert aware of the changes in sense perception.[2]

Immune to the effects of technology, "the artist picks up the message of cultural and technological challenge decades before its transforming impact occurs."[3] Endowed with prophetic vision, the artist is of critical social value. However, his merit does not reside in his perceptual acuity alone. Through his work "the artist can correct the sense ratios before the blow of new technology has numbed conscious procedures."[4] By creating works of art that train our perception and judgement, he teaches us to see our environment for what it is and what it does. No longer somnambulists, we regain our autonomy and are enabled to consciously pursue our ends.

The Nature of the Art Object

The art objects that have the potency to train our perception and effect our deliverance are referred to by McLuhan as "antienvironments" or "counterenvironments." Antienvironments provide us with the means of perceiving the environment itself by focusing on the environment as content.

> An environment is naturally of low intensity or low definition. That is why it escapes observation. Anything that raises the environment to high intensity, whether it be a storm in nature or violent change resulting from a new technology, turns the environment into an object of attention. When it becomes an object of attention, it assumes the character of an anti-environment or an art object.[5]

As a new technology becomes environment, it reprocesses the old one as content, making it perceptable and thus, elevating it to an art form. Similarly, an art object or antienvironment brings the environment to our attention. Once enabled to perceive the environment and its active processes, we can prepare for its psychic and social consequences.

McLuhan interprets the function of art as perceptual training for the purpose of acting as an "early warning system" with respect to the impending personal and corporate repercussions of our technologies.

Both the subject matter and the meaning of art are the environmental forces which reorder our sense ratios and determine our perception. The art object is a model signifying those forces and demonstrating their operations.

While McLuhan does not speak to the question of aesthetic form directly, it is evident from his speculations regarding art that his entry under the conventional rubric of aesthetic form could be stated as an environment of an environment. When creative activity achieves this form, the latter environment becomes content and hence, an art object. It is an art object only when it manifests for our inspection the active processes of an environment. Clearly, for McLuhan, the aesthetic experience is essentially a cognitive discovery. "A poem or a painting is in every sense a teaching machine for the training of perception and judgement."[6] The value of art is, on this account, decidedly mediating in character. "Art offered as a consumer commodity rather than as a means of training perception is as ludicrous and snobbish as always."[7]

Significance of McLuhan's Aesthetic Theory

McLuhan's aesthetic theory is the foundation of his general theory of enculturation. It is pivotal to his explication of how it happens that we so readily merge

with our culture. The pace and pattern of human association, our products and values, are determined by the same technological forces that have molded our perception. The technological determination of our perception limits us to, and biases us toward, a particular world view--the world view presented to us by our technological environment. Thus, the primitive tribesmen cannot "see" our films and we view many of their customs as "irrational." In short, we have a technologically produced affinity for our technology.

In their religious instruction children are often taught that God made man in His own image. Also, they learn, God made man to love Him and obey Him. By substituting technology for God, we have a pretty fair picture of what McLuhan is telling us concerning enculturation.[8] On the other hand, some athiests may insist that the concept of God is only the intensified projection of our own personalities. We create the God image out of a need for security (homeostasis?) and to help us bear the burdens of life. Our love for the Diety, they might argue, is actually a form of blind self-love (Narcissus role).

The point to be noted is McLuhan's contention that the environmental forces that precondition us for

ready accommodation to our cultural mileau are generated by extensions of ourselves.

> By continuously embracing technologies, we relate ourselves to them as servomechanisms. That is why we must, to use them at all, serve these objects, these extensions of ourselves, as gods or minor religions.[9]

While it is all too easy for us to blindly become one with our environment, our salvation depends on our perceiving and controlling these enculturative forces. Only then shall we see clearly ("see the light," as it were).[10]

Epistemological Significance

McLuhan's theory of perception provides his answers to some of the epistemological questions which have been perennial in the history of philosophic thought. A few of these questions are: "What is the nature of knowledge?" "How do we come to know anything?" Implicit in McLuhan's writings is a possible solution to the problem of ultimate knowledge or "When will our knowledge be completely accurate?"

The nature of knowledge is relative to the pervading technologies in a given culture. What we accept as true depends on how we perceive the world which in turn, according to McLuhan, is determined by the interiorization of technological forces.

In the Western world, the now receding age of mechanization, was a visual age spawned by the phonetic alphabet and intensified by print technology. It is a paradigm example of the relationship between technology and knolwedge with perception as mediator. The phonetic alphabet first isolated and exaggerated the visual component from the audile-tactile aspects of idiogamatic writing. The Gutenberg technology further intensified and extended the visual sense. As early as ancient Greece, the new environment of the phonetic alphabet, with its strong visual bias, relentlessly and without notice, began reproportioning the sensorium. As the ratios among our senses were altered to give dominance to the visual sense, the visual bias tightened its grip on perception.

While the auditory and tactile modes of perception are sensitive to gaps and disjunctions, the visual bias lies in the direction of continuity and sequentiality. Visual space is space with a vanishing point. It is space as continuum and container. The illusion of the third dimension developed as an automatic response to a visual technology. Addressing this concept of space McLuhan writes:

> . . . only phonetically literate man lives in a "rational" or "pictorial" space. The discovery or invention of such space that is uniform, continuous, and connected was an environmental effect of the phonetic alphabet in the sensory life of ancient Greece. This form of rational or pictorial space is an environment that results from no other form of writing, Hebraic, Arabic, or Chinese.[11]

As for the mental process we vaunt as a method of arriving at truth, it too is an illusion conjured out of the same technological biases. In Understanding Media McLuhan explains our confusion.

> "Rational," of course, has for the West long meant "uniform and continuous and sequential." In other words, we have confused reason with literacy, and rationalism with a single technology."[12]

Later in the same text he refers to ". . . the hidden cause of our Western bias toward sequence as 'logic' in the all pervasive technology of the alphabet."[13]

Therefore, both what we know and our methods of knowing are ultimately determined by environmental conditioning of our perception. Whatever is environment is quickly learned.

> The reason that children learn a language in a year or two is simply because it is an environment. Educationally, there is no reason why physics and mathematics cannot be given the same environmental codification and learned with the same speed and ease.[14]

While McLuhan presents a technologically based form of cultural relativism, there runs through his work the implication of a less relativistic stance regarding

epistemological concerns. Perhaps in his perceptual theory there is an answer to the question, "How can we be sure that our knowledge is accurate?"

