



National Library
of Canada

Bibliothèque nationale
du Canada

Canadian Theses Service

Services des thèses canadiennes

Ottawa, Canada
K1A 0N4

CANADIAN THESES

THÈSES CANADIENNES

NOTICE

The quality of this microfiche is heavily dependent upon the quality of the original thesis submitted for microfilming. Every effort has been made to ensure the highest quality of reproduction possible.

If pages are missing, contact the university which granted the degree.

Some pages may have indistinct print especially if the original pages were typed with a poor typewriter ribbon or if the university sent us an inferior photocopy.

Previously copyrighted materials (journal articles, published tests, etc.) are not filmed.

Reproduction in full or in part of this film is governed by the Canadian Copyright Act, R.S.C. 1970, c. C-80.

**THIS DISSERTATION
HAS BEEN MICROFILMED
EXACTLY AS RECEIVED**

AVIS

La qualité de cette microfiche dépend grandement de la qualité de la thèse soumise au microfilmage. Nous avons tout fait pour assurer une qualité supérieure de reproduction.

S'il manque des pages, veuillez communiquer avec l'université qui a conféré le grade

La qualité d'impression de certaines pages peut laisser à désirer, surtout si les pages originales ont été dactylographées à l'aide d'un ruban usé ou si l'université nous a fait parvenir une photocopie de qualité inférieure

Les documents qui font déjà l'objet d'un droit d'auteur (articles de revue, examens publiés, etc.) ne sont pas microfilmés.

La reproduction, même partielle, de ce microfilm est soumise à la Loi canadienne sur le droit d'auteur, SRC 1970, c. C-30.

**LA THÈSE A ÉTÉ
MICROFILMÉE TELLE QUE
NOUS L'AVONS REÇUE**

Art education and Marshall McLuhan

Georges F. Singer

**A Thesis
in
The Department
of
Art Education**

**Presented in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy at
Concordia University
Montréal, Québec, Canada**

April 1987

© Georges.F. Singer, 1987

Permission has been granted to the National Library of Canada to microfilm this thesis and to lend or sell copies of the film.

The author (copyright owner) has reserved other publication rights, and neither the thesis nor extensive extracts from it may be printed or otherwise reproduced without his/her written permission.

L'autorisation a été accordée à la Bibliothèque nationale du Canada de microfilmer cette thèse et de prêter ou de vendre des exemplaires du film.

L'auteur (titulaire du droit d'auteur) se réserve les autres droits de publication; ni la thèse ni de longs extraits de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation écrite.

ISBN 0-315-35536-0

ABSTRACT

Art education and Marshall McLuhan

Georges F. Singer, Ph.D.
Concordia University, 1987

This thesis is structured as a series of arguments to validate the hypothesis that McLuhan's perception of art offers all the necessary elements to make up the basis of an innovative approach to art education. The thesis is divided into six chapters:

CHAPTER 1 - ART EDUCATOR'S PERCEPTION OF MCLUHAN'S IDEAS

The first chapter describes the context in which the author perceives McLuhan's ideas and explores how art educators have perceived McLuhan's work through their writings.

CHAPTER 2 - MCLUHAN'S NOTION OF MIND

The second chapter situates the foundation of McLuhan's thinking by presenting his ideas on the functioning of the mind and the senses.

CHAPTER 3 - MCLUHAN'S VIEWS ON MEDIA AND ENVIRONMENT

The third chapter presents the notion of interface between humans and their environment. How do humans influence their environment? How does his

environment influence them? McLuhan's ideas on media dynamics and media cultures are explored.

CHAPTER 4 - MCLUHAN'S NOTION OF ART

The fourth chapter describes McLuhan's perception of the role of the artist and art in the context of the electronic environment.

CHAPTER 5 - MCLUHAN'S NOTION OF EDUCATION

The fifth chapter explores McLuhan's ideas on the need for a new approach to education.

CHAPTER 6 - MCLUHAN'S METHODS

The sixth chapter presents the methods of exploration which he used to generate his own creative work. These methods evolved from his study of the creative process in literature and in the visual arts. They are the foundation of McLuhan's approach to art and education.

A conclusion synthesizes McLuhan's ideas on art education.

ACKNOWLEDGEMENTS

I would like to acknowledge the assistance of the members of my thesis committee, Dr. David Pariser, chairman, professors Lowry Burgess and Stan Horner. I am deeply indebted to Marshall McLuhan and his close friend and associate Barrington Nevitt for their friendship and inspiration.

TABLE OF CONTENTS

ABSTRACT

ACKNOWLEDGEMENTS

TABLE OF CONTENTS

PREFACE 1

INTRODUCTION 2

CHAPTER 1

ART EDUCATOR'S PERCEPTIONS OF MCLUHAN'S IDEA 6

Introduction 6

A. The author's perception of McLuhan's ideas 7

B. Survey of art educator's perceptions of McLuhan's ideas 29

1. Need for a new approach to education 31

2. Understanding media 32

3. Environment as a teaching machine 33

4. Definition of the artist 33

5. Failure of the literary establishment 34

6. Art 35

7. The role of the artist 36

Conclusion..... 37

CHAPTER 2

MCLUHAN'S NOTION OF MIND..... 40

A. On the nature of consciousness 40

B. Dynamics of the mind 43

1. Synesthesia 43

2. Equilibrium between the senses 44

3. Making sense: concepts and percepts 44

4. Hot and cool 46

5. Sensory input and recognition 47

6. Hemispheric dominance 47

Conclusion..... 50

CHAPTER 3

MCLUHAN'S VIEWS ON MEDIA AND ENVIRONMENT 52

Introduction	52
A. Media dynamics	52
1. Definition of media	53
2. Development of a new medium	53
3. Media as extensions of people	54
4. Média as translators	55
5. Amputation	56
6. Narcissistic narcissis-numbness	57
7. Somnambulism	59
8. Acceleration	61
9. From explosion to implosion	62
10. Media interactions	63
11. Media reversal	63
12. Medium is the message	64
B. Media and culture	66
1. Acoustic space/tribal society	68
2. Visual space / literate society	70
3. The Marconi constellation/the Global village	76
Conclusion.....	84

CHAPTER 4

MCLUHAN'S NOTION OF ART.....	87
A. Definition of the artist	87
1. Everybody is encouraged to be an artist	89
2. Artist / Scientist	89
3. Self expression / revelation	91
4. The artist is subversive	94
B. Role of the artist	95
1. Making versus matching	95
2. Cleansing and renewal	97
3. Training perception	97
4. Pattern recognition	98
5. Anticipation	99
6. Retrieval	101
7. Programming	102
C. Art	105
1. Art forms	106
2. Art as nature	107
3. Primitive art	108
4. New art	109
5. Vulgarly and banality	111
6. Genuine fake	112
7. Good taste	112
D. The role of art	113
1. Antienvironment	115
2. Environment	116
E. The audience	119

F. Popular art	124
1. Advertising	126
2. Slang	130
3. Games	130
Conclusion.....	131

CHAPTER 5

MCLUHAN'S NOTION OF EDUCATION.....133

A. Information hunter	134
1. Learning a living	135
2. Environment as a teaching machine	137
3. Living in two worlds	139
4. Discarnate humans	140
5. Violence and identity (War as education)	142
6. Private and group identity	142
7. Role and Job	144
8. Goals	145
9. Involvement	146
B. TV Child	147
1. Drop out	150
C. Failure of the literary establishment	151
1. Critique of specialism	152
2. Comprehensive awareness	154
3. McLuhan as comprehensivist	156
4. Critique of schools	156
D. Need for a new approach to education	159
1. Understanding media	161
2. Language of form	163
3. School as antienvironment.....	164
4. Making versus matching	166
5. Educational media.....	168
Conclusion.....	169

CHAPTER 6

MCLUHAN'S METHODS172

A. The method of exploration	173
1. Reconstruction/invention	176
2. Suspended judgment	178
3. Interface	181
4. Figure/ground	182
a) Double figure/ground	185
b) Omission	186
c) Reversal	186
5. Cliché and archetype	187
a) Probing	188

b) Scrapping	188
c) Retrieving	189
6. Radial logic	190
7. Direct comparison and examination	191
8. Paradox	191
9. Probes	192
a) Facts	192
b) Emotions	193
10. Organization and sharing of ignorance	195
11. Dialogue	196
12. The comprehensive method of analysis	196
a) What does this artifact amplify or enhance?	197
b) What does this artifact replace or obsolesce?	198
c) What does this artifact revive or retrieve of similar nature previously obsolesced?	198
d) What does it flip into when pushed to its maximum potential?	199
B. The mosaic form	200
1. Symbols	203
2. Metaphors	204
3. Aphorisms	205
4. The doublet: comparison and contrast	206
5. Omission and exaggeration	206
6. Parallel action	207
C. McLuhan and the scientific method	208
Conclusion.....	211
 CONCLUSION	 215
 BIBLIOGRAPHY	 224
 APPENDICES	
 ART EDUCATOR'S PERCEPTIONS OF MCLUHAN'S IDEAS.....	 223
Appendix 1: Survey of Journals in Art Education.....	232
Appendix 2: Survey of Journals in Education.....	250
Appendix 3: Survey of Resources in Education (ERIC).....	256
Appendix 4: Survey of Books on Art Education with references to McLuhan's work.....	259

PREFACE

McLuhan never expressed any interest in structuring his work logically. He opposed the simplistic use of categories and ridiculed linear mindlessness. This might account for the variety and richness of ideas in his work and at the same time for the difficulty in grasping them as a whole.

With the exception of my introductions and conclusions the thesis is centered around McLuhan's ideas. The present dissertation should be thought of as a musical structure with four main themes (creativity, media, art and education) each theme having a multitude of resonances in which all the other themes seem to be consistently replaying. This acoustic structure is an effort to capture McLuhan's spirit within its own habitat, unfortunately it is quite demanding for the reader. The best strategy would seem to be to slip on something of interest and slowly sink into it. Like in reading a newspaper, the most interesting article is often the best place to start.

INTRODUCTION

I don't pretend to understand it. After all my stuff is very difficult.¹

This thesis is an analysis of Marshall McLuhan's writings. It is not a critique of McLuhan's work; it is a reframing of the work by selection and organization to yield an art education perspective. McLuhan's ideas are presented as often as possible in context with the use of quotations. This direct approach tries to convey the essence of McLuhan's personal poetics and offers a referential structure for further research.

Marshall McLuhan, professor of English Literature and director of The Center for Culture and Technology at the University of Toronto has written some fourteen books and hundreds of articles on the social and psychological impact of media.² His ideas have received considerable critical attention, four books have been devoted to the criticism of his theories³; which he preferred to call approaches. The major assumptions underlying of McLuhan's work as stated in

¹"Understanding Marshall McLuhan: or Will T.V. Put a Zombie In Your Future," Senior Scholastic XC (April 28, 1967), p. 13.

² Marshall McLuhan, The writings of Marshall McLuhan and what has been written about him, 1934-1977 A bibliography. (Fort Lauderdale, Florida: Wake-Brook House, 1977).

³Harry H. Crosby and George R. Bond, eds., The McLuhan Explosion. (New York: American Book Company, 1968); Sidney Finkelstein, ed., Sense and Nonsense of McLuhan. (New York: International, 1968); R. Rosenthal, ed., McLuhan. Pro and Con. (New York: Pelican Books/Penguin Books, 1968); Gerald E. Stearn, ed., McLuhan. Hot and Cool. (New York: Dial Press, 1967).

Report on Project in Understanding New Media, a study commissioned by the United States Department of Health, Education and Welfare, were:

- (a) that nothing had yet been done to bring understanding to the effects of media in patterning human associations,
- (b) that such understanding was quite possible; media assumptions do not have to remain subliminal,
- (c) that the absence of such understanding was eloquent testimony to the power of media to anesthetize those very modes of awareness in which they were most operative.⁴

McLuhan believed that humanity's hope of creating an harmonious environment depended on its capacity to probe and understand what surrounds it.

Every culture and every age has its favorite model of perception and knowledge that it is inclined to prescribe for everybody and everything. The mark of our time is its revulsion against imposed patterns. We are suddenly eager to have things and people declare their beings totally. There is a deep faith that concerns the ultimate harmony of all being. Such is the faith in which this book has been written. It explores the contours of our own extended beings in our technologies, seeking the principle of intelligibility in each of them. In the full confidence that it is possible to win an understanding of these forms that will bring them into orderly service.⁵

McLuhan's personal definition of his work and his definition of the role of the artist converge. Both stress the same need to understand and be aware.

I'm determined to understand this age, because it's the only one I expect to live in. So I probe like an artist, I keep probing the present and what I probe I do not present as a view, but purely as conjecture.⁶

⁴ Marshall McLuhan, Report on Project Understanding New Media, (Washington, D.C. : National Association of Educational Broadcasters, Department of Education, 1960).

⁵ Marshall McLuhan, Understanding Media: The Extensions of Man, (New York: The New American Library, Signet Books, 1964), p. 21.

⁶ Marshall McLuhan, Harley Parker and Jacques Barzun, Exploration of the Ways, Means and Values of Museum Communication with the Viewing Public. A Seminar, (New York: Museum of the City of New York, 1966), p. 18.

The artist is the man in any field, scientific or humanistic, who grasps the implications of his actions and of new knowledge in his own time. He is the man of integral awareness.⁷

McLuhan considers the achievement of such awareness to be the basis of a new order of harmony and an end in itself.

We have now become aware of the possibility of arranging the entire human environment as a work of art, as a teaching machine designed to maximize perception and to make everyday learning a process of discovery.⁸

Art as a classified activity dissolves with the advent of electric circuitry. The art object is replaced by participation in the art process. This is the essential meaning of electric circuitry and responsive environments. The artist leaves the ivory tower for the control tower, and abandons the shaping of art objects in order to program the environment itself as a work of art.⁹

This thesis is structured as a series of arguments to validate the hypothesis that McLuhan's work has all the essential theoretical components to provide the basis for a new approach to art education. The first chapter situates McLuhan's work within the area of art education by exploring how art educators have perceived McLuhan through their writings. The second chapter situates the foundation of McLuhan's thinking by presenting his ideas on the functioning of the mind and the senses. Based on these ideas the third chapter presents his notion of the interface between people, media and environment. How do humans influence their environment? How does the environment influence humans? The relations between media and the environment are explored. It is in this dynamic context of the electronic environment that McLuhan situates his ideas of art and education. These are discussed in the fourth and fifth chapters. Finally the sixth chapter presents McLuhan's approach to creativity. The basis of

⁷ Marshall McLuhan, Understanding Media: The Extensions of Man. (New York: The New American Library, Signet Books, 1964), p. 71.

⁸ Marshall McLuhan, The Medium Is The Massage. (New York and Toronto: Bantam Books, 1967), p. 68.

⁹ Marshall McLuhan, "The Future of Art," Ethos 1 (1983), 1:10.

McLuhan's approach to art and education is a methodology of exploration which he developed to generate his own creative work. This method which evolved from his study of the creative process in literature and in the visual arts is the subject of the last chapter of the dissertation.

McLuhan's original contribution lies in the creation of a set of exploratory techniques and in the richness of the discoveries generated by using these methods. As with most great artists his vision challenges the very way we think of the world that surrounds us.

CHAPTER 1 - ART EDUCATOR'S PERCEPTION OF MCLUHAN'S IDEAS

Introduction

The origin of my interest in this thesis topic comes from my curiosity about how Marshall McLuhan's ideas could be integrated into a new approach to art education. Having studied with McLuhan at the University of Toronto's Center for Culture and Technology and having later undertaken studies in art education I thought that McLuhan could make an important contribution to many of the issues discussed in art education. McLuhan while being more closely associated with the fields of communication studies or English Literature dealt with many concerns similar to the ones expressed in art education.

This chapter is divided into two parts. In the first I present the ideas on art education which form the context in which I perceive McLuhan's contribution. The second section of this chapter is an analysis of how Marshall McLuhan's work was perceived by art educators. An extensive survey of publications in art education was used as the basis of this research. Some publications in education were also reviewed but were not found to be of particular interest. Each article or book was read and a selection of relevant excerpts are quoted in appendix 4. The findings in the last part of this chapter are grouped in terms of topics most often referred to in McLuhan's work. Critiques of his work are also briefly mentioned. From this survey one can conclude that interest in McLuhan's

work among art educators reached its peak in the 1970's. Unfortunately very little interest has been shown since.

A. This author's perception of art education

My approach to art education is based on my belief that to teach art one must seek to understand it in terms of how it differs and is similar to other areas of human activity. With this objective in mind my interest has focussed on how humans construct and expresses their thoughts and feelings about themselves and the world that surrounds them. The following exploration into this topic should give the reader some insight into the context in which I view McLuhan's work and his contribution to art education.

A new concept of man has evolved; he is now thought of as an active system built or thrown into the environing world. His knowledge of the world is no longer conceived as that of a disinterested spectator who sees what encounters his eye; the existential behavior of the human being in his surrounding medium has emerged as a vital determinant of his cognition. The latter is shaped, and in turn shapes, an ongoing transactional relationship between man and his environment.¹

The premises of this transactional or systems approach can be described as follows:

a) Each person's biography is considered to be unique. Each individual with particular characteristics shapes his or her own life in an original way.

In a systemic portrait, man cannot be a simple receiver and giver of stimuli, information and energy; nor is he a passive receiver of stimuli coming from an external world but in a very real concrete sense he creates his universe.²

¹ E. Laszlo, Introduction to Systems Philosophy, (New York: Harper and Row, 1972), p. 197

² W.E. Thompson, Inquiries into the Epistemology of Visual Learning. (Doctoral dissertation, University of Oregon, 1976) Dissertation Abstracts International, 1977, (University Microfilms No. 77-13, 215), p. 28.

b) Humans are defined as embedded in a specific context and yet autonomous within it.

c) The Human-environment system is viewed as an open system. People's search for knowledge is only limited by the extent of their transactions.

The fundamental characteristic of life metabolism, growth, development, self regulation, response to stimuli, spontaneous activity etc... ultimately may be considered as consequences of the fact that the organism is an open system.³

d) People's choices are based on their values which originate from a mixture of learned abstract theory and lived experience.

Given the slenderest clues to the nature of surrounding objects we identify them not so much according to what is directly sensed, but what is believed.⁴

People's perception and behavior cannot be dealt with in a purely normative or scientific way. Ulrich Neisser acknowledges:

Behavior, like perception, is a continuing interaction with the social and the natural environment. It can be understood only with respect to that environment whose historically-developed characteristics lie as far outside the scope of sociobiology as of behavioral science. Neither biology nor any other science will relieve us of the responsibility of making our own decisions.⁵

Both Neisser's cognitive approach and the previously mentioned systems approach share some similar premises:

- a) Human activity occurs relative to a knowledge base and is context bound.
- b) Affect (emotions) is both a manner and a product of knowing.
- c) Both conscious and unconscious knowledge guide us in choosing and accomplishing our aims.

³ L.U. Bertalanffy, General Systems Theory, (New York: George Braziller, 1973), p. 149.

⁴ R.L. Gregory, Eye and Brain, (New York: McGraw-Hill, 1973), p. 11.

⁵ Ulrich Neisser, Cognitive Psychology, (New York: Appleton-Century-Crofts, 1967), p. 195.

In both approaches, meaning is seen as always being in relationship, it is never absolute nor is it ever alone. It is always embedded in context.

Robert Sommer⁶, in discussing the results of experiments to evaluate the appreciation of certain environments, refers to the well-known Hawthorne experiments and points out that environmental changes (in this case different lighting conditions in a factory) did affect the workers. But the effects were a function of each individual's interpretation of these changes and the significance associated with them. The results were not in relation to whether there was more or less light in the environment. They were a factor of how the figure of the changing light levels was perceived by individual workers against the ground of the factory's normal functioning. McLuhan and Nevitt⁷ share the same arguments in saying that "the meaning of a word is not what it says, not merely its definition, but what it does as a figure in a context." Words, objects and environments in themselves have no 'real' meaning. People give and take away meanings from the things that surround them. Duchamp's "ready-mades" are analogous to this process. By taking familiar objects and giving them a new context (art gallery) Duchamp created new meanings for these objects and the art gallery.

The surrealists also offer us many examples of the figure (object) / ground (context) process in the creation of new knowledge (paintings, etc...). By changing the way in which things are classified together we jolt the perspective of the classifier (the audience) and create a new association. The perspective of the classifier (the audience) or what could be called common sense is the usual ground for this type of knowledge making. In understanding the constructive

⁶Robert Sommer, Tight Spaces: Hard Architecture and How to Humanize it, (Englewood Cliffs, N.J.: Prentice-Hall, 1974), p. 99.

⁷Marshall McLuhan and Barrington Nevitt, "Medium Meaning Message," Communication 1 (1974) : 29.

and transactional manner in which humans acquire their sense of reality, the notion of context becomes a key element in explaining the variety and relevancy of human responses. From this point of view, the usual inference of competence in human beings based on the performance of similar activities is highly questionable. Differences, in other words, do not inevitably reflect disability.

...Those groups ordinarily diagnosed as culturally deprived have the same underlying competence as those in the mainstream of the dominant culture. The differences in performances being accounted for by the situations and contexts in which the competence is expressed.⁸

Individual and cultural differences in perception are apparent when any of the senses are studied through psychophysical measurement. For instance, Segall, Campbell and Herskovits, the authors of The Influence of Culture on Visual Perception (1966), found that people in different cultures were differentially susceptible to certain geometric illusions. Their work has helped in gaining a better understanding of what has been called phenomenal absolutism or the objectification of perception (the feeling that the world is as it appears to be).

The normal observer naively assumes that the world is exactly as he sees it. He accepts the evidence of perception uncritically. He does not recognize that his visual perception is mediated by indirect inference systems...Socially, one important aspect of phenomenal absolutism is the observers assumption that all other observer perceive the situation as he does, and that if they respond differently it is because of some perverse willfulness rather than because they act on different perceptual content.⁹

The individual is the real content of any message. Nevertheless some distinctions must be made between the different particularities of the individual.

⁸ Bruner and Cole, 1974: 980

⁹M.H. Segall, D.T. Campbell and M.J. Herskovits, The Influence of Culture on Visual Perception, (Bobbs-Merrill, 1966), p.5.

At least three categories of events can be identified as contributing to an individual's unique identity:

- a) The events that contribute to one's unique genetic make-up. These events will generate the innate features that will give the individual from the start a specific point of view.
- b) The events that make up the specific history of the individual. Chosen or not chosen by the individual, these events and their sequence in time and space shape the individual in a unique way.
- c) The events that are shared within a group of individuals. These events contribute to the socialization of the individual. Whereas the two previous categories of events tended to isolate individuals because of their specificity, the main purpose of this category is to bring them together by creating common goals and procedures.

These are the events that make us compatible and integrated members of a social group by gradually internalizing the ideas and attitudes expressed by key figures in our life -- observing their actions and attitudes, adopting them and expressing them as our own... We tend not to engage in activities or behaviors that those we consider significant disapprove of. We change friends or our behavior.¹⁰

We consider our symbolic interpretation of environmental stimuli as a private, individual matter but we have learned the symbolic meaning of these stimuli from public sources. The general context of our life setting is learned through interactions with others. The process of socialization produces specific preferences with which the individual identifies himself. These social symbolic conventions have usually little to do with the nature of the objects themselves. They make up the basic conventional context in which people can exchange

¹⁰F.D. Becker, "Environmental Messages: Housing as Non-Verbal Communication," Unpublished manuscript, Cornell University, 1975, pp. 8-9.

messages. Verbal language for example can be thought of as a well structured social convention.

The expressions in our language acquire their meaning from the procedure by which we give them definite uses in our practical dealings with one another and the world, not from inner articulation alone, nor from any essentially pictorial character of utterance themselves.¹¹

Modern Western art as a language system is also ruled by conventions one aspect of which, paradoxically, is the desire for change and continuous innovation. Conventions, well structured or not, are created by humans and imposed on humans through some form of learning process.

Paradoxalement, c'est donc à travers une idée vague et commune à tous que chacun va se sentir absolument singulier. Et réciproquement, c'est en se singularisant continuellement selon l'éventail des différences sérielles qu'on réactive le consensus imaginaire qu'est l'idée du modèle. Personnalisation et intégration vont strictement de pair.¹²

The paradox between the notion of personalization (emphasis on individual particularities) and socialization (emphasis on social conventions) is eliminated since society organizes the process of personalization within the menu of the social conventions it offers. One is free to express choices within the recognized possible solutions to the problem. One can become a lawyer, a doctor, etc..., the decision as to which of these is chosen is unfortunately more often than not also based on similar conventions of social prestige and well being. This leaves very little recognition of the individual's particular identity.

Needless to say most social institutions promote social idioms and hope to integrate marginal factors. Thus, the "normal" individual has little chance of achieving a mature personality capable of self-actualization based on his or her own identity. This process is viewed as a luxury, left to the rich, artists and other

¹¹A. Janik and S. Toulmin, Wittgenstein's Vienna, (New York: Simon and Shuster, 1973), p. 217.

¹²J. Baudrillard, Le Système des objets, (Paris: Gonthier, 1968), p.172.

marginals. Up to now, people's hope has been their own inefficiency in social control and the whims of chance.

A good example of the strength of the socialization process lies in the influence it has on the way humans choose the objects that surround them.

Duesenberry has suggested that the purchasing of a product as symbolic behavior may be even more important to the person than the benefits provided by the functioning of the object. Expensive, highly stylized cars, that may be hard to enter and to leave, provide passengers with poor visibility and consume enormous quantities of gasoline are successful because they are associated with power, wealth, prestige, youth, sex. Their transportation function is of little significance.¹³

The psychological lift that an individual gets by purchasing is often due to the fact a person is satisfying certain social expectations. The suitability of the object in terms of the person's social image is often the main criterion.

In appraising the suitability of an object for personal use, an observer usually combines his perceptual impressions of the object with considerations of his body image. He projects himself in action and subsequently in an actual test, compares his achievement with his expectations. Often the actual test is considered unnecessary, with visual appraisal sufficing.¹⁴

These comments reinforce the idea that what is most in demand is not technology, housing or services but personality and identity. The lack of maturity in an individual creates a constant state of insecurity. To compensate for this individuals seek socially recognized objects which will satisfy their socially created expectations about themselves and construct a false sense of security.

One's self concept can be strengthened if one believes the object purchased or associated with is recognized publicly and classified in a manner consistent and supportive of one's self concept...

...Since the effect of a different product on the individual is ultimately dependent on the product being a publicly recognized symbol, products

¹³F.D. Becker, "Environmental Messages: Housing as Non-Verbal Communication," Unpublished manuscript, Cornell University, 1975, p. 3.