McLuhan only uses the terms "illusion" and "distortion" when referring to cultures or perceptual modes in which a single sense has disproportionate influence. It is the goal of media study to help us balance the sensorium. Once we have achieved synethesia, our vision will be unbiased. It seems to follow that knowledge, attained through perception which involves the balanced interplay of the senses, will not be distorted and therefore epistemologically sound. McLuhan seems to imply that a balanced sensorium assures that what we think is true, is not mere illusion, but the result of undistorted perception. Speaking of the importance of balance he says:

> Perhaps the most precious possession of man is his abiding awareness of the analogy of proper proportionality, the key to all metaphysical insight and perhaps the very condition of consciousness itself.[15]

Strategy for Survival

The philosophy of art that inheres in the work of Marshall McLuhan has been highlighted as the necessary core of his general theory of enculturation and the basis of his epistemology. However, it represents more than a means by which we can come to understand cultural evolution

and human learning styles. It is also a strategy for social survival.

The study of art objects is the study of environmental processes. When allowed to operate invisibly, these processes have resulted in the most devastating personal and social calamities. Art as media study is "exact information of how to rearrange one's psyche in order to anticipate the next blow from our own extended faculties."[16] Therefore, "art has the utmost relevance not only to media study but to the development of media controls."[17]

We can no longer afford the role of blind and powerless servants of technology. As McLuhan stated in Beyond the Vanishing Point,

> When the highest scientific knowledge creates the environment of the atom bomb, new controls for the scientific environment have to be discovered, if only in the interest of survival.[18]

It is the discovery of such controls that is the promise of his aesthetic theory.

Art as Experience: Another Perspective

"Comparison and contrast have always been a means of shaping perception in the arts as well as in general experience."[19] John Dewey's Art as Experience[20] presents an aesthetic theory which admits of both comparison and contrast with McLuhan's philosophy of art. Perhaps through

a juxtaposition of the two systems, we can sharpen our perception of McLuhan's position. This exercise should help shed some light on the novelty, completeness and consistency of McLuhan's aesthetic theory.

There are at least two good reasons for selecting Dewey's aesthetics for this undertaking. Dewey's Art as Experience has had wide recognition as a major contribution to the field of aesthetic inquiry. This is largely so because the theory contained in that work is well developed in terms of consistency and completeness. In addition, Dewey presents an aesthetic theory which like McLuhan's, focuses on perception. However, it does so by employing such conventional terminology as form, matter and substance.

As an introduction to the nature and value of art, Dewey distinguishes between experience in general and what he terms "an experience." An experience is one in which "the material experienced runs its course to fulfillment."[21] Its end is not mere cessation. Unlike most experience which is interrupted, mechanical or aimless, an experience is unified by a dynamic configuration of parts which, directed by purpose, flows to completion. It is doing and undergoing, within the formal context of purposive organization, that accounts for an experience possessing pattern and structure.

Aesthetic quality is that which constitutes, in experience, the pervasive unity which marks an experience. As unity moves toward end, aesthetic quality builds to a consummation which is emotionally satisfying. Unity and aesthetic quality are so much one that "no experience of whatever sort is a unity unless it has esthetic quality."[22]

It is the existence of aesthetic quality and its formal causes that account for the commonality between an experience and the distinctively aesthetic experience. However, the distinctively aesthetic experience elevates aesthetic quality to the rank of purpose. The goal of such experience is the very having of the experience. Its primary value is immediate.

Distinctively aesthetic experience is that unique experience which is evoked by an art object. It is in this sense that the construction of dynamic form, which is permeated by and culminates in aesthetic quality, is the work of art in experience--its goal and value. It is also the functioning experiential identity of production and appreciation in the realm of art.

The artist interacts with his work as he creates a new object. His production is a matter of doing and undergoing, which is controlled by his perception of the qualities of the object--its parts and their developing

relationships as well as the total quality of the work, present not only in completion, but throughout as a guide to creation.

Just as the artist must create perceptively, the audience must perceive creatively. Making, without perception, is no more artistic than seeing, without creating, is aesthetic. Perception is active rather than passive. In the act of perceiving an object of art, the audience creates relationships that develop in such a manner and culminate in such a form as to correspond to the relationships and form that constitute the aesthetic experience of the artist. Both artist and audience are involved in creating and perceiving, motivated by the consummatory value of the aesthetic experience.

In the triadic relationship of artist--art object--audience, the art object functions as a link, or more specifically a bridge between artist and audience. This communication between artist and audience is, for Dewey, the function of art. The correspondence mentioned above need not be literal for communication to obtain[23] since the communicative potential of an art object inheres in its formal character. While art is a language, it is not a language of signs and symbols which refer to meanings beyond themselves.

The meaning of an art object is contained in the work of art. Meaning is enacted through rhythm and symmetry, resistance and movement, conflict and harmony. In other words, meaning resides in form and form is that dynamic organization of qualities, relationships and energies which move cumulatively in, and to, consummation. To state the matter in still another way, the dynamic unity, which is the work's aesthetic quality, is also its form and its meaning.

Dewey draws attention to the material of art which, he asserts, are qualities. These qualities are the observed consequences of sense-perceptions garnered through our interactions with the world.

> The material out of which a work of art is composed belongs to the common world rather than to the self, and yet there is self-expression in art because the self assimilates that material in a distinctive way to reissue it into the public world in a form that builds a new object.[24]

> Material is ingested and digested through interaction with that vital organization of the results of prior experience that constitutes the mind of the worker.[25]

Mind, for Dewey, is the funded and retained meanings of past experience that form an active background which engages subsequent experience.

When material is formed in such a way as to make it adequately expressive, it is transformed into aesthetic substance. Dewey recognizes that substance ("what is said")

may be intellectually distinguished from form ("how it is said"), however, he indicates that in the act of experiencing the work of art, "there can be no distinction drawn, save in reflection, between form and substance. The work itself is matter formed into esthetic substance."[26] Again, form is the dynamic organization of the qualities, relationships and energies of a work of art.

Expression is emotional, but as it is guided by purpose, it is intellectual as well. Concretely, expression transforms matter into substance via a medium (i.e., marble, paint, words, etc.). While media are the "languages of the fine arts," they are only the means of evoking the work of art. For, in the end, a work of art is an active process which is recreated in experience only when it is aesthetically perceived.

McLuhan and Dewey Compared

The discussion of McLuhan's ideas may be augmented by briefly outlining a number of the major congruencies and contrasts that become evident in a comparison of his aesthetic theory with the theory developed by John Dewey. For the sake of organization and clarity, I will enumerate their corresponding concerns under distinct conventional subheadings, and assume that the systematic relationships

existing between the ideas of either man are apparent from my previous summaries.

The Artist

Both McLuhan and Dewey describe the artist as possessing unusual sensitivities. In Dewey's view, the artist is one who is highly sensitive to qualities. However, it should be noted that all men have some sensitivity to qualities. Likewise, all men are somewhat facile with symbols while a few are particularly sensitive to symbolic operations--these latter being intellectuals.

McLuhan's artist is sensitive to our technological environment. This is not a sensitivity shared in some measure by all men. It is exclusive. Most men are blind to the forces of technology as environment.

Mind

There exists a similarity between Dewey's concept of mind and the McLuhanesque notion of sensorium. In discussing the active background of experience which constitutes mind, Dewey wrote: ". . . of this background, traditions form a large part . . . each great tradition is itself an organized habit of vision and of methods of ordering and conveying material."[27] The relationship, then, between Dewey's concept of mind and McLuhan's sensorium, is

one in which sensorium is appurtenant to mind. However, Dewey would not assent to the notion of sensorium as completely determined by external forces. There are other aspects of mind which, being active, interact with the sensorium or in Dewey's terms "habit of vision." They, together with organic forces, play a role in perception.

Material

While in agreement concerning the source of appropriate material for art, namely, material garnered through experience, it is again clear that Dewey's description of material subsumes the more limited view of McLuhan. For Dewey, all qualities are legitimate material for artistic enterprise. If we use Dewey's language of "quality" as observed meaning,[28] it is then discernable that the only appropriate material for art on McLuhan's account are the qualities of media.

Form

We might also find some basis for correspondence between McLuhan and Dewey on the topic of form, but just how close a coincidence may exist is quite open to interpretation. If media environments are active processes, and if the conception of form implied in McLuhan's work can be explicitly formulated in a statement such as, "Form is an environment of an environment," then there may be

reason to assert a similarity between McLuhan's description and Dewey's interpretation of form on the grounds that both are conceptualizations of form as active.

With that similarity recognized, we are drawn into a consideration of action. All action requires energy. When we inquire into the source of energy which propels the action in these two alternative conceptions of form, the contrast between them is immediately disclosed. In McLuhan's system, active forces are the environment, thus, the activity of the antienvironment is an intrinsic property of the new environment.

Keeping in mind the flaw in all analogies, allow me to enlist the aid of an analogy to make my point. I have formulated McLuhan's apparent idea of form as "an environment of an environment," and, as such, it may be analogous to traffic reports given from a helicopter. It is the inherent energy and action of the helicopter which accounts for the vantage point and new perspective. It is the helicopter's action as new environment now encompassing the automobile environment that allows us to perceive the environmental forces of the automobile as it effects the pace, pattern, and scale of human associations. The formal action and source of energy lies completely in the antienvironment.

Dewey's concept of form is active, but it is only active when it lives in the individualized experience of a perceiver. It is the going out of energy in perception which furthers the action of form.

The validity of this comparison will rely in large measure on the following examination of perception to which it has led.

Perception

In McLuhan's theory of perception, we are presented with an account of perception that is determined--a die cast by the forces of our technological environment. What and how we perceive are consequences of this environment. Our mode of perception is only altered when we react to an overburdening force in the environment in such a way as to bring into existence a fundamentally different form of technology which molds our perception in a new way.

If we superimpose Dewey's view of experience, that of transaction with the environment--"doing and undergoing," on McLuhan's theory of perception, it seems that in McLuhan's analysis we are typically "under-going." Our occasional "doings" take the form of reactions. In other words, our intercourse with the world is activated and sustained by energies and actions having their locus in our technological environment. What, for Dewey, was a two-sided affair, a continuous balancing of interacting

forces, becomes, on McLuhan's view, a lopsided arrangement of one way action and reaction. We passively mirror the environment rather than being organically related to it in a mutual give and take transaction.

I suspect the overemphasis on environmental forces one notices in McLuhan's general theoretical framework is due to an absence of purely biological factors among the terms of his theory of perception. The forces in Dewey's theory, which account for the human source of energy required in that transaction with nature he calls perception, are expressed in such terms as "need," "impulse" and "organic energies."

Function

Art is communication--on this Dewey and McLuhan agree. But this does not exhaust the function of art for either man. The meaning and value of the communication is the distinguishing factor between these two views of art as communication. For Dewey, the communication is of immediate value. It is consummatory and aesthetic in nature. McLuhan, on the other hand, places a primarily mediating value on the communication. It is more intellectual and practical than aesthetic. Art for him becomes a "teaching machine" or "early warning signal" that's function is mainly cognitive.

Meaning

Dewey refers to meaning in art as something intrinsic to the work of art, while meaning in art, as considered by McLuhan, is symbolic. The meaning in the latter sense is standing in for and referring to the meaning inherent in environmental processes.

Evaluation of McLuhan's Aesthetic Theory

The aesthetic theory under consideration suffers from a variety of difficulties. In closing this chapter, I will attempt to summarize what I believe are the more serious problems attending McLuhan's aesthetics.

Prepared by the wide publicity and much touted originality of McLuhan's ideas, a student of aesthetics might approach his work with the anticipation of encountering a very novel and illuminating philosophy of art. Yet, as we have already witnessed through a comparison with a single alternative, many of McLuhan's basic ideas on the topic are not virgin in aesthetic discourse.

It would be ludicrous to feign surprise when confronted with the observation that artists are sensitive to their environment, or that they draw upon their experience for the material of their work. Certainly, it was not McLuhan who brought to our attention for the first time the fact that past experience predisposes our

orientation to present and future experience. Theoreticians have historically made statements about art that parallel those contained in McLuhan's writings. The following paraphrasings may convey some of these earlier ideas: Music prepares the soul to perceive truth; Art should instruct the proletariat so as to keep them on course toward permanent goals; Art is symbolic of nature; Art is communication. Not even the observation that ends are inherent in means may we list as an original McLuhan contribution. However, the distorted rendering of these ideas, the crippling of their import, and the terminology found in McLuhan's aesthetics may indeed be unprecedented.

The contradictory statements and ideas sprinkled throughout his work pose another sort of problem for McLuhan. Examples may be found in his conceptions of art, the artist, and the function of art. Let me offer one illustration here; others will be taken up in the next chapter.

The function of art is to train perception with respect to the environmental forces of media so we may be prepared for their consequences. It is to this end that the artist creates antienvironments, which present existing environmental forces as content. Because we are blind to any new medium and can only focus on its content (another medium), the creation of an antienvironment

enables us to share in the artist's perception of our existing environment. However, by presenting the environment as content, the antienvironment has brought us no closer to the realization that "the medium is the message" since it insists that we attend to its content. In fact, it is our awareness of this content that is of such practical value. It seems, then, in art "the message is the content," for it is our knowledge of the content of art that will result in a new pace, pattern or scale in our associations.

Perhaps the most serious failing of McLuhan's aesthetic theory is the absence of terms representing strictly constructed biological entities. His concept of sensorium is as close as he ever comes to incorporating biological factors in his analysis. However, the concept is at best only quasi-biological and speculative. Thus, it is difficult to use it in anything more than a metaphorical way.

The uses of metaphor as a basis for the development of hypotheses and a source of utopian vision cannot serve any system very well. In McLuhan's theory, the simplistic and distortive tendencies involved in the use of metaphor find their full manifestation. Consequently, art, a la McLuhan, is severely limited in material and function. In a discussion of art as "radar," he says, "This concept of the arts as prophetic contrasts with the popular idea

of them as mere self-expression."[29] And of the generality of the arts he writes, "We can afford to use only those portions of them that enhance the perception of our technologies, and their psychic and social consequences."[30] In McLuhan's theory of art, the aesthetic is overlooked and art is reduced to only an intellectual and practical phenomenon.