¹⁴J. Ruesh and W. Kees, Non Verbal Communication. (Berkeley: University of California Press, 1956), p. 126.

with shared meanings will elicit reactions from others that support self-esteem.¹⁵

Most of the visual communication (T.V., magazines, etc...) that surrounds us promotes the joys associated with the acquisition and display of social objects, attitudes and beliefs. Within a framework respectful of the individual, a person's manipulation of the micro-environment is part of his or her general sense of growth and control over life. Instead of this, the individuals become spectators of their "own" (social) development.

In Western societies advertising is an example of a learning system that reinforces and influences conventional "wisdom". It situates a product in its rightful context. It tells the viewer what meanings are to be associated with it. Through repetition it can reinforce a less widely held belief. The efficiency of this system is dependent on redundancy and the individual's personal perception of the problem.

Only one third of those commercials one is exposed to make any active impression in memory. Of those which are attended to, only about half are correctly comprehended, and fewer than five percent are actively recalled for as long as 24 hours. Incoming information thus is disregarded if it is seen to be irrelevant. The total marketing offering must be designed so that the consumer perceives its features as providing an answer to a perceived problem and felt needs.¹⁶

As mentioned earlier, the perspective of the classifier (the audience) is the ground for most types of communication. Advertisers must adhere to some mental surface to be efficient in influencing it. In adhering to it they reinforce it and at the same time associate their products to it. Examples of this are always interesting because of their often paradoxical nature. Cars are often shown in a natural setting (country - no road shown), even though they contribute to

¹⁵F.D. Becker, "Environmental Messages: Housing as Non-Verbal Communication," Unpublished manuscript, Cornell University, 1975, p. 10.

¹⁶J.F. Engel, R.D. Blackwell and D.T. Kollat, Consumer Behavior (3rd ed.), (Hinsdale, Illinois: Dryden Press, 1978), p. 6.

polluting the environment and destroy the natural landscape. Menthol cigarettes are associated with the freshness of spring water, even though their true nature is closer to fire, smoke and chemicals.

Advertisers know that their products can be criticized, this is why they associated them with "motherhood statements" that are irreproachable. Friendship, nature, mother/father figures, science, the progress of technology, etc..., all these concepts are favorably acknowledged by the audience and constitute good surfaces to adhere to. Another good surface is the concept of a "problem". Beer for instance is not sold as a mixture of hops and malt but is presented as the possibility of solving the "thirst problem" in an agreeable way. Advertising often ends up creating problems so as to be able to solve them. In solving our each and every problem, advertising establishes a symbolic "milieu" that presumes to identify the best we can hope for.

The following are some of the dynamics that seem to regulate the acceptance of socially determined conventional objects.

1. Social conventions are dynamic. They change over time and are usually context dependent. They tend to form clusters that reinforce each other to create specific configurations of attitudes (e.g.: life styles). In a cluster formation change in one element can be expected over time to change the whole of the aggregation.
2. Conventions are sometimes created by accident but more often they are designed or accepted because they meet certain specific expectations. Ideally they help individuals to adapt to their environment and maintain their stability and equilibrium in that environment.
3. The more often a convention is repeated (tradition), the better its chances of acceptance and integration into the symbolic "milieu" of a group.

4. The more captive the audience, the more forcefully a convention can be imposed.
5. The more often a convention is presented, the more meanings are projected upon it. The meaning of a convention, to be efficient in communicating, needs to be well outlined. It should be in contrast to other possible meanings so as to differentiate itself. When new meanings are projected on old conventions, it is sometimes advantageous to forget the old meanings.
6. Once a convention has been established, it acquires familiarity and is easily integrated into the individual's idea of the world. The individual usually holds on to a convention and identifies with it for a certain time.
7. Conventions are modified by use and often lose their potency because of contextual changes. Repetition can lead to fatigue and boredom. The desirability and meaning of conventions are continuously being re-evaluated.
8. Abrupt change in a convention can lead to a loss or rejection of identification on the part of the individual.
9. New conventions should be exciting because they meet new expectations and are yet familiar enough to be integrated in the existing symbolic "milieu". The industrial designer Raymond Lowey called this process M.A.Y.A. (Most Advanced Yet Acceptable).¹⁷
10. The "least objectionable" theory postulates that in a situation of choice between different but similarly uninteresting alternatives one will choose the least objectionable.
11. Mimicry, the introduction of a new (or old) convention under the cover of an old (or new) one achieves a sense of continuity and emotional involvement by referring to what is comfortable and familiar. The closer the distance between the two conventions (new and old), the more interest they will attract.

¹⁷J.-P. Favre, Color Sells Your Package, (Zurich: A.B.C., 1969), p. 168.

12. The real informational value of a convention is a function of its novelty; the difference between what was known and what has been learned.

13. Humans are both a makers and a consumers of conventions. In both cases these are defined by the parameters of the continual equilibrations and contingencies of the world the mind as an organism creates and exists within.

14. The more conspicuous a convention, the more easily it can be imposed by reference groups. A convention can be conspicuous in that it is easily seen and identified by others. It can also be conspicuous if by not being available it stands out and is noticed.

These few observations only serve as examples of the factors that affect people's social choice of beliefs.

In this approach, the appreciation of art, like other human activities has been considered to be socially determined.

Aesthetic qualities... they no more exist in the world than mathematical equivalence does. Qualities are attributed by human beings to their perceptual experiences in terms of their already confirmed constructs. Thus aesthetic qualities themselves do not have existential status independently of human interpretive cognitions... Once the doctrine of "immaculate perception" has been overcome naive realism can no more reassert itself in aesthetics than it can in any other sphere of empirical cognition.¹⁸

Alland¹⁹ refers to studies by Irvin Child in relating art appreciation or aesthetic judgement to the process of socialization. Art judgement would seem to correlate with the amount of formal education as well as with experience in looking at art in museums, galleries, books and magazines. Art making activities such as painting, sketching, sculpting or photography would seem to correlate much less since they involve the individual more at a personal creative level and less at a social normative level.

¹⁸E. Laszlo, Introduction to Systems Philosophy, (New York: Harper and Row, 1972), p. 225.

¹⁹A. Alland, The Artistic Animal, (New York: Doubleday, 1977), p. 45.

The essence of the visual perception process as presented by Ulrich Neisser is dynamic and creative:

In short, the reaction of the nervous system to stimulation by light is far from passive. The eye and brain do not act as a camera or a recording instrument. In perceiving, complex patterns are extracted from that input and fed into the constructive processes of vision... Although the eyes have been called the windows of the soul, they are not so much peep-holes as entry ports, supplying raw material for the constructive activity of the visual system.²⁰

Even though socialization plays a limiting role, visual perception in the systems approach is seen as a series of constructive and creative operations. It assumes that "You make the image, it's that simple."²¹ A person does not see anything, he interprets bunches of electrical information and creatively constructs what he sees. In contrast to the sense-datum arguments (what we see is what appears to be), it directs us towards the creative and constructive aspects of the brain.

The systems approach is also in opposition to the image theory which suggests that the retinal image is filed away somewhere. The analogy to photography is incorrect, neither visual perception nor memory are copying processes. Perceptual experience is unbounded as opposed to merely reflecting the unboundedness.

Our visual field is not neatly cut out of our objective world, and is not a fragment with sharp edges like the landscape-framed by the window. We see as far as our hold on things extends, far beyond the zone of clear

²⁰Ulrich Neisser, Cognitive Psychology. (New York: Appleton-Century-Crofts, 1967), p. 11.

²¹G. Bateson, Steps to an Ecology of Mind. (New York: Ballantine Books, 1972), p. 478.

²²R. Warren, "The Ecological Nature of Perceptual Systems," in Handbook of Perception: Perceptual Ecology, eds. E.C. Carterette and M.P. Friedman, (New York: Academic Press, 1978).

vision, and even behind us. When we reach the limits of the visual field, we do not pass from vision to non-vision.²³

The path from visual stimuli to our conceptual world is indirect and complex. Sensory inputs are not sensory closures. A one to one relationship between an object or an event and its internal encoding does not exist. There is a distinct difference between the reception of visual data and its processing. Bruner²⁴ emphasizes "that it is the processing of data that yields significance not its receipt." This processing is always done within the limits of an individual's context. The continuously changing state of a person's context makes it possible for the same sensory data to yield different significations at different times. People's perceptual system is an integrated whole where all senses interplay; visual perception cannot be isolated from the rest.

The rules of perceptual ordering, constancy and the principle of "pragnanz" are being contradicted by empirical data that suggest the organization of the brain is constructive and systematic. Both Julesz²⁵ with research in stereoptic vision and Gregory²⁶ with his research on size constancy indicate some intrinsic problems in Gestalt theory and point towards a more constructive view of visual perception.

A criticism made of normative theories among psychologists is that they do not account for "the necessary ability of the human organism in its

²³M. Merleau-Ponty, Phenomenology of Perception. (New York: Humanities Press, 1962, originally published, 1945), p. 277.

²⁴Jerome S. Bruner, The Relevance of Education, (New York: Norton and Company, 1973), pp. 126-7.

²⁵B. Julesz, "Texture and Visual Perception," in Image, Object and Illusion: Readings from Scientific American, (San Francisco: W. H. Freeman and Company, 1974), pp. 59-70.

²⁶R.L. Gregory, Eye and Brain, (New York: McGraw-Hill, 1973), p. 151.

consciousness and unconsciousness to function flexibly, creatively and to adapt and actuate itself in different environments"²⁷

The idea of untrained or deficit perception comes from the theoretical supposition that an ideal type of perception exists. The systemic approach provides a theory and data to contradict this. Perception must be understood as a function of people's individual context (a mixture of lived experience and abstract theory). Visual education should be based on principles of discovery not on principles of repetition.

In interpreting and explaining the world to himself humans create a net to catch the world. This search for knowledge often takes the form of hypotheses which are later systemized to become theories. The making of hypotheses is a creative constructive process that exists in the minds of humans, not in the phenomenon itself. The transactional nature of these constructs makes them historically and culturally variable. Theories for these reasons do not and should not hold still.

Aesthetics or styles as social conventions can be considered similar to theoretical paradigms. With the exception that they are not formulated in as widely accepted conventional language as science for instance, the physical essence of the work is not easily replaceable by abstract concepts (unless they are part of the art work), without leaving out as much as we put in. Art finds its identity more in its particularities than in its generalities.

The real problem arises when one needs proof of the generality. Besides the credibility of the source, art compared to science does not seek proof of a hypothesis through a socially accepted methodology. Art is what you can get away with. Art research on the other hand adopts scientific methodology in the

²⁷W.E. Thompson, "Inquiries into the Epistemology of Visual Learning," (Doctoral dissertation, University of Oregon, 1976), Dissertation Abstracts International, 1977, (University Microfilms No. 77-13, 215), p. 75.

hope of making its hypothesis socially acceptable. The following discussion of scientific methodology tries to bring forth certain particulars of its basic assumptions and its less than fruitful venture into the human sciences.

a) Through time and for survival purposes, humans have developed a certain degree of isomorphism between their experience and the physical environment. In the humanities, the basic nature of the phenomenon has not achieved as large a consensus as in science.

b) Scientific methodology can only help to validate or invalidate hypotheses that can be formulated following its established criteria. This leads to defining people's experience within the limited categories of measures, tests and experimental procedures that are prescribed. Because of this the results rarely tell us anything about the everyday functioning of people.

c) The emphasis on quantitative models forces us away from the basically transactional nature of people's experience. Taxonomies do not deal with interaction; they can identify but they can not explain.

d) The atomist assumption that everything can be broken down to simple elements is usually in contradiction with the holistic approach which puts more emphasis on the transactional aspects.

e) Correlative research in dealing with large groups of human's on a random basis, directs itself only to similarities rather than to the way an individual live their lives in their own unique way by interacting within their own context. When perception ceases to have the individual as content it ceases to have any content at all.

f) Science as method in contrast to other ways of knowing presents a unified approach inclusive of its own contradictions. Its attempts to be self-corrective allow it to continuously change. "Anything can be questioned if it is questioned

in terms of how the existing human-made explanatory system is not coordinating with emerging (or existing) observations and experience."²⁸

g) The way humans go about searching for a personal common sense understanding of the world and the methods of science, differ as forms of knowledge. One emphasizes and values the subjectivity of the individual, the other stresses objectivity and seeks social recognition. The individuals create their hypotheses, science discovers them by a methodology of proof.

h) Science, sometimes involuntarily, has promoted the idea of reality having a static nature, with immutable laws. The systemic approach views people's individual constructs of knowledge quite differently.

Our view of facts is very theory laden at best, as we further understand facts to be transitory and only interpreted in terms of context and the 'lived' of man. The 'lived' of man then means change it means purposeful action orienting itself towards appropriate states of organization, themselves in transformation via their open condition and the exchange of energy and information from other changing systems. The systems view sees no final higher form, no final explanation deducted or induced from an aggregate of facts. ²⁹

The nature of thought and the problems associated with its expression are at the center of any human form of knowledge. Each medium shapes our thoughts in its own way and yet immediate thought would also seem to exist as Einstein suggests in the following:

The words of the language as they are written or spoken do not seem to play any role in my mechanisms of thought. The physical entities which seem to serve as elements in thought as certain signs and more or less clear images which can be voluntarily reproduced and combined. The above mentioned elements are, in my case, of visual and some muscular type. Conventional words or other signs have to be sought for laboriously

²⁸R.P. Chaney, "Scientific Inquiry and Models of Socio-Cultural Data Patterning: An Epilogue," in Models in Archeology, ed. David L. Clarke (London: Methuen and Company, 1972).