In such a theory, what is at most the incidental by-products of art become the purpose and function of art. The result is McLuhan's failure to distinguish between art, science, and technology. Consider the following statements:

> It is useful to notice that the arts and sciences serve as antienvironments that enable us to perceive the environment.[31]
>
> Today technologies and their consequent environments succeed each other so rapidly that one environment makes us aware of the next. Technologies begin to perform the function of art in making us aware of the psychic and social consequences of technology.[32]

Rather than adding breadth and depth to our understanding of art, McLuhan's aesthetic theory, through its incompleteness, restricts art and confuses the unique contribution that art makes to the quality of human life. Finally, his theory seems to ignore the fact that there can be no mediating values without the existence of immediate values.

CHAPTER III: FOOTNOTES

[1]McLuhan, Understanding Media, op. cit., p. xi.

[2]Ibid., p. 33.

[3]Ibid., p. 70.

[4]Ibid., p. 71.

[5]McLuhan, Beyond the Vanishing Point, op. cit., p. 247.

[6]Ibid., p. 238.

[7]McLuhan, Understanding Media, op. cit., p. x.

[8]With the exception that no intentionality is ascribed to technology.

[9]McLuhan, Understanding Media, op. cit., p. 55.

[10]Admittedly, the anti-Christ theme has become trite, however, in reading McLuhan's work, I can't help wondering if he views technology as a type of anti-Christ. A force that has historically wreaked havoc in the world (wars, revolution, etc.). A force that has its origin in our physical natures. A force that, in its many disguises, seduces us, and deflects us from our true course. Are artists really contemporary prophets? In the absence of biological forces, once we have completely mastered our environment, what will be the source of those "permanent goals" McLuhan mentions? Is his admiration for the middle ages based completely on its "synesthetic" character, or were we then on the right course toward permanent goals?

[11]McLuhan, War and Peace in the Global Village, op. cit., p. 7.

[12]McLuhan, Understanding Media, op. cit., p. 30.

[13]Ibid., p. 88.

[14]McLuhan, War and Peace in the Global Village, op. cit., p. 151.

[15]McLuhan, Beyond the Vanishing Point, op. cit., p. 240.

[16]McLuhan, Understanding Media, op. cit., p. 71.

[17]Ibid., p. xi.

[18]McLuhan, Beyond the Vanishing Point, op. cit., p. 243.

[19]Ibid., p. 238.

[20]John Dewey, Art as Experience (New York: Putnam and Sons, 1937).

[21]Ibid., p. 35.

[22]Ibid., p. 40.

[23]Rarely, if ever, is communication of any sort literal.

[24]Ibid., p. 107.

[25]Ibid., pp. 55-56.

[26]Ibid., p. 109.

[27]Ibid., p. 265.

[28]Ibid., p. 259.

[29]McLuhan, Understanding Media, op. cit., p. xi.

[30]Ibid., p. xi.

[31]McLuhan, Beyond the Vanishing Point, op. cit., p. 243.

[32]McLuhan, Understanding Media, op. cit., p. ix.

CHAPTER IV

METHODOLOGICAL PROBLEMS IN McLUHAN'S WORK

In Understanding Media McLuhan states his purpose:

> The present book, in seeking to understand many media, the conflicts from which they spring, and the even greater conflicts to which they give rise, holds out the promise of reducing these conflicts by an increase of human autonomy.[1]

The increase of human autonomy, McLuhan believes, can be effected through an understanding of media leading to media controls. In his discussion of "Media Hot and Cold" we are given a glimpse of what the exercise of media control may be like.

> We are certainly coming within conceivable range of a world automatically controlled to the point where we could say, "Six hours less radio in Indonesia next week or there will be a great falling off in literary attention." Or, "We can program twenty more hours of T.V. in South Africa next week to cool down the tribal temperature raised by radio last week." Whole cultures could now be programmed to keep their emotional climate stable in the same way that we have begun to know something about maintaining equilibrium in the commercial economies of the world.[2]

As we have seen, the artist is central in training our perception of the media environment. He is also a major figure in the development of media controls.[3]

> To prevent undue wreckage in society, the artist tends now to move from the ivory tower to the control tower of society.[4]

> The percussed victims of the new technology have invariably muttered cliches about the impracticality of artists and their fanciful preferences. But in the past century it has come to be generally acknowledged that, in the words of Wyndham Lewis, "The artist is always engaged in writing a detailed history of the future because he is the only person aware of the nature of the present." Knowledge of this simple fact is now needed for human survival.[5]

> In social terms the artist can be regarded as a navigator who gives adequate compass bearings in spite of magnetic deflection of the needle by the changing play of forces.[6]

The artist, by virtue of his immersion in the universe of media, comprehends and manipulates media in their root qualities. For the artist, a medium is not, as it is for the non-artist, a given, into which thinking and doing are to be cast. Instead, a medium is a potential object of choice, alteration and invention. The artist, in the world of media, is like an explorer equipped with a bulldozer--he can make his own trails, alter the landscape, while his less well-equipped brethren have to make do with extant roads and trails.

The Extra-Environmental Observer

The prophetic vision of the artist is an upshot of his immunity to the environmental forces which determine the perception of most men. The turn of mind and the habit of behavior that constitute his professional activities

give him a freedom of movement that allows him to reach vantage points from which he can survey the terrain and understand it in a global way. He is able to be map-maker and engineer, to forecast difficulties and devise strategies for avoiding them and to apply his special capacities to the control of the otherwise uncontrollable media environment. Therefore, given McLuhan's description of the artist and his proper function, the "control tower of society" will be manned by extra-environmental observers. Herein lies the crux of a variety of related problems.

What will be the credentials of our social navigators? A Masters of Fine Arts degree? Hardly. It would seem that their having been selected as "serious artists" would be their only credentials. However, history has shown that some of the best artists have been very old men, or long dead, before their work was recognized as great art. Typically, these were men who had departed from the accepted art canons and styles of their day. By the time recognition of their work came, and assuming McLuhan's theory of what such work meant, it could not be considered an "early warning" except in the sense that it had existed earlier. The problem which McLuhan seems to overlook is this: In the uncertain realm of the imagination, where the only constraints are those intrinsic to our capacity for dream, vision and construction--very

meager constraints indeed--there is no immediately applicable criteria for discriminating between veridical vision and hallucination, between authentic insight and sensational charlatanry. (Perhaps he ignores the problem because his work is subject to just that sort of criticism.) The situation is a complicated and difficult one. He is in a position to that of someone who, professing to believe in ghosts, admits that ghosts are, indeed, apparitions. Now he complicates the picture by agreeing that the ability to see apparitions is limited in distribution--some people can see them, some cannot. If I am a non-seer of apparitions (a "non-artist") and I encounter two people, both of whom claim they are seeing (different) appirations, on what grounds can I possibly test their competing claims? Apparitions are not material, so I cannot touch them. I cannot see them and there is probably not a jury of other apparitionists to whom I can appeal for validation. (This problem has been analyzed in detail by philosophers interested in the phenomena of extra-sensory perception, especially H. H. Price and C. D. Broad.) In the case of art, history has served as precisely such a jury, so that we can have some confidence in saying that, from a present point of view, some aesthetic positions proved to be more profoundly and intimately accurate in their vision of the cultural reality than did others. Dada and surrealism, for example,

now appear to have been less valid in terms of their articulation of the ethos of the twentieth century than, say, the work of Picasso or Chagall. It is just this process of historical adjudication and reflection that is not possible within the context of McLuhan's advocacy of the artist as an early warning system. Without history, there is no one to tell the ghost that is there from the dream that is not.

But basically, the problem is, if we assume McLuhan's extra-environmental description of the artist, how can we ever, let alone in time, recognize their art for what it is? It would seem that such work would always be unintelligible to media blind mortals.

To pose the problem differently, let's assume for the moment that we have somehow managed to identify a group of artists. Now what do we make of the reports from the "control tower"? They are, after all, knowledge claims of the greatest magnitude. How can we verify artist's knowledge claims and hence validate their directives? We are incapable of reproducing their experiments and checking their observations. I suppose we could be expected to accept these "truths" on faith. But what if, like Van Gogh and Cezanne, they were to disagree about the quality of one another's vision? It would be no more possible for the citizens in Plato's Republic to adjudicate differences between their philosopher kings. While one

might argue that Plato's philosopher kings would never have a falling out, there is simply no basis in past experience that warrants a similar statement about artists. Once again the false ghost puts in his appearance. Confronted with the problem of validation we must, inevitably, be Hamlets before our ghosts, wondering whether to be or not to be.

We have already been quite generous in granting, even for the moment, that "serious artists" could be identified. We could extend our magnanimity, and grant that these artists would, with complete unanimity, communicate their visions to us through their art. Even if we were willing to accept these artist's prophecies on blind faith, there are problems arising from the notion of artist as extra-environmental that would continue to plague McLuhan's theory.

One such problem finds its locus in McLuhan's description of art as an instrument for training our perception of environmental forces. Allow me to illustrate the problem. Suppose Mr. A, gifted with the power of precognition, drew a detailed picture of the confidence man who would soon attempt to fleece his friend Mr. B. Certainly, if Mr. B were a believer in ESP (and perhaps even if he were not) he would use this information to protect himself. He could alter what might otherwise be his normal course of behavior. He would be prepared.

But, even the most ardent ESP zealot would not assume that he had, along with this information, gained some of the precognitive power of his psychic friend. His benefactor had only recreated what he had envisioned, via his exclusive powers of perception, in a form that could be perceived by his less gifted friend.

To put it more briefly, we cannot cure the blind by simply telling them what we see. Similarly, McLuhan's artists could not, through their art, train our perception so that we may one day see as they do. The only possible "training" they could do concerning our limited perceptual capacities would be to train our perception on (as in directing rather than developing) the forces of the technological environment.

One-Factor Explanation

McLuhan's analysis of media is of enormous value in so far as he draws our attention to the importance of media as active forces which have consequences on their own account. Probably our inattentiveness to media, as causes of effects beyond the mere transmission of content, has constituted a kind of "blindness" in the same way that we may be "blind" to the "hidden persuaders" of Madison Avenue. Certainly, it is true that the more we know about the variety of consequences that may ensue as the results of means we have chosen to bring about desired ends, the

greater will be our autonomy. That is, we will be freer to achieve our goals while avoiding possible difficulties that would have otherwise been unforeseen. With such knowledge we are better prepared to control our environment.

Critics of McLuhan have pointed out that if his system is correct, his books, precisely because they are books, are doomed to failure. I agree with their logic, however, I believe his work is valuable as indicated above, and to that extent it is successful. Therefore, I submit, it is the success of his work in this respect that points up the faults in his system. Among these defects are overgeneralization, exaggeration, and contradiction. They share a common source--the single-factor explanation of all personal and social phenomena employed in McLuhan's theory.

With technology as his prime mover, McLuhan explains the entire history of mankind. From the first utterances of our primordial ancestors to the contemporary age of electric circuitry, our thoughts, beliefs, habits, and perceptions have been but the determination of technology. All cultures, social movements, wars and great ages, past and present, are explained by reference to the forces of media alone. Without concession to the content of media, biological forces or the natural environment,[7] McLuhan pushes his thesis of technological

determinism to the point of distortion. This is, of course, not all that unusual among social theorists, social scientists and philosophers. Marxists wish us to believe that material conditions constitute an adequate single-factor theory that explains all historical and social events, just as conservatives propagandize for "human nature" as explicandum, Skinnerians for reinforcement, astrologers for the movement of celestial bodies and Freudians for early childhood experience. While there is no more warrant for saying that a culture's character can be traced to its media environment than there is for saying it can be located in patterns of toilet training or the swaddling of babies, or man's biological proximity to the baboon, charity dictates that, in fairness to McLuhan, we recognize that he is not the only culprit.

The distortions accruing to his aesthetic theory, as a result of his own "single vision," have already been noted. Also, the contradictions involved in the relationship between his concept of the artist and the technological determination of the sensorium are rooted in his one-factor explanation of perception. When the technological environment is the only factor influencing (hence, determining) perception, we are at a loss to account for, or share in, the perceptive powers of McLuhan's artists.

As for content, he has completely disregarded the fact that what is communicated by a medium is also a cause having various effects, some of which bear on subsequent perception and may both directly and indirectly introduce change in human association. If this were not the case, there would be little purpose or value in McLuhan's books, articles, lectures and business consultations.

Teleology

Finally, it should be briefly noted that, for McLuhan, the shape of technology is a teleological force, especially as that shape arises from the imaginative manipulation of the potentials of media environments. (That that does not seem to trouble him much is, perhaps, traceable to his religiosity. Indeed, many of the more peculiar abberations in his work seem most explicable when they are cast against a background of his spiritual biography. Perhaps, if one wished to devise a single-factor explanation of Marshall McLuhan, his religious experience might be the most profitable place to look. That, however, is another entire study.) For McLuhan, history is often a march toward a predestined end, dictated by the inevitability of technological impact. His methodology, then, is subject to the standard list of criticisms and weaknesses common to all teleological approaches.

CHAPTER IV: FOOTNOTES

[1]McLuhan, Understanding Media, op. cit., p. 59.

[2]Ibid., p. 41.