²⁹W.E. Thompson, "Inquiries into the Epistemology of Visual Learning," (Doctoral dissertation, University of Oregon, 1976), Dissertation Abstracts International, 1977, (University Microfilms No. 77-13, 215), p. 29.

only in a secondary stage, when the mentioned associative play is sufficiently established and can be reproduced at will.³⁰

The procedures by which one mind may affect another through non-verbal means are presented by Hall in his book The Silent Language.

If a common symbol exists for two or more people, then the symbol should bring forth a similar response in each, and therefore members of a group can use a symbol in their behavior pattern. Further, symbolic social classification of goods, allows the consumer to relate himself directly to them, matching his self concepts with the meaning of the goods. In this way, self-support and self-enhancement can take place through association with goods that have a desirable social meaning and from the favorable reactions of significant references in the social interaction process.³¹

Elliot's comments on the use of verbal language to elicit emotions reveal some similar dynamics:

The only way of expressing emotion in the form of art is by finding an objective correlative; in other words, a set of objects, a situation, a chain of events which shall be the formula of that particular emotion; such that when the external facts, which must terminate in sensory experience are given the emotion is immediately evoked.³²

Both authors emphasize the need for the communication process to have a content that is shared and recognized by both the sender and the receiver of a message. The more the communication process is shared, the more one can expect a message to be understood.

Memory from a psychological point of view can be seen as the storage space for an almost infinite number of possible associations. By structuring these associations we make a "net" in the hope of understanding the world. Many associations are the product of the socialization process, yet they allow

³⁰Quoted in G. Kepes, Education of Vision, (New York: George Braziller, 1965), p. 14.

³¹E.T. Hall, The Silent Language, (New York: Fawcett, 1959), p. 25.

³²T.S. Elliot, "Hamlet," in Selected Essays, (New York: Harcourt, Brace, 1932), p. 415.

the individual's imagination to travel and create new worlds. The cultivation of this ability is one of the characteristics that makes art so valuable.

Structure is the space through which the imagination roams. Yet the existence of a structure means there are limits to creativity and the connectability of symbols. Nevertheless, the symbolic process is completely open and any and all images can be connected. There is no contradiction here. Any image is realizable. What is limited or determined by our culture, as well as by the way the human brain works are the path ways available to connect images. This does not make creativity finite. There are infinite ways of producing effective metaphors as there are infinite ways of producing an exciting work of art.³³

One of the aims and advantages of social conventions is that they diminish the risk that society could creatively go out of control and disintegrate. Social conventions offer continuity and security to people's sense of reality.

The essentially non-verbal nature of thought (McLuhan) brings forth the realization that most of what is brought into the individual via the senses is also of a non-verbal nature.

...There are people who seem completely staggered when one talks about non-verbal referential processes -- that is wordless thinking; these people simply seem to have no ability to grasp the idea that a great deal of covert living -- living that is not objectively observable but only inferable -- can go on without the use of words. The brute fact is as I see it, that most of living goes on that way. That does not in any sense reduce the enormous importance of the communicative tools -- words and gestures.³⁴

Allport in his description of the way we judge another human being presents us with a convincing description of our reliance on these non-verbal referential processes in judging the daily context we live in.

With briefest visual perception, a complex mental process is aroused, resulting within a very short time, 30 seconds perhaps, in judgement of sex, age, size, nationality, profession and social caste of the stranger, together with some estimate of his temperament, his ascendance,

³³A. Alland, The Artistic Animal, (New York: Doubleday, 1977), pp. 38-9.

³⁴H.S. Sullivan, The Interpersonal Theory of Psychiatry, (New York: Norton, 1953), p. 33.

friendliness, neatness and even his trustworthiness and integrity. With no further information many impressions may be erroneous, but they show the self totalizing nature of our judgements.³⁵

The path from people's perceptual/conceptual world to its expression is slippery, indirect and highly complex. The medium used and its language are two important elements in this translation process. The study of media has been Marshall McLuhan's³⁶ specific interest. He and his predecessor Harold Innis³⁷ were the first to show that "people and societies are transformed or recycled unconsciously by the service environment created by any new human artifact or organization of energy, space or time."³⁸

Media give form to our ideas and shape them. They determine which of our thoughts can be easily expressed and how. As a result, they tend to structure and organize our perceptions of the world. Languages as media programs have the same effect.

All of the limitations placed on our conceptions of what the microphysical world is like are really limitations arising out of the linguistic features of the formal languages available.³⁹

The degree to which a language and its internal structures cohere with the real world is an important dimension in the correspondence between people's thought, their medium of expression and the reality that surrounds them.

³⁵G. Allport, Personality. A Psychological Interpretation, (New York: Henry Holt and Company, 1937), p. 500.

³⁶Marshall McLuhan, Understanding Media: the extensions of man, (New York: Signet Books, 1964)

³⁷Harold Innis, Empire and Communication, (Toronto: University of Toronto Press, 1972 [1950]).

³⁸Marshall McLuhan and Barrington Nevitt, "Medium Meaning Message," Communication, 1, (1974), : 28.

³⁹N.R. Hanson, Perception and Discovery: An Introduction to Scientific Inquiry, (San Francisco: Freeman Cooper and Company, 1969); p. 186.

The efficiency of the communicative process depends on the degree to which the users share the knowledge of its content. For signs to have a communicative ability they must be commonly understood by their users.

The user is always the content of any medium, whereas the message is the totality of effects whether intended or not.⁴⁰

These basic notions are the basis of McLuhan's trademark "the medium is the message". Since the content of any medium must be previously known to be understood, the "real" message is the medium itself and the effects it creates.

Language as a media program is usually thought of as being verbal in nature. Historically, notions of rationality and logic have been closely associated with verbal languages in speech or in print. This bias has often lead to the neglect of non-verbal languages. Morris in Signs, Language and Behavior describes some of the parameters in which language operates:

...language is composed of a plurality of signs, the significance of which must be known to a number of interpreters. Furthermore, these signs must be of such a nature that they can be produced by human beings and will retain the same significance in different situations. Finally in order to enter into a variety of complex language processes, such signs must be set into patterns that are agreed upon.⁴¹

The notion that non-verbal languages exist is generally accepted. Even though the exact structure and components of such languages are not obvious. Most authors in the European semiotics movement⁴² make few essential distinctions between verbal and non-verbal languages. They project on non-verbal phenomena, more or less, the structure of verbal language. Such a transposition is also obvious in other authors.

⁴⁰Marshall McLuhan and Barrington Nevitt, "Medium Meaning Message," Communication, 1, (1974), p: 30.

⁴¹C.W. Morris, Signs, Language and Behavior, (New York: Prentice-Hall, 1946), p. 335.

⁴²Barthes, 1970; Eco, 1976; Greimas, 1966

In linguistics, the field of syntactics is given over to the study of the mutual relationship of verbal signs to each other. A corresponding relationship in object language is expressed through the combination of materials, surface structure, color and shape to produce an object that embodies the functions of noun, adjective, verb and adverb all in one. Finally the sequences of sentences leading to the expression of an idea are achieved in object language through the arrangement of several articles in space; the idea that is then expressed may be called theme.⁴³

One essential difference between both types of language lies in the differences between discursive and non-discursive character⁴⁴. Non-verbal language functions in an analogous manner and cannot be broken down into "bits". Verbal language on the other hand finds its strength in the repeatability and standardization of its basic units.

One of the ways we understand our immediate environment is on a non-verbal basis. Its meaning is not objectively stated; it is embedded within a dynamic ecological context in which everything is interdependent, interrelated and in a continuous state of change. While the consequence of any simple event may not be immediately noticed, its effect can surface over time as it combines with other elements and becomes obvious because of its behavioral consequences.

Different authors have been able to recognize certain of the dynamics of non-verbal language. McLuhan's⁴⁵ theory of "hot and cool" stipulates that the higher the definition of a medium, the lower the public's participation (hot) and vice versa (cool). Brecht's⁴⁶ theories about distancing the audience in theater also offer us some insight into the nature of non-verbal communication. Much

⁴³J. Ruesh and W. Kees, Non Verbal Communication. (Berkeley: University of California Press, 1956), p. 100.

⁴⁴Susan Langer, Philosophy in a New Key. (New York: Mentor, 1951)

⁴⁵Marshall McLuhan, Understanding Media: The Extensions of Man. (New York: Signet Books, 1964)

⁴⁶Bertolt Brecht, Petit organon pour le théâtre. (Paris: L'Arche, (1948), 1963).

more work in this area is necessary before we gain a better understanding of our perception of non-verbal information.

Communication distinguishes itself from art by relying on shared, established conventions to achieve its efficiency. In searching for the new, art often does not communicate 'efficiently.'

Art... seeks diversity, is bathed in subjective considerations and seeks out the original, the variant and the novel, reaching out for uniqueness, vividness and intensity, rather than anticipating what is already known and repeating it.⁴⁷

For some artists, the purpose of art is to shake people out of the limits of their literate idea of the world and to make them accept and cherish the richness of the non-verbal referential processes that rule the perception of their everyday environment.

One of the peculiarities of art is to serve as an anti-environment, a probe that makes the environment visible. It is a form of symbolic or parabolic action. Parable means literally to throw against, just as symbol means to throw together.⁴⁸

The artists as individuals incorporate in their work the values, ideals and visions they have personally constructed. They are usually directly or indirectly their own subject matter. Art exists only in the homo sapiens; it is a basic human activity which offers people the possibility of discovering their individuality.

The logical structures of our literate world have tended to homogenize human experience by their emphasis on the establishment of social conventions. Art as an intrinsic individual activity has tried to reach the less

⁴⁷I. Kaufman, "Limitations of Research in Teaching Art," in Concepts In Art and Education, ed. G. Pappas, (Toronto: Macmillan, 1970), p. 432.

⁴⁸Marshall McLuhan, "The Relation of Environment to Anti-environment," in Esthetics Contemporary, ed. R. Kostelanetz, (Buffalo, N.Y.: Prometheus Books, 1978), pp. 91-2.

obvious areas of human consciousness. When art has a functional obligation to satisfy the social expectations of a public it becomes communication (design).

The process is this: you have an intent, or experience which you wish to communicate and a medium in which to put it (and that medium can be verbal, non verbal, it can be an artifact, it can be anything). Then you program that medium, by your knowledge of what that medium will do in that context. To do what? To have the desired meaning for the user, who is the content of that process. The user of the medium is the content, not the program. The program is what you do to the medium.⁴⁹

B. Survey of art educator's perception of McLuhan's ideas

A survey of the following sources was done to explore the way in which art educators in the past have responded to McLuhan's ideas:

1. Survey of Journals in Art Education (see appendix 1)

Survey of Art Education and Studies in Art Education from 1960-1986. Marshall McLuhan's work appeared in many bibliographies; he was specifically referred to in fifteen articles.⁵⁰

2. Survey of Journals in Education (see appendix 2)

Twenty articles written by Marshall McLuhan and sixty-five articles⁵¹ in reference to McLuhan's work, were found. Few articles dealt specifically with art education, but as a whole they do give a broad perspective on how McLuhan was perceived by educators in different fields.

3. Resources in Education (ERIC) (see appendix 3)

⁴⁹Barrington Nevitt, "Communication and Design," In Industrial Design and Aesthetics, eds. W. Gilles and G. Singer, (Ottawa, Canada: Carleton University, 1978).

⁵⁰See appendix 1. Survey of Journals in Art Education for references.

⁵¹See appendix 2. Survey of Journals in Education for references.

Survey of Educational Resources Information Center (ERIC), Resources in Education, Two documents written by Marshall McLuhan and nineteen documents in reference to McLuhan's writings were found⁵²:

4. Survey of Books on Art Education (see appendix 4)

Survey of Books in Print 1960-83 and card catalogues at McGill and Concordia University libraries; 521 books in Art Education published after 1960 were found, 225 of these books⁵³ were surveyed and 17 books contained references to Marshall McLuhan's work.

McLuhan's ideas have been mainly associated with the sixties and early seventies. At that time people seemed to perceive technological changes more clearly because such changes were more obviously in contrast to the experiences they had lived in their immediate past of the late forties and fifties. In the seventies, the subject of cultural change was widely discussed and McLuhan's ideas were central to that climate. Education in general was under intense scrutiny. Within that context art educators raised many questions which were left unresolved. Since then attitudes have shifted. The collective mind seems to have become numbed by the rapid flow of technological innovations. Many of these issues have been discarded. Whereas we still believed we could do something about them in the early seventies, we now feel helpless before the facts of technological change which have overtaken us and we do not know how to respond.

A mature attitude towards technological change and the use of media certainly has not evolved in many disciplines. In art education where human values take precedence, in the past decade the issue of new media has been a secondary preoccupation to the survival of art in the public schools. In

⁵²See appendix 3. Resources in Education (ERIC) for references.

⁵³See appendix 4. Survey of Books on Art Education for references

searching for new directions to attract public interest in art education the possibility of shifting to a more technological approach seems to be currently seductive. The wide acceptance of computer graphics reinforces consideration of this alternative. This context would seem to emphasize the need for art educators to better understand media and gives new life to issues raised by McLuhan and art educators in the past.