[3]Obviously, one who controls media, controls our perception and thus the mode and content of our knowledge.

[4]Ibid., p. 70.

[5]Ibid., pp. 70-71.

[6]McLuhan, Through the Vanishing Point, op. cit., p. 238.

[7]As opposed to any and all inventions of man.

CHAPTER V

CRITICISMS AND EVALUATIONS

McLuhan's general theory of enculturation is impressive in its scope. It contains ideas that, if not completely novel, are interesting re-statements of insights concerning such topics as the relationship between the process of learning and what is learned, the means-ends continuum, the relationship between man and his environment, the nature of art, and the nature of knowledge.

As indicated in Chapter I, it is a theory which has already prompted some writers to begin drawing educational implications from it. Some McLuhan disciples would employ McLuhanesque notions as the basis for a complete restructuring of education. In concluding this paper, I would like to present some final evaluative comments on the general theory followed by an assessment of McLuhan's significance for educational thought and practice.

Either/Or Dichotomy

Andrew Forge wrote of McLuhan ". . . in his work there is an icy undertone which strikes terror." Forge sensed the coldness of a nightmare which somehow permeates McLuhan's theory. Icy terror is the response one should expect

from the spector of oneself disemboweled. McLuhan has dichotomized man to such an extent that he is either the mindless slave of mechanical technology or a powerless bystander confronted with a global electric brain. Such a dichotomy presents us with a vision of ourselves as just so much meat in a universal butcher shop. It causes the existential nausea to well up once more without even the consolation prize of volition.

In this new set of "either/or's" we are either exploding or imploding, specialized or integrated, separate and uniform or organic and unique, individual or social. In the tribe we were integrated, organic, unique, and social. After the industrial age had ravaged the tribal wholeness, we became specialized, separate, uniform, and individual.

The forces of media which McLuhan describes may have emphasized the individual aspects of man in some periods of history and the social in others. But never making of man exclusively one or the other. Biology tells us man is an animal while history tells us he is social. That he is an animal (no two of which are biochemically the same) with a unique set of experiences (viewpoints!) is enough to ensure at least a minimal level of individuality. As for his social nature, all of the human sciences negate atomistic social theory and demonstrate that man qua man has always existed in and through relations with other men.

Social relations changed form during the industrial age, however, they were then, and will be at the close of the electric age, social relations. Man has never been exclusively individual in any age. Neither has he been exclusively social. What primitive tribe may we study that is more primitive than a "tribe" of chimpanzees. Yet Jane Goodall in her observations of these primates of South Africa discovered not only dominant social forms of behavior but individuality as well--this, in our most primitive relative's non-literate, non-verbal, tribal, corporate, integrated social life.

McLuhan's work is confusing to the point where one may begin to take his basic precepts seriously and seek the locus of the confusion amid one's own "literate" ground rules of logic. However, closer inspection suggests the confusion is McLuhan's. He has mistaken two aspects of human nature for two mutually exclusive entities.

Throughout his work, McLuhan repeatedly criticizes the notion that logic has much to do with rationality. He insists it is only a way of thinking cultivated by the linear, sequential and connected bias of our highly visual technology. "Logical or connected discourse," he writes, "is highly visual and has very little to do with human reasoning."[1] While McLuhan tells us what rationality is not, namely logic, he does not say what it is.

To criticize his work as illogical could only invite McLuhan's scorn. He would look on such criticism as the somewhat pathetic habit of a mind trapped in the snares of literary tradition. Nonetheless, if McLuhan is to be taken seriously in the philosophy game, he must play by the basic ground rules of logic. To put his work above rational criticism is perhaps, on this playing field, the most serious criticism of all. One cannot pretend he is playing good baseball simply by asserting that his foul ball was a homerun. To argue that logic does not apply to him would clearly put McLuhan out of philosophy and perhaps into mysticism.

Contradictions

As McLuhan "probes," oblivious to any need for consistency, he gives rise to the host of contradictions embodied in his publications. The following examples may serve as a sampling of the problems a student of media will encounter in McLuhan's work.

One important problem has been discussed in Chapter III. It is the opposition between the technological determination of perception on the one hand, and the freedom from media-determined perception on the part of the artist. Nowhere does McLuhan offer a satisfactory resolution to this dilemma.

At times McLuhan treats a topic as though he had forgotten his earlier pronouncements on the same subject. On these occasions, if he doesn't blatantly contradict himself, he at least betrays an inconsistency in the use of terminology that is central for an understanding of his system. In the chapter entitled "The Medium is the Message" in Understanding Media, he refers to the electric light: "The electric light is pure information. It is a medium without a message, as it were, unless it is used to spell out some verbal ad or name."[2] Only two pages later he writes: "The message of the electric light is like the message of electric power in industry, totally radical, pervasive, and decentralized."[3] Later in Chapter V, he again speaks of the message of the electric light. "In a word, the message of the electric light is total change."[4]

While expounding on his conceptions of media as hot or cold, he has the following to say about their effects on the audience: "Hot media are, therefore, low in participation, and cool media are high in participation, or completion by the audience. Naturally, therefore, a hot medium like radio has very different effects on the user from a cool medium like the telephone."[5]

Among the effects of hot media, is the inclination to act without reacting and the development of a detached aloofness.

McLuhan's elaborately constructed category of "hot media" becomes confused and suspect as he addresses the hot medium of radio late in the book. In the chapter on radio, subtitled "The Tribal Drum," he remarks of Hitler's victims and critics, "They danced entranced to the tribal drum of radio that extended their central nervous systems to create depth involvement for everybody."[6] And on the next page he writes, "The famous Orson Welles broadcast about the invasion from Mars was a simple demonstration of the all-inclusive, completely involving scope of the auditory image of radio."[7]

In his discussion of the movie medium in Beyond the Vanishing Point, he explains: "The movie is highly pictorial, but kinematically it is discontinuous and non-visual, and thus demands participation."[8] However, he categorizes the movie as a hot medium in the first chapter of Understanding Media.

While on the subject of hot and cool media, there are two other observations which should be noted. McLuhan criticizes classification as a habit of print dominated Western culture. His protestations in McLuhan: Hot and Cool notwithstanding, he is clearly open to his own criticism when he constructs the categories of "hot media" and "cool media."

If convenient explanations can be offered at the expense of his own classifications and discriptions,

McLuhan doesn't hesitate to offer them. "In audile-tactile Europe TV has intensified the visual sense, spurring them toward American styles of packaging and dressing."[9] How is it possible for a medium that McLuhan characterizes as fundamentally tactile and only meagerly visual, to intensify the visual sense? Isn't it reasonable to assume that the hot and highly visual media of photography, film and print would have already extended the visual sense in Europe beyond the point where television could intensify it further? But McLuhan is bent on attributing all cultural changes to media rather than content. Since it is widely assumed that the content of American films have brought about some measure of change in European life styles, McLuhan seems pressed to disregard his own ideas concerning the tactile quality of TV in order to claim that such changes are accountable in terms of media alone. Hence, it is more convenient for him to explain changes in European dress and packaging by utilizing the visual aspect of television. This strange contortion also contradicts his notion that the television medium is antithetical to packaging in general.