In the articles and books that referred to Marshall McLuhan's work art educators discussed topics which can be grouped into the following seven categories:

1. Need for a new approach to education.
2. Understanding media.
3. Environment as a teaching machine.
4. Definition of the artist.
5. Failure of the literary establishment.
6. Art.
7. The Role of the artist.

1. Need for a new approach to education.

Seven authors⁵⁴ discussed the need to re-examine art education in view of the changes brought about by the electronic environment and the inability of our present educational system to cope with the new media. The following quotes characterize these concerns.

... There is a need to examine the practices of art education as they relate to its generally stated goals and the changing nature of our society.⁵⁵

⁵⁴ Behrens, R. (1973), Collins, E. (1971), Humes D.M. (1973), Dorethy, R.E. (1972), Knee, M. (1970), Harlan, C. (1970), Hauseman, J. (1970)

⁵⁵ Earl Collins, "Art Education and the Rapidly Changing World," Art Education, 24 (8) (1971) : 9.

... Tomorrow is here before yesterday is finished. Critics such as Alvin Toffler in *Future Shock*⁵⁶ and Charles Reich in *The Greening of America*⁵⁷ and Marshall McLuhan in *Understanding Media*⁵⁸ deal with the issue of educational relevancy as it relates to a continually changing world. Marshall McLuhan has accused education of "marching backward into the future" and suggests that "children interrupt their education to attend school." Most attempts at relevancy are superficial due to a failure to analyze the needs of the learner, who is confronted with constant and rapidly accelerating change throughout the world.⁵⁹

2. Understanding media.

Five authors⁶⁰ were concerned with the need to understand, explore and work with new media. The following quotes illustrate this concern:

It is difficult to state the case for the use of media as art without noting the role of Marshall McLuhan in the construction of a theoretical basis for its use. In an address to the International Center for the Communication in Arts and Sciences, McLuhan stated⁶¹ (among other things): "... sensory levels have already changed drastically since TV. The visual component in our lives has dropped dramatically, and the visceral, kinetic, and auditory modes of responses have risen to compensate." In short, the desire of young people to explore the technology of their age as a means of expression may be viewed as an inevitable sensory shift, capable of altering not only the artist's expression but the public views of entertainment as well.⁶²

I have already implied that students should be working with newer media - and I now need to emphasize that any study of contemporary society should concern itself with the popular arts as typified by the motion picture, television, poster, and other mass media.⁶³

⁵⁶Alvin Toffler, *Future Shock*, (New York: Random House, 1970).

⁵⁷Charles A. Reich, *The Greening of America*, (New York: Random House, 1970).

⁵⁸Marshall McLuhan, *Understanding Media*, (New York: McGraw-Hill, 1964).

⁵⁹Earl Collins, "Art Education and the Rapidly Changing World," *Art Education*, 24 (8) (1971) : 7

⁶⁰Chalmers, F. G. (1974), Collins, E. (1971), Heyduck, B. (1975), Hurwitz, A. (1970) Luca, M. & Kent, R. (1968)

⁶¹Vision '68 Conference, Southern Illinois University.

⁶²Al Hurwitz, "Experiment in Intermedia," *Art Education*, 23 (3) (1970) :15.

⁶³*Ibid.*, p. 24.

3. Environment as a teaching machine.

Five authors⁶⁴ discussed the influence of the outside environment on the classroom and perceived environments in general as active processes. The following quotes elucidate this theme.

There are many ways of identifying and describing educational objectives. Art specialists are no different from most of their colleagues in being too busy, too involved, too set in their ways perhaps, to ask themselves the primary questions very often. A pragmatic posture often appears the most appropriate but most of us have felt threatened in recent years by the apparent rejection by large numbers of our pupils of the values and systems we have taken for granted all our lives. The questions are now, perforce, being asked. We may feel that the greatest pressures come from within the school system--comprehensive reorganization, ROSLA, and so on. Others sense that the motive force for change comes from outside, from shifts and cracks in the social structure itself. As Marshall McLuhan wrote (in a kind of vers libre):⁶⁵
Today in our cities.

Most learning occurs outside the classroom.

The sheer quantity of information conveyed by The press-mags, films, TV., radio far exceeds

The quantity of information conveyed by school instruction and texts.

This challenge has destroyed

The monopoly of the book as a teaching aid and cracked the very walls of the classroom so suddenly,

we're confused, baffled.⁶⁶

Knowledgeability in art does not exist as information handling alone, taken from the context of contemporary society. Good teachers understand and encourage the grasp of humanistic relationships as they relate to the discovery of art in its multivarious forms. To paraphrase McLuhan, perceptive teachers in the profession are aware of the fact that environments are not passive wrappings but active processes.⁶⁷

4. Definition of the artist.

⁶⁴Dorothy, R.E. (1972), Churchill, A. (1971), Conant, H. & Randall, A. (1959), Cross, J. (1977), Linderman, E.W. (1980).

⁶⁵Jack, Cross, For Art's Sake, (Allen Unwin, 1977) p. 12.

⁶⁶From G.E. Stearns, ed., McLuhan Hot and Cool, (Penguin, 1968), p.12.

⁶⁷Earl W. Linderman, Teaching Secondary School Art: Discovering Art Objectives, Art Skills, Art History, Art Ideas, (Dubuque, Iowa: Wm. C. Brown, 1980), p.32.

Four authors⁶⁸ were concerned with the importance of the artist in the electric age. The artists were perceived as being capable of understanding their environment through their capacity for awareness. The following quotes explicate some of these ideas.

As an art educator reflecting upon the recent E-week, I begin to see Marshall McLuhan's prophecy⁶⁹ that the future lies in the hands of artists coming to haunt us. It swelled our corporate pride to have the "prophet of the new age" turn to artists. He possibly reasoned that the solutions to our (eco-logical) problems would flow from (a) the more highly developed sensory equipment of the artist, or (b) the prophetic nature of art, i.e. making us more aware through the artists' rejection of the "rear view mirror" outlook, or (c) an awakening of social responsibility on the part of the artistic world bringing us out of our ivory lofts.⁷⁰

For in the electric age there is no longer any sense in talking about the artist's being ahead of his time. Our technology is, also, ahead of its time, if we reckon by the ability to recognize it for what it is. To prevent undue wreckage in society, the artist tends now to move from the ivory tower to the control tower of society. Just as higher education is no longer a frill or luxury but a stark need of production and operational design in the electric age, so the artist is indispensable in the shaping and analysis and understanding of the life forms, and structures created by electric technology.⁷¹

5. Failure of the literary establishment

Four authors emphasized the importance of not isolating art education from other disciplines and of stressing the relationships between art education,

⁶⁸Behrens, R. (1973), Rossey, W.A. (1970), Linderman, E.W. (1980), Plummer, G.S. (1974).

⁶⁹Marshall McLuhan and Quentin Fiore, War and peace in the Global Village. (New York: Bantam Books, 1968).

⁷⁰William A., Rossey. "Toasting Marshmallows Over A Pot Bellied Stove," Art Education, 23 (8), (1970), : 12.

⁷¹Marshall McLuhan, Understanding Media: the Extensions of Man. (New York: McGraw-Hill), 1965, p. 65.

the sciences and humanities.⁷² Some authors mentioned a holistic/generalist approach to art education. The quotes that follow present some of their ideas:

As Marshall McLuhan⁷³ states "What could be more absurd than to go from an electric, integral world into a disintegrated, fragmented, mechanical world of the old nineteenth-century technology which we call our school system." Some art educators have stated that the art teacher, if he is not to be superfluous, must examine the relationships that exist between art and science. Western education has failed to help rising generations of non-scientists to understand "science"⁷⁴

Marshall McLuhan in The Medium is the Message, states: "Our "Age of Anxiety" is, in great part, the result of trying to do today's job with yesterday's tools with yesterday's concepts."⁷⁵ Because this generation exists in a rapidly changing world and because it is different from the past, we must re-examine our goals and direction to assure that we are meeting our students' needs.⁷⁶

6. Art

Two authors⁷⁷ commented on the reduction of the distance between art and life in the electronic environment. The following quotes summarize some of their preoccupations:

Perhaps one of the most undeserved misnomers of the twentieth century has been the term "primitive art". Whilst the people of much of the Third World can be considered primitive in that they lack the sophistication of technology and organization so highly prized in western civilizations, by using a different value system much of their art forms can be seen to possess a high level of sophistication with a deeply profound relationship to their patterns of life which is anything but primitive. By comparison,

⁷²Chalmers, F.G. (1974), Chichura, D.B. (1970), Collins, E. (1971), Humes, D. (1973).

⁷³Marshall McLuhan, "Television in a new light," in Stanley T. Donner, The Meaning of Commercial Television, (Austin, Texas: University of Texas Press, 1967), p. 88.

⁷⁴Graeme F. Chalmers, "A Cultural Foundation for Education in the Arts," Art Education, 27 (1) (1974) : 24

⁷⁵Marshall McLuhan and Quentin Fiore, The Medium is the Message, (New York: Bantam, 1967), p. 2.

⁷⁶Diane B. Chichura, "Sight and Sound," Art Education, 23 (3) (1970) : 28.

⁷⁷Allison, B. (1972), Feldman, E.B. (1970).

European art, except to a very small minority, appears remote and removed from the life of the people, and is one of the consequences, as Marshall McLuhan pointed out, of the western dependence on verbal literacy.⁷⁸

Perhaps the most obvious feature of aesthetic form today is the reduction of psychic distance - the steady elimination of the gap between art and life. Children and adults look at popular art and elite art forms without performing the mental operations that distinguish them from reality. In other words, we deliberately see art as reality and reality as art. It is for this reason that so many youngsters are masters of the put-on. They can behave seriously or unseriously toward any experience almost at the same time, perplexing those adults who are accustomed to fairly rigid distinctions between the real and the artificial, subjectivity and objectivity, the false and the genuine.⁷⁹

7. The Role of the artist

Two authors⁸⁰ discussed the importance of art in training perception.

The following quote typifies their concerns:

Marshall McLuhan identified an environmental role for the artist when in his introduction to the second edition of *Understanding Media* he wrote: As our proliferating technologies have created a whole series of new environments, men have become aware of the arts as "anti-environments" or "counter-environments" that provide us with the means of perceiving the environment itself ... Art as anti-environment becomes more than ever a means of learning perception and judgment. Art offered as a consumer commodity rather than as a means of training perception is as ludicrous and snobbish as always.⁸¹

⁷⁸Allison, Brian, Art education and teaching about the art of Asia, Africa and Latin America. (London: Voluntary Committee on Overseas Aid and Development Education Unit, 1972), p. 5.

⁷⁹Edmund Burke, Feldman, Becoming Human Throughout Art. (Englewood Cliffs, New Jersey: Prentice-Hall, 1970). P.M..

⁸⁰Vernon D. Dame, (1970), Rossey, W.A. (1970).

⁸¹Marshall McLuhan, Understanding Media. (New York: McGraw-Hill, 1964), cited in Vernon D. Dame, "Art, Artist and Environmental Awareness," Art Education, 23 (7) (1970) : 53-4.

Four authors⁸² expressed some form of criticism towards McLuhan's work. This criticism in most cases seemed very diffuse, either attacking only one idea such as the notion of change⁸³ or again the need to use discursive language.⁸⁴ Unfortunately no clear or well structured criticism of McLuhan's work seems to emerge from this study.

Conclusion

This chapter represents the point of departure. It establishes the personal and disciplinary contexts on which this thesis is built. It comes to the conclusion that McLuhan's ideas have not been substantially explored as the basis of an art education program. Art educator's use of McLuhan's ideas have been for the most part very limited in scope and depth. Could art educators have dealt with McLuhan's ideas differently? I think the answer is no, because of two important obstacles. The first obstacle, which has already been discussed, is that McLuhan's work is not easily accessed by the reader because of the works open structure. The other obstacle is a function of the limited perspective which most art educators adopted vis-à-vis McLuhan. Such a perspective excludes a contextual understanding of humans and their environment. I believe that the role of art and art education must be understood in the context of technological change.

This first chapter also presents the transactional context in which I view McLuhan's ideas. This effort on my part to situate McLuhan's ideas within a broader context indicates where I think future developments might arise in the

⁸²Dorethy, R.E. (1972), Wygant, F. (1974) Feldman, E.B. (1970) Gaits, C.O.D.. & Hurwitz, A. (1970).

⁸³Wygant, F. (1974.).

⁸⁴Feldman, E.B. (1970).

use of McLuhan's ideas and how this context might at one point help to support McLuhan's notions.

Some critics have attempted to frame McLuhan's work through a Marxist, Freudian or Catholic point of view. One of the objectives of this thesis is to base the interpretation of McLuhan's work on a process of discovery. This process does justice to McLuhan's ideas; by ordering his ideas it allows a comprehensive structure to evolve out of the work. The aim of this thesis is then to provide evidence (argument) that McLuhan's work contains the essential elements of an interesting approach to art education. I consider these elements to be: a notion of creativity (chapter two - McLuhan's notion of mind); an understanding of the present context in which we live (chapter three - McLuhan's views on media and environment); a description of the role of artists and art (chapter four - McLuhan's notion of art); an approach to education (chapter five - McLuhan's notion of education); and a methodology to stimulate creativity (chapter six - McLuhan's methods).