There are so many incongruities in McLuhan's thought that it would be pointless to recount them all. But before moving on to educational considerations there are a few more that should at least be mentioned. Relying on Hume to buttress his argument that causation is an

illusion occurring to mentalities crippled by literacy, McLuhan presents media as the cause of all cultural configurations.[10] In his writings we find a determinism that seeks to find the autonomy that would anhiliate itself and an investigator who prides himself on having the detachment of a medical doctor admidst disease, while decrying detachment as one of the depravities of a visually biased sensorium.

Other Logical Problems

Undoubtedly McLuhan's disdain for logic and consistency cause problems for his readers. At the same time, his disregard for logic accounts for a large part of his acclaim. A native curiosity, the satisfaction and sense of security that comes with understanding, and the need to adequately relate to the environment are characteristics of most laymen and researchers alike. But inquiry is not always an easy undertaking and answers are not always simple. Our reticence to expend time and energy, combined with our desire to understand, seems to create a tension within us that is expressed in our clamorous applause for those who construct for us simple answers to complex problems. McLuhan offers simple answers. However, we must be wary of such explanations. Not because they are always wrong, for some are not (Occam's razor is a useful tool), but because our thirst for them may too easily prompt an uncritical acceptance of them.

Whether McLuhan approves or not, the question of logical consistency needs to be raised in a critical analysis of any theory. Certainly a theory which proports to explain the evolution of cultures from the stone age to the age of computers with only a single factor and a modicum of postulates is not to be excepted. The question, once raised and pursued, reveals more than the sampling of contradictions previously cited. It indicates that the illusion of explanation saturating McLuhan's work results from the use of contradictory hypotheses.

McLuhan argues that all of culture is determined by technology. He amasses "evidence" to support his claim that literate industrial man has become homogenized by a visually biased technology. While his critics have objected to his facts and believe his interpretations of history and literature are suspect, McLuhan's collection of evidence has been most prodigious. But to debate such an all encompassing claim, we need not accumulate a similar arsenal of evidence. If someone were to argue that all birds can fly, and proceeded to support his claim by producing thousands of particular birds that did in fact fly, we need only to produce one penguin to falsify his claim. The evidence of pluralism in industrial societies as compared to tribal or primitive societies[11] would seem to be sufficient grounds for rejecting McLuhan's assertion

that western man has been relentlessly and completely homogenized by print. However, McLuhan's description of how alternative sensory modes have created tribal or literate cultures seems almost a strategy contrived to avoid such criticism. His description has greatly enhanced his apparent ability to explain all.

The dominant sensory mode of perception in any culture characterizes that culture and provides the key to understanding the culture. Tribal cultures, which are dominantly audile-tactile, possess an organic wholeness. They are corporate and collectivist. However, they are also distinguished from literate western cultures by their pluralism, uniqueness, and discontinuity. When McLuhan turns his analysis to literate cultures, shaped by the visual stress of typography, he describes western cultures as marked by homogeneity, uniformity, and continuity. Yet print technology is also responsible for the fact that western literate man is individualistic and private.

The following excerpts from Understanding Media pertain to his hypotheses concerning tribal and literate man:

> Print created individualism and nationalism in the sixteenth century.[12]

> As we move out of the Gutenberg era of our own culture, we can more readily discern its primary features of homogeneity, uniformity, and continuity. These were the characteristics that gave the Greeks and Romans their easy ascendancy over the non-literate barbarians. The barbarian or tribal man, then as now, was hampered by cultural pluralism, uniqueness, and discontinuity.[13]

Given McLuhan's assumptions about the effects of print technology on western culture, evidence of common beliefs or common patterns of behavior may be ascribed to the homogenizing effects of typography, while differences of beliefs or behavior are interpreted as the individualizing consequences of the "private point of view" conditioning of literacy. Similarly, sameness and divergence in tribal cultures are explainable since his hypotheses also state that the audile sense exaggerated in non-literate cultures leads to organic wholeness, corporateness, pluralism, uniqueness, and discontinuity.

Armed with premises as these, it is not surprising that McLuhan seems capable of explaining all cultural phenomena. A contradictory hypothesis is capable of explaining any and all observations. However, since there are no observations that could, in imagination or in fact, disprove such contradictory hypotheses, they are at best, poor tools for understanding culture, and at worst, meaningless.

Disregard for Content

I have stated that McLuhan pushes many of his ideas to the point of distortion. The most striking example of this habit is his insistence that the medium, and only the medium, is the message. I am more than willing to grant that there are differences between the pace, pattern, and scale of human associations rendered

through the use of mule train as opposed to jet planes. But to argue that the pace, pattern, and scale of human associations (in short, the message) is not at all effected by the cargo of the jet, be it love letters or H bombs, is patently absurd. This particular distortion is not simply the result of an over emphasis of medium as opposed to content, but results from a prior mistake which allows the possibility of such an overemphasis at the outset. This error is the artificial dichotomy between medium and content. While the distinction is a useful one in discourse and analysis, to mistake it for an existing fact easily leads to just the kind of distortion to which McLuhan is prone. We may fruitfully discuss the color and the shape of a square in a checkerboard pattern. However, the path we take will cease to be fruitful once we forget that the color and shape of the square are inextricably bound up in one another as an experienced fact. In much the same way, McLuhan's analysis reaches the point of diminishing returns once his analytic distinction between medium and message ignores the experiential fact that what is communicated cannot be separated from how it is communicated. It is this oversight that facilitates McLuhan's disregard for content. Even if we choose to linger in a universe of analytic discourse, it can hardly be denied that the

content of media are themselves means which lead to personal and corporate ends.

Conclusions

How, then, shall we assess McLuhan's status and his relevance for educational planning and practice? First, it is clear that his work is not sufficiently strong and comprehensive to stand as a "theory of education." It can only be so regarded if one is willing to oversimplify the notions of both "theory" and "education." Given that a comprehensive theory cannot be derived from "the medium is the message," there are several alternatives for incorporating McLuhan's thinking into our educational purview that fall short of simply discarding his work in totality. Let us explore a few of them.

If a body of statements are not clear enough or comprehensive enough, if they will not yield consistent descriptions, powerful explanations or predictive hypotheses, then the way in which they enter into our systematic thinking is limited to proferring them a place in virtue of their status as metaphors. That, ultimately, would seem to be what McLuhan has constructed--a rather monumental metaphor for use in the inspection of culture. Like all metaphors, it contains flaws that mitigate its utility as a theory but, like all metaphors, it can be

instructive. The problem is not so much in the use of metaphors as instruments of thought as it is in the elevation of metaphors to a quasi-theoretical status. This unwarranted mental trick, whether in the case of McLuhan, "the problem solving approach," "relevance," "alternatives" or fashionable rubrics like Consciousness III, Futureshock or what have you, is endemic. While it spawns cults, confusion and plain simplemindedness, the fault is not with metaphor as a tool, but with the witless misuse of that tool. In a real sense, McLuhan himself has said how his work is to be used, when he has insisted on calling his ideas "probes"--a reasonable analog of "metaphor." He does, however, sometimes fail to limit himself to a recognition that the principle role of metaphor in reasoning is to direct attention, rather than to produce knowledge. (Knowledge may, of course, be produced, but that is a secondary consequence, stemming from the action of directing attention.) Once we have arrested our attention on some aspect of a context, then we can inquire into it systematically, and, perhaps, eventually attain knowledge that is stable enough to direct practice and behavior. McLuhan's significance for education, then, lies in the structure of concerns to which he directs our attention. Of many possibilities, let us consider three.

Education is a Function of the Total Environment

It is a truism, of which we are all aware, that learning and development--the sorts of things we call "education" are functions of the total environment and not just of that small (and probably insignificant) portion of it that we recognize as "schooling" or "formal education." From time to time, educators are reminded of that fact, and the reminder is marked "received and noted," filed and forgotten. There are multiple reasons why those memoranda get shuffled into the dead files of our minds. For one thing, that education that is "non-formal" is, by definition, outside the defined domain of schoolmen and to attend to it is seen to be irrelevant at best and, on some interpretations, dangerous. Another reason lies in the fact that, even if we recognize the entire spectrum of educational contexts, little is known about any except those that are visible and deliberate--those that are "formal." The history of education is, mainly, the history of schooling, in part because that is the aspect of education that has been documented, studied, designed and evaluated.

McLuhan has given us another strong reminder that education is multi-faceted and has, to a limited extent, moved one of those facets closer to the kind of conceptualization and documentation that is needed in order to

include it in our total scheme of educational thought. We can begin to see the emergent shape of one of the components--call it medium or form or whatever--that is a significant dimension of education. Once we note it we can ask both what it is and what its effects are. The next reasonable step would seem to be that of refining and operationalizing the concept of "medium" in ways that might have some promise of eventual theoretical adequacy. (That might, at least, give us some grounds for saying, sometime, whether "medium" can be satisfactorily operationalized or if, like some other concepts it is ultimately ineffable and, thus, theoretically sterile.) We can at least use McLuhan's notions to give somewhat greater flesh and force to those reminders of the multi-dimensionality of education that we are too readily disposed to ignore.

Learning is a Function of the Form in Which Material is Presented

Here is another truism that we are prone to ignore. McLuhan makes a strong case for the view that form of presentation is, at least, a relevant variable in the learning situation. In those few comments on education contained in his work the central notion is always to the effect that, children accustomed to learn material in one way ("electronically") will learn very little (or nothing) if confronted with a different

("literate") medium. He worries a lot about that in his books. While we do not need to accept his rather extreme interpretation, his contention, buttressed by at least a modicum of evidence, can serve as a ground for insisting on the inclusion of a dimension of presentational form ("cognitive style," "sensibility," "pedagogical expectations" or whatever) in any educational theory that aspires to comprehension and adequacy.

Useful Education Must Include an Aesthetic Dimension

A very old part of the educational debate is that of the place of aesthetic in the enterprise. The debate has largely centered around the question of what education in the aesthetically-loaded realms--art, music, literature, dance--could possibly be good for. Advocates of the aesthetic have insisted that, while it may not be good for much of anything, it is a good in-and-of-itself, a vital aspect of the full range of humaneness and so on. Opponents of the aesthetic (who, for the most part, have prevailed) have simply said that, since it doesn't look like it is good for much, it is a "frill," to be barely tolerated only when there is a surplus of funding or of student time. (Or, on a slightly different approach, it is sometimes tolerated as part of "bread and circuses" strategy for dealing with student disaffection from the schools.) McLuhan gives the debate an interesting turn.

(The turn is not dissimilar to that taken by Dewey when he integrated the aesthetic dimension into his architectonic theory of inquiry, since "inquiry" and "practicality" were closely identified in his work.) First, McLuhan's commitments are to an aesthetic that, in its emphasis on perception, sensuous qualities and the organization of experience, is closely allied with aesthetic positions that usually terminate in an "art for art's sake" posture. (That, of course, is also the posture that usually concludes that aesthetic education is not "for" much of anything. The McLuhanesque turn comes in his insistence that, far from being of little utility, aesthetic sensitivity is of paramount utility--it is the bedrock survival tool. He carries that argument along several fronts, perhaps the best-developed and valuable one being his interesting elucidation of the social vision of James Joyce. His contention (with variously persuasive documentations) that many social disasters can be read as the consequence of a failure of aesthetic sensitivity gives, by inference, a central place to the development of the aesthetic dimension in the cultural and educational affairs of men. Although this contention can be disputed and remains at the level of contention, it would seem to merit inclusion in the continuing discussion of the proper place of aesthetic in the educational scheme.

A modest appraisal of McLuhan, then, is the conclusion of this study--one that neither portrays him as an unprincipled charlatan bent upon the corruption of Western culture nor as the ultimate savant holding the only key to salvation in his elegantly articulated hands. Rather, he must be viewed as a reasonably insightful, often obscurantist and sometimes arrogant formulator of provocative cultural hypotheses of considerable interest and some plausability. A fuller judgment on the viability of his position must await the test of further inquiry and testing, especially the sort of inquiry that would treat his amorphous concepts in a theoretically disciplined way. Even so, his efforts, just because they are of global scope, can be instructive and illuminating, even when they are in error. He has sought to expand our vision of man, culture and history and even though he probably does not deserve an exclusive podium, he has at least earned a chair in the global symposium of the intellect.

CHAPTER V: FOOTNOTES

[1]McLuhan, Hot and Cold, op. cit., p. 284.

[2]McLuhan, Understanding Media, op. cit., p. 23.

[3]Ibid., p. 25.

[4]Ibid., p. 60.

[5]Ibid., p. 36.

[6]Ibid., p. 260.

[7]Ibid., pp. 261-262.

[8]McLuhan and Parker, Beyond the Vanishing Point, op. cit., p. 240.

[9]McLuhan, Understanding Media, op. cit., p. 54.

[10]One of the few, if not the only cultural occurrences McLuhan does not attempt to explain is the first technology--the technology of speech. There is no preceeding technology to explain its emergence, yet, in a quite serial and connected fashion, it causes all else. In this light it takes on the character of an uncaused cause.

[11]See, for example, Georges Balandier, Political Anthropology (New York: Viking Press, 1962).

[12]McLuhan, Understanding Media, op. cit., p. 34.

[13]Ibid., p. 89.

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