Understanding McLuhan is like understanding poetry, the formal aspects are as important as the content. The objective of this thesis is to present McLuhan's original material in a structured way so that the reader is able to more easily achieve a synthesis of the work and see its possible implications for art education. The author of the thesis expresses his presence in the choice of the quotations, in the order of their presentation, and in the general direction which he gives the work. This thesis is about revealing the possibility, if not the opportunity or applicability of an association between McLuhan's ideas and art education. This thesis is a reference work to be used in developing an art education approach based on McLuhan's ideas. It is not intended to dispose of McLuhan's disturbing presence but it might shed some light on the artistic importance of being a disturbance.

What is important in approaching the next chapter on the notion of mind is that McLuhan's contribution to art education mostly lies in the area of creative methodologies. These methods are based on a notion of the mind as a resonant space where all senses interplay. This notion of the mind as the corporate action of the senses explains McLuhan's emphasis on perception. McLuhan considers language to be a technology. As this chapter has demonstrated much of the difficulty most art educators have had with McLuhan's work was due to their lack of understanding of the assumptions that were the basis of his particular approach to media, art and education. By exploring his notion of the mind I intend to focus on McLuhan's explanation of how people invent their world through creative thought.

CHAPTER 2 - MCLUHAN'S NOTION OF MIND.

To be comfortable with McLuhan's work one must understand some of his underlying assumptions. In this chapter, I emphasize a basic psychological model that I think is the backdrop for McLuhan's methodology and its findings. McLuhan's hypothesis, in the Gestalt tradition, is that the interplay of the senses regulates the mind, thus whenever the information environment changes the emphasis from one sense to another, our patterns of thought change. When the speed of information accelerates we switch thought patterns from concepts to percepts as a way of dealing with the greater amounts of information that are processed by our senses. This hypothesis explains McLuhan's preoccupation with trying to describe different sensory processes: synesthesia, equilibrium between the senses, concepts and percepts, hot and cool, sensory input and recognition, hemispheric dominance.

McLuhan's attraction to the artist as the model for the person of integral awareness is linked to the artist's capacity to perceive the world with the senses and to notice how the changes in the information environment influence the senses. One of the roles of the artist, which will be discussed in a later chapter, is to make others aware, to train the senses to perceive the information environment as it evolves.

A. On the nature of consciousness

Successful communication is a rarity. It requires not only repetition of a common language, but also participation of both author and audience in the process of remaking from their old components a pattern that only the author may have perceived. Communicating the new is a miracle.¹

McLuhan considers the form of thought and the subject of thought to be directly derived from the senses which he perceives as being all interrelated and in constant interplay. The process of thought is regulated by the amount and variety of sensory inputs and their effects.

The interplay between our different senses is thought of as being similar to touch (speech which appears late in the child's development is considered to be a 'surrogate' of touch) in that the different senses resonate and transmute themselves one into the other in an effort to grasp "reality". The reference to touch, the most primitive sense, extends itself to the mind for which all things are sudden, total, synthetic and involving. For the mind, just as for nature, the only physical bond is the resonating interval. The mind, like the hand, has no point of view.

... it would be a grave mistake to suppose that sight is the most important "sense"... touch was the original sense from which the others were gradually differentiated... it is clear the decisive form of intercourse with things is in fact touch. And if this is so, touch and contact are necessarily the most conclusive factor in determining the structure of the world.²

The interplay of the senses between themselves is a Gestalt figure-ground process of perpetual change as figure and ground mutually transform each other by resonance. For McLuhan the whole process of understanding is neither purely objective nor purely subjective but comprehensive as people through their personal experience transform themselves and their environment.

¹ Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout (Don Mills, Ontario: Longman Canada, 1972), p.42.

² Marshall McLuhan and Harley Parker, Through the Vanishing Point: Space in Poetry and Painting (World Perspectives Series, edited by Ruth Nanda Anshen, Vol. 37. New York: Harper and Row, 1968), pp.263-4, quoting Ortega y Gasset Man and People (Norton)

According to McLuhan, in contrast to the other senses the visual sense when isolated and emphasized is sequential, linear, continuous, objective and analytical. With the capacity to exclude and order in visual space comes the notion of rationality³. Individuals who live in cultures where the visual sense is not stressed⁴ live in a dream world where everything exists but a rational structure.

In archaic societies, "the people of the dream," the conscious life is flooded with images of what civilized man thrusts back into the unconscious⁵

McLuhan uses an analogy from painting, light on versus light through, to describe the difference between a visual structure and one where all the senses interplay:

There is (still) the full ratio or interplay of all the senses in concert, which permits light through. That concert comes to an end with the stepping up of one sense by technology, and by the insistence of light on. The nightmare of light on is the world of Pascal: 'Reason acts slowly and with so many views upon so many principles which always must be present, that at any time it may fall asleep or get lost, for want of having all the principles present'.⁶

This is the difference between experiencing 'light on', "the direction of a syntactical point of view from outside onto the painting"⁷, i.e. seeing time and

³Marshall McLuhan, "Education in the Electronic Age," Interchange 1 (1970) 4:2

⁴Marshall McLuhan and Harley Parker, Through the Vanishing Point: Space in Poetry and Painting (World Perspectives Series, edited by Ruth Nanda Anshen, Vol. 37. New York: Harper and Row, 1968), p.15.

⁵Marshall McLuhan and Wilfred Watson, From Cliché to Archetype (New York: The Viking Press, 1970), p.63.

⁶Marshall McLuhan, The Gutenberg Galaxy: The Making of Typographic Man (Toronto: University of Toronto Press, 1962.) p.247.

⁷Marshall McLuhan, Understanding Media: The Extensions of Man (New York: McGraw-Hill Book, 1964) p.171.

space as containers to be filled⁸ and 'light through' where the viewer becomes the 'vanishing point'⁹ and sees the world appear through the painting (Seurat).

The ideal situation is when all modes of experience receive simultaneous attention. The dominance of audile-tactile or visual structures in a culture is dependent on the particular society's media environment. The tactile nature of the mind is such that even when visual structures appear to be predominant they occupy only a small part of the mind's resonating field.

B. The dynamics of the mind

McLuhan identifies six different functions of the mind under the following key word headings.

1. Synesthesia,
2. The tendency for equilibrium between the senses,
3. Making sense: concepts and percepts,
4. Hot and cool: states of mind,
5. Sensory input and recognition
6. Hemispheric dominance.

1. Synesthesia.

McLuhan defines synesthesia as an effect of sensory interplay -- the translation of one sense into another. It is an effort towards a unified sense, a

⁸Marshall McLuhan, The Gutenberg Galaxy: The Making of Typographic Man (Toronto: University of Toronto Press, 1962.) p.107.

⁹Marshall McLuhan and Harley Parker, Through the Vanishing Point: Space in Poetry and Painting (World Perspectives Series, edited by Ruth Nanda Anshen, Vol. 37. New York: Harper and Row, 1968), p.24.

form of common sense. Barrington Nevitt, one of McLuhan's closest associates cites an observation by E.H. Gombrich:

What is called synesthesia, the splashing over of one sense modality to another, is a fact to which all languages testify. They work both ways from sight to sound and from sound to sight. We speak of loud colors or bright sounds and everyone knows what we mean. Nor are the ear and the eye the only senses that are thus converging in a common centre. There is touch in such terms as a "velvety voice" and "a cold light", taste with "sweet harmonies" of colors or sounds, and so on thru countless permutations.¹⁰

2. Equilibrium between the senses.

Each cultural environment imposes a certain sensory ratio and changes within that environment alter this ratio in relation to its past configuration. The ratio among the senses tends to remain constant. When the equilibrium between the senses is disturbed by the impact of a new medium, for example, the changes imposed by the new technology on the sensory ratio are instantaneously compensated for by increasing or decreasing the involvement of the different sensory components in search of a new equilibrium. Within this new balance, certain senses can be overexcited, constrained or even atrophied; the hyperspecialisation of certain senses over others usually leads to the greatest imbalance. In the process transferring information media transform humans. McLuhan considers that the ideal equilibrium between the different senses exists when people use all of their senses as a corporate action in the apprehension of 'reality', a reality that is not separate from them, but includes them.

3. Making sense: concepts and percepts.

¹⁰Barrington Nevitt, "Visible and Invisible Bias Via Media," Canadian Journal of Communication 7:3 (Nov. Dec. Jan. Feb., 1980-1) pp.11-2.

"Perception or input is never the experience of 'closure'. No matter which sense receives the data the other senses rally to complement it"¹¹ It is in the interplay and the replay of the sensory inputs that resides the source of consciousness. The making of awareness is an active and creative process to be differentiated from the mere matching of sensory inputs which tends to fragment reality.

The idea of matching, like the notion of a linearly structured point of view is contrary to McLuhan's view of the mind as a resonant field in the Gestalt tradition: Instead, he considers percepts as providing the basic substance of the process of being aware. It is by the analytical process of isolating single percepts from the totality that we are able to distinguish between the different senses¹². It is by focussing our attention on different percepts that we can reveal the ongoing processes in ourselves and in our environment and free us from servitude to our technologies. Concepts which are ossified percepts tend to distract us from the active interplay of the mind by imposing stifling preconceived notions.

Whereas science links the present to the past via concepts, art leaps from the present to the future via percepts.¹³

At electronic speeds simultaneous humans tend to shift from concepts to percepts to perceive the rapidly changing process patterns of their environment.¹⁴

¹¹ Marshall McLuhan, Culture Is Our Business (New York: Ballantine Books, 1970), p.186.

¹² Barrington Nevitt, "Visible and Invisible Bias Via Media," Canadian Journal of Communication 7:3 (Nov. Dec. Jan. Feb., 1980-1) p.32.

¹³ Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout (Don Mills, Ontario: Longman Canada, 1972), p.123.

¹⁴ ibid., p.7.

4. Hot and Cool.

McLuhan identifies two modes of media involvement: hot and cool. These terms borrowed from slang refer to two different kinds of commitment and participation.

a hot medium excludes and a cool medium includes: hot media are low in participation, or completion by the audience and cool media are high in participation. A hot medium is one that extends a single sense with high definition. High definition means a complete filling in of data by the medium without intense audience participation. A photograph, for example, is high definition or hot: whereas a cartoon is low definition or cool, because the rough outline drawing provides very little visual data and requires the viewer to fill in or complete the image himself. The telephone, which gives the ear relatively little data, is thus cool, as is speech: both demand considerable filling in by the listener. On the other hand, radio is a hot medium because it sharply and intensely provides great amounts of high definition auditory information that leaves little or nothing to be filled in by the audience. A lecture by the same token, is hot, but a seminar is cool: a book is hot, a conversation or bull session is cool. In a cool medium, the audience is an active constituent of the viewing or listening experience.¹⁵

For McLuhan the hotness or coolness of a medium is context bound. In each cultural environment any given medium will be hot or cool depending on the other media available and the unique sense ratio that exists in that culture. Too great a contrast between the hotness and coolness of a medium and the cultural environment in which it is introduced generates innumerable problems and confusions.

You can't have a hot election or a hot war when the audience has been cooled to the total participation point by TV. The experience is unbearable.¹⁶

¹⁵Eric Norden, "Playboy Interview: Marshall McLuhan," Playboy 16:3 (March, 1969) pp.53-158.

¹⁶Marshall McLuhan, Culture Is Our Business (New York: Ballantine Books, 1970), p.52.

McLuhan's hypotheses on sensory interplay is not easily tested scientifically; its validation depends on its substantiation by consistent testimony of artists.

5. Sensory input and recognition

McLuhan distinguishes between sensory input and recognition; the process of making sense comes from the awareness of effects, not simply of the sensory facts or inputs. In our electric environment where impulse and the feedback are simultaneous, events can exist without recognition and can also be replayed for its meaning minus the experience.

During the actual experience the issue may have been in doubt, but, as the poet explains, "we can have the experience and miss the meaning". In fact, such is the nature of experience that it is almost inevitable that we do miss the meaning. The "meaning", our relation to ourselves of a particular event, may not come home to us until much later. However, with instant replay of our own or others' experiences, it is now possible to have the meaning without the experience.¹⁷

When sensory inputs are dim the sensory response is correspondingly strong. This is why small children are always "poetic" in their responses to anything at all. A child's sensory reception is very selective, somewhat in the manner of what is offered our senses by "abstract art". And just because the sensory offering is meager, the sensory response is full. As we grow older, we dim down the sensory responses and increase the sensory inputs, turning ourselves into robots. This is why art is indispensable for survival. Art perpetually dislocates our usual responses by offering a very abstract or meager and selective input.¹⁸

6. Hemispheric dominance.

¹⁷ Marshall McLuhan "At the Moment of Sputnik the planet became a global theater in which there are no spectators but only actors" Journal of Communication (Winter, 1974) p.57.

¹⁸ Marshall McLuhan, "Education in the Electronic Age," Interchange 1 (1970)

McLuhan found in the research on the differing mental functions of the right and left hemispheres of the brain another way of explaining the differences between the simultaneous acoustic/tactile sensory structures and the sequentially connected visual structures.

The advantage of the hemisphere thing is that it is pragmatic and empirical rather than conceptual... For thirty years I have been working out of the right hemisphere and attacking the left. The world of the symbolist poets and of James Joyce is a right hemisphere world. The hemisphere thing gives a beachhead into the territories I have covered in my work... All media content is left hemisphere and media effects are right hemisphere. The right hemisphere is perception and the left hemisphere is the concept world.¹⁹

The left hemisphere is strongly marked by visual characteristics, visual order, visual space, visual connectedness, Euclidean space. All the connective lineal space, whatever it tends to be, seems to be in the charge of the left hemisphere. Acoustic space is space that we create by listening to all directions at once, we hear from above and around, and below - all points at once. We hear from all directions simultaneously. That creates a space that is acoustic, auditory.²⁰

When discussing hemispheric dominance McLuhan usually refers to the following description taken from Science News²¹:

left hemisphere	right hemisphere
speech/verbal	spatial/musical
logical, mathematical	holistic
linear, detailed	artistic, symbolic
sequential	simultaneous
controlled	emotional
intellectual	intuitive, creative
dominant	minor (quiet)
wordly	spiritual
active	receptive
analytic	synthetic, Gestalt

¹⁹James Finley Striegel, "Marshall McLuhan on Media" (Ph.D. dissertation, Union Graduate School, Ohio, 1978) p.64 citing personal correspondence with Marshall McLuhan, 9/14/76

²⁰Carl Scharfe, "Marshall McLuhan and Barrington Nevitt with students and guests: A Fireside Chat," The Innis Herald 10:4 (March 10 1977) p.6.

²¹Marshall McLuhan, "The Brain and the Media: The "Western" Hemisphere," Journal of Communications Autumn 1978 p.55 citing Trotter, R.J. "The Other Hemisphere." Science News 109, April 3, 1976.

reading, writing, naming	facial recognition
sequential ordering	simultaneous comprehension
perception of significant order	perception of abstract patterns
complex motor sequences	recognition of complex figures

The playing down of the faculties of the right hemisphere in our conventional curricula has been destructive of integral awareness and wisdom and has been called by McLuhan "the great brain robbery."²²

Maclean's: Which hemisphere is dominant in Marshall McLuhan?

McLuhan: My whole natural bent is right hemisphere but my academic training was all left hemisphere and so was yours. Anybody who's been to school is a left hemisphere person; on the other hand, if they have an artistic bent, that means they're in head-on clash all the time with everything.²³

"Basics" always means a study of effects, whereas "know-how" is the left hemisphere implementation, rather than awareness of structure and effect. The current concern about basics is merely a left hemisphere concern about efficiency and know-how and about a decline in left hemisphere skills and left hemisphere quantitative measurements.²⁴

McLuhan concludes that the dominance of the Western world on the left hemisphere from Parmenides until Einstein depended largely on the lineal structure imposed by certain technologies such as roads, military bureaucracies, print etc... The shift to the right hemisphere can be associated with the use of electricity and simultaneous data which create a resonating environment similar to oral cultures.²⁵

The new dominance of the right hemisphere strongly favors the approach to the entire human environment as an art form. The role of fine arts, of

²²Marshall McLuhan with Kathryn Hutchon and Eric McLuhan, "The Laws of the Media," English Journal, (November 1978) p.93-4.

²³"Interview With Professor Marshall McLuhan," Maclean's (March 7, 1977), p.6.

²⁴Marshall McLuhan with Kathryn Hutchon and Eric McLuhan, "The Laws of the Media," English Journal, (November 1978) p.93.

²⁵Marshall McLuhan, "Extracts from statements", Place and Function of Art in Contemporary Life: Report of an International Symposium organized by Unesco, (September, 1976) p.18.

music and painting and poetry also assumes new dominance along with the right hemisphere.²⁶

The conflict between the right hemisphere orientation of our society's art and entertainment and the left hemisphere dominance in our society's institutions is in McLuhan's view a "formula for complete chaos".²⁷

McLuhan's use of hemispheric dominance in expanding some of his ideas should be understood in view of his methodological approach²⁸ of comparing and contrasting. In the context of the differing opinions as to the scientific validity or relevancy of hemispheric dominance in art education, McLuhan's position would stress the importance of making sense with all of our senses.

Conclusion

This chapter has presented McLuhan's tactile definition of consciousness which is based on the notion of resonance. Like the wheel and the axle, the gap or interplay between our senses is the basis for awareness. It is through the ambiguity of our different senses in interplay that our mind moves towards understanding situations. To fix one sense to another or to exclude one from another tends to fossilize life. Sensory input is not sensory closure. The interplay of the senses, their translation one into another (synaesthesia), their search for equilibrium and others are the dynamics of the mind which help it to recognize reality. A comprehensive approach to mind tries to situate the world of perceptual discovery in interplay with the world of concepts and thus tries to avoid a seized rigid stance.

²⁶ibid., p.22.

²⁷Marshall McLuhan, "The Brain and the Media: The "Western" Hemisphere," Journal of Communications Autumn 1978 p.54.

²⁸see chapter six

McLuhan's dynamic and open notion of the mind demonstrates the creative nature of his view of our perceptual system. The present thesis defines McLuhan's notion of art as being based on these premises. McLuhan developed the notions of hot and cool and later adopted the controversial²⁹ right and left hemisphere hypothesis as a way of distinguishing different aspects of the mind even though such premises were not necessarily scientifically proven.

The following chapter presents McLuhan's ideas on media. It offers a dynamic view of how our electronic environment developed historically based on a series technological innovations from speech to computer chips. More specifically it offers a vision of how humans shape their environment and are shaped by it. For the student/artist many of these ideas can be useful in exploring the artistic use of media such as painting, sculpture, film etc... and seeing how the evolution of these media³⁰ has been influenced by the general context of technological development.

²⁹Michael S. Youngblood, "The Hemispherality Wagon Leaves Laterality Station at 12:45 for Art Superiority Land," Studies in Art Education 21:1 p.44-49.

³⁰Siegfried Giedeon, Mechanization Takes Command (New York: W.W. Norton, 1948) pp.14-44.

CHAPTER 3 - MCLUHAN'S VIEWS ON MEDIA AND ENVIRONMENT

Introduction

This chapter presents McLuhan's ideas on the interactions between humans and media. The first part of this chapter deals with the definition and dynamics of media. How do media develop? What are their characteristics? How are we influenced by them? McLuhan's insights into media are greatly responsible for the following he had during the sixties and seventies. Few people at the time¹ were interested in exploring the post-industrial age where information is one of the most important commodities. McLuhan was able to present a vision of what this new electronic age might be. His findings and especially his approach corresponded to the expectations of a public eager to distinguish itself from the past. He developed a terminology to describe the phenomena (hot, cool, percept, concept, global village etc...) and also was able to present his findings in a formal embodiment that was as exciting and innovative as the ideas themselves. Having understood McLuhan's ideas on media we can more easily understand his vision of the cultures generated by these media.

The second part of the chapter establishes the relationship between media and culture. McLuhan distinguishes three general types media cultures: Speech structures oral cultures and generates the oral tradition.

¹Harold Innis, Lewis Mumford, Seigfried Gideon, etc...

Print establishes a visual culture with a very different set of attitudes characterized by McLuhan as the Gutenberg Galaxy.

Electricity has progressively speeds up all the old visual relations into more of an acoustic and tactile environment, which McLuhan calls the Global village.

A. Media dynamics

1. Definition of media

My definition of media is broad: it includes any technology whatever that creates extensions of the human body and senses from clothing to the computer.²

McLuhan contends that the formal language of each medium, regardless of the messages it communicates, shapes our physical, psychic and social environment. He considers individual consciousness as a relationship between the senses that is constantly and subliminally transformed by the environments created by different technologies. The specific content of each medium is the user who makes subjective awareness out of the information received from the senses. In this process of interaction both humans and their environment are in a state of continuous transformation.

2. Development of a new medium

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, as the bee of the plant world, enabling it to fecundate and to evolve ever new forms. The machine world reciprocates man's love by expediting his wishes and desires, namely, in providing him with wealth. One of the merits of motivation research has been the revelation of man's sex relation to the motorcar.

²Eric Norden, "Playboy Interview: Marshall McLuhan," Playboy 16:3 (March, 1969), p. 55.

Socially, it is the accumulation of group pressures and irritations that prompt invention and innovation as counterirritants. War and the fear of war have always been considered the main incentives to the technological extension of our bodies.³

The stimulus to new invention is the stress imposed on us by our present technological environment. The response to the increased power and speed of our own extended bodies is one which engenders new extensions. Every technology which is embraced creates new irritants and stresses in the human beings who have engendered it.⁴ These new needs lead to new technologies that act as counter-irritants in the hope of maintaining some kind of equilibrium. This is a ceaseless ongoing process. Human technology is a mode of adaptation.

Once any part of the economy feels a step-up in pace, the rest of the economy has to follow suit. Soon, no business could be indifferent to the greatly increased pace set by the typewriter. It was the telephone, paradoxically that sped the commercial adoption of the typewriter. The phrase "Send me a memo on that," repeated into millions of phones daily, helped to create the huge expansion of the typist function. Northcote Parkinson's law that "work expands so as to fill the time available for its completion" is precisely the zany dynamic provided by the telephone. In no time at all, the telephone expanded the work to be done on the typewriter to huge dimensions. Pyramids of paper work rise on the basis of a small telephone network inside a single business.⁵

In its embryonic stages there is rarely a specified demand for a new medium it is often misunderstood and misused as entertainment (ex: robots, clocks, etc...)

3. Media as extensions of people.

³Marshall McLuhan, Understanding Media: The Extensions of Man. (New York: McGraw-Hill Book, 1964), p. 56.

⁴Ibid., pp. 165-6.

⁵Ibid., p. 231.

Evolution as process has shifted from biology to technology.⁶

McLuhan considers that any medium whatever is an extension, a projection in space or in time, of our various senses⁷ Every human-made cultural artifact from language to chairs is seen as an extension of our body. The wheel is an extension of our feet, the camera an extension of our eye and memory etc...

Whereas all previous technology (save speech itself) had, in effect, extended some part of our bodies, electricity may be said to have outered the central nervous system itself, including the brain. Our central nervous system is a unified field quite without segments.⁸

All these extensions whether of skin, hand or feet, affect the whole psychic and social complex.⁹ Because all technologies are extensions of our physical being McLuhan considers their transformations to be organic in character.

4. Media as translators

All media are active metaphors in their power to translate experience into new forms.¹⁰ They force people to let go of their environment and to regasp it in a new creative way that enables a redefinition of reality.¹¹ The electronic

⁶Marshall McLuhan, Counterblast. (Toronto: McClelland and Stewart, 1969), p.53.

⁷Marshall McLuhan, "Report on Project in Understanding New Media," (Report No. 7a-279; ERIC No. ED 017-166). Washington, D.C.: U.S. Office of Education, 1960. part III p. 13.

⁸Marshall McLuhan, Understanding Media: The Extensions of Man. (New York: McGraw-Hill Book, 1964), p. 247.

⁹Ibid., p. 19.

¹⁰Ibid., p. 64.

¹¹Marshall McLuhan, The Gutenberg Galaxy: The Making of Typographic Man. (Toronto: University of Toronto Press, 1962.), p. 72.

pressures of simultaneity translate us from the visual sense to the oral sense, a major shift from visual to acoustic space.

When technology extends one of our senses, a new translation of culture occurs as swiftly as the new technology is interiorized.¹²

The term extension is used when talking about the transfer of physical functions and the word translation is referred to when discussing mental functions.

By putting our physical bodies inside our extended nervous systems, by means of electric media, we set up a dynamic by which all previous technologies that are mere extensions of hands and feet and teeth and bodily heat-control - all such extensions of our bodies, including cities - will be translated into information systems. Electromagnetic technology requires utter human docility and quiescence of meditation such as befits an organism that now wears its brain outside its skull and its nerves outside its hide. Man must serve his electric technology with the same serve-mechanistic fidelity with which he served his coracle, his canoe, his typography, and all other extensions of his physical organs. But there is this difference, that previous technologies were partial and fragmentary, and the electric is total and inclusive. An external consensus or conscience is now as necessary as private consciousness.¹³

In this electric age we see ourselves being translated more and more into the form of information, moving toward the technological extension of consciousness. That is what is meant when we say that we daily know more and more of ourselves into other forms of expression that exceed ourselves.¹⁴

5. Amputation

Every new technological innovation is a literal amputation of ourselves in order that it may be amplified and manipulated for social power and

¹²Ibid., p.40.

¹³Marshall McLuhan, Understanding Media: The Extensions of Man. (New York: McGraw-Hill Book, 1964), pp.64-5.

¹⁴Ibid., p.64.

action. Naturally, such amputation is associated with pain that is referred not so much to the body as to brain centers.¹⁵

Media encourage the overreliance on one sense faculty to the impairment or amputation of others. When the wheel substitutes itself for our feet, our feet's function is cut off, amputated.

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. This is the sense of the Narcissus myth. The young man's image is a self-amputation or extension induced by irritating pressures. As counter-irritant, the image produces a generalized numbness or shock that declines recognition. Self-amputation forbids self-recognition. The principle of self-amputation as an immediate relief of strain on the central nervous system applies very readily to the origin of the media of communication from speech to computer.¹⁶

6. Narcissistic narcosis-numbness

The Greek myth of Narcissus is directly concerned with a fact of human experience, as the word Narcissus indicates. It is from the Greek word narcosis, or numbness. The youth Narcissus mistook his own reflection in the water for another person. This extension of himself by mirror numbed his perceptions until he became the servomechanism of his own extended or repeated image. The nymph Echo tried to win his love with fragments of his own speech, but in vain. He was numb. He had adapted to his extension of himself and had become a closed system.¹⁷

¹⁵Marshall McLuhan, War and Peace in the Global Village. (New York: Bantam Books, 1968), p. 73.

¹⁶Marshall McLuhan, Understanding Media: The Extensions of Man. (New York: McGraw-Hill Book, 1964), p. 52.

¹⁷ibid., pp.51-2.

McLuhan's references to the myth of Narcissus serves to emphasize the idea that men are immediately fascinated by any extension of themselves in any material other than themselves and avoid feeling any concern about invention as a threat to their way of life.¹⁸ Since nobody was asked to invent radio or television based on a specifically expressed need, the exceedingly growing demand for such technology must be considered one of its psychic consequences.

This power of technology to create its own world of demand is not independent of technology being first an extension of our own bodies and senses. When we are deprived of our sense of sight, the other senses take up the role of sight in some degree. But the need to use the senses that are available is as insistent as breathing - a fact that makes sense of the urge to keep radio and TV going more or less continuously.¹⁹ The urge to continuous use is quite independent of the "content" of public programs or of the private sense life, being testimony to the fact that technology is part of our bodies. Electric technology is directly related to our central nervous systems, so it is ridiculous to talk of "what the public wants" played over its own nerves. This question would be like asking people what sort of sights and sounds they would prefer around them in an urban metropolis! Once we have surrendered our senses and nervous systems to the private manipulation of those who would try to benefit from taking a lease on our eyes and ears and nerves, we don't really have any rights left. Leasing our eyes and ears and nerves to commercial interests is like handing over the common speech to a private corporation, or like giving the earth's atmosphere to a company as a monopoly. Something like this has already happened with outer space, for the same reasons that we have leased our central nervous systems to various corporations. As long as we adopt the Narcissus attitude of regarding the extensions of our own bodies as really out there and really independent of us we will meet all technological challenges with the same sort of banana-skin pirouette and collapse.²⁰

¹⁸ibid., p.237.

¹⁹New York (AP)- Average daily television viewing in United States reached an all-time high in 1985 of seven hours, 10 minutes for each household." The Gazette, February 3 1986, p. A-9

²⁰Marshall McLuhan, Understanding Media: The Extensions of Man, (New York: McGraw-Hill Book, 1964), p. 73.

Another aspect developed by McLuhan is the need we have to numb a certain part of ourselves to avoid the pain caused by the extension, translation and amputation of our senses.

Because all media from the phonetic alphabet to the computer are extensions of man that cause deep and lasting changes in him they transform his environment. Such an extension is an intensification, an amplification of an organ, sense or function, and whenever it takes place, the central nervous system appears to institute a self-protective numbing of the affected area, insulating and anesthetizing it from conscious awareness of what's happening to it. It's a process rather like that which occurs to the body under shock or stress conditions, or to the mind in line with the Freudian concept of repression. I call this particular form of self-hypnosis Narcissus narcosis, a syndrome whereby man remains unaware of the psychic and social effects of his technology as a fish of the water it swims in. As a result, precisely at the point where a new media-induced environment becomes all pervasive and transmognifies our sensory balance, it also becomes invisible.²¹

After the initial shock of a new technology dissipates, the real revolution occurs. It lies in the adjustment of all personal and social life to the new perceptual models promoted by a technology. A new medium thus becomes an accepted undisputed assumption.²²

By stressing one sense over another a new technology can alter the ratio among our senses and thus the interplay between our senses. When one sense is stepped up it acts as an anesthetic for the other senses. The result of a break in the ratio among the senses is a kind of lost of identity.²³

7. Somnambulism

²¹Eric Norden, "Playboy Interview: Marshall McLuhan," Playboy 16:3 (March, 1969), p.56.

²²Marshall McLuhan, The Gutenberg Galaxy: The Making of Typographic Man. (Toronto: University of Toronto Press, 1962.), pp. 22-3.

²³ibid., p.24.

In the history of human culture there is no example of a conscious adjustment of the various factors of personal and social life to new extensions except in the puny and peripheral efforts of artists.²⁴

McLuhan uses different metaphors to describe people's difficulty in perceiving their environment either because they does not perceive it or because they approach the new with the psychological conditioning of the old.²⁵ Some of these analogies are the Tale of the Emperor's new clothes, the rear-view mirror and the notion that a fish do not know water.

From the time that Neolithic man the planter began to create environments one at a time by specialist extensions of his hands and arms and feet, men have always looked at a new environment as if it were the old one. We can never see the Emperor's new clothier, but we are staunch admirers of his garb. Only small children and artists are sensuously apt to perceive the new environment. Small children and artists are anti-social beings who are as little impressed by the established mores as they are conditioned by the new.²⁶

Most people still cling to what I call the rearview-mirror view of their world. By this I mean to say that because of the invisibility of any environment during the period of its innovation, man is only consciously aware of the environment that has preceded it: in other words, an environment becomes fully visible only when it has been superseded by a new environment: thus we are always one step behind in our view of the world. Because we are benumbed by any new technology which in turn creates a totally new environment we tend to make the old environment more visible: we do so by turning it into an art form and by attaching ourselves to the objects and atmosphere that characterized it, just as we've done with jazz; and as we're doing with the garbage of the mechanical environment via pop art.

The present is always invisible because it's environmental and saturates the whole field of attention so overwhelmingly; thus everyone but the artist, the man of integral awareness is alive in an earlier day.²⁷

²⁴Marshall McLuhan, Understanding Media: The Extensions of Man. (New York: McGraw-Hill Book, 1964) p. 70.

²⁵Marshall McLuhan and Quentin Fiore, The Medium is the Message. (New York: Bantam Books), pp.94-5.

²⁶Marshall McLuhan, "The Emperor's Old Clothes," cited in The Man-Made Object, ed. Gyorgy Kepes (New York: George Braziller, 1966), p. 90.

²⁷Eric Norden, "Playboy Interview: Marshall McLuhan," Playboy 16:3 (March, 1969) p. 55.

People's failure to recognize the powers and opportunities of new media and to develop the necessary controls for these media leaves them in the role of a servomechanism of this new technology.²⁸

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. An Indian is the servomechanism of his canoe, as the cowboy of his horse or the executive of his clock.²⁹

8. Acceleration

The typical virtues of industrial and typographic man are radically revised and reformed when information moves at the speed of light. Whereas visual man had dreamed of distant goals and vast encyclopedic programs of learning, electronic man prefers dialogue and immediate involvement. Since nothing on earth can be distant at the speed of light, electronic man prefers the inner to the outer trip and the inner to the outer landscape.³⁰

The speed of information attained by different technologies have a major effect on the organization of society. New means of moving information alters the structure of any society and may breakdown or dissolve certain organizations.

So long as the new means is everywhere available at the same time, there is a possibility that the structure may be changed without breakdown. Where there are great discrepancies in speeds of movement, as between air and road travel or between telephone and typewriter, serious conflicts occur within organizations.³¹

²⁸Marshall McLuhan and Harley Parker, Through the Vanishing Point: Space in Poetry and Painting, (World Perspectives Series, edited by Ruth Nanda Anshen, Vol. 37. New York: Harper and Row, 1968), p. 245.

²⁹Marshall McLuhan, Understanding Media: The Extensions of Man, (New York: McGraw-Hill Book, 1964), p. 55.

³⁰Marshall McLuhan "At the moment of Sputnik the planet became a global theater in which there are no spectators but only actors," Journal of Communication (Winter, 1974), p. 50.

³¹Marshall McLuhan, Understanding Media: The Extensions of Man, (New York: McGraw-Hill Book, 1964), p. 92.

9. From explosion to implosion

The gradual speed-up in the circulation of information transforms people's mode of participation in society.

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, after more than a century of electric technology, 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.³²

After expanding their frontiers with the use of mechanical technologies people sees their world contracting under the influence of electric technology.

From fission to fusion.

What makes a mechanism is the separation and extension of separate parts of our body as hand, arm, foot, in pen, hammer, wheel. And the mechanization of a task is done by segmentation of each part of an action in a series of uniform, repeatable, and movable parts. The exact opposite characterizes cybernation (or automation), which has been described as a way of thinking, as much as a way of doing. Instead of being concerned with separate machines, cybernation looks at the production problem as an integrated system of information handling.³³

When information is everywhere people feel independent³⁴, they relate to the world in a casual mode³⁵, the separation of functions and authority tends

³²ibid., p.19.

³³ibid., pp.218-9.

³⁴"Interview With Professor Marshall McLuhan," Macleans (March 7, 1977) : 4.

³⁵Marshall McLuhan, Understanding Media: The Extensions of Man. (New York: McGraw-Hill Book, 1964), p.286.

to dissolve³⁶, the principle of the divisibility of each process is replaced by the organic interlacing of all functions.³⁷

Today, in an age of implosion, we are playing the ancient explosion backward, as on a film. We can watch the pieces of man's being coming together again...³⁸

10. Media interactions

Media interact among themselves. A new medium oppresses the older media until it finds new shapes and positions for them. As with our senses any change in one medium brings about change in the whole configuration of media. New force and energy is released by the crossings or hybridization of media.³⁹

The electric light ended the regime of night and day, of indoors and outdoors. But it is when light encounters already existing patterns of human organization that the hybrid energy is released. Cars can travel all night, ball players can play all night, and windows can be left out of buildings. In a word, the message of the electric light is total change. It is pure information without any content to restrict its transforming and informing power.⁴⁰

The meeting of two media and the creation of a new form is a moment of truth and revelation that allows us to briefly grasp their formal essence and releases us from the numbness of our narcissistic trance.⁴¹

11. Media reversal

³⁶Ibid., p.217.

³⁷Ibid., p.48.

³⁸Ibid., p.168.

³⁹Ibid., p.57.

⁴⁰Ibid., p.60.

⁴¹Ibid., p.61

Any form or any kind of organized form, when pushed to its limits, instantly assumes the opposite characteristics. Once all the resources and energies of a medium have been played up the next step in its evolution is the reversal of itself. The following are a few examples of such reversals:

Culture has become our business. Ours used to be a business civilization with a little culture added. Now in the age when knowledge industries have become overwhelmingly dominant, culture has become the primary mark of our age.⁴²

... the ad is taking the place of the product progressively; the ad is a substitute for the product. It is not intended to encourage you to go out and buy a product; it is intended to be a product; to give you all the satisfactions and more than you could ever get from the product. In fact it is the people who own that car, own that icebox, love that soap - whatever they own already-who read and watch ads, in order to get the right satisfaction.⁴³

12. Medium is the message

In the organization of large areas, communication occupies a vital place...Media that emphasized time are those that are durable in character, such as parchment, clay and stone. The heavy materials are suited to the development of architecture and sculpture. Media that emphasize space are apt to be less durable and light in character, such as papyrus and paper. The latter are suited to wide areas in administration and trade. The conquest of Egypt by Rome gave access to supplies of papyrus, which became the basis of a large administrative empire. Materials that emphasize time favor decentralization and hierarchical types of institutions, while those that emphasize space favor centralization and systems of government less hierarchical in character. Large scale political organizations such as empires must be considered from the standpoint of two dimensions, those of space and time, and persist by overcoming the bias of media which over-emphasize either dimension. They have tended to flourish under conditions in which civilization reflects the influence of more than one medium and in which

⁴²Marshall McLuhan, Harley Parker and Jacques Barzun, Exploration of the Ways, Means and Values of Museum Communication with the Viewing Public. A Seminar. (New York: Museum of the City of New York, 1966), p. 10.

⁴³Marshall McLuhan, "Education in the Electronic Age," Interchange 1 (1970) :3.

the bias of one medium toward decentralization is offset by the bias of another medium towards centralization.⁴⁴

This basic idea, originally developed by Harold Innis⁴⁵, postulates that media shape and control the scale and form of human association and action and that the real message of media are the changes they bring about.⁴⁶

The media's messages are not presented consciously through concepts and opinions but unconsciously by altering sense ratios or patterns of perception.⁴⁷ Each medium is seen as having a bias towards the promotion of certain designs or patterns which they amplify and accelerate. McLuhan's position should not be understood as a total denial of the role of content in affecting individual and social behavior. In the Playboy interview, McLuhan presents his position as follows " by stressing that the medium is the message, rather than the content, I'm not suggesting that the content plays no role - merely that it plays a distinctly subordinate role."⁴⁸

The discovery of the materials was a reversal of roles that occurred with the Symbolists. When the painter Degas complained to Mallarmé that though he was overflowing with ideas for poems, the poems wouldn't jell. Mallarmé replied, "My dear Degas, poems are not made with ideas, they are made with words." The same discovery was made by all the arts in the later nineteenth century. Most familiar is the discovery of materials by the architects who realized that the form of a building needed to grow out of the materials used. They found that the tendency to enclose forms in materials that happened to be available was disastrous. Rather, let the available materials be the means of discovery of unique architectural

⁴⁴Harold Innis, Empire and Communications, (Toronto: University of Toronto Press, 1972), p. 7.

⁴⁵also Harold Innis, The Bias of Communication, with an Introduction by Marshall McLuhan (Toronto: University of Toronto Press, 1964).

⁴⁶Marshall McLuhan, Understanding Media: The Extensions of Man, (New York: McGraw-Hill Book, 1964), p. 24.

⁴⁷Barrington Nevitt, "Visible and Invisible Bias Via Media," Canadian Journal of Communication 7:3 (Nov. Dec. Jan. Feb., 1980-1) :16.

⁴⁸Eric Norden, "Playboy Interview: Marshall McLuhan," Playboy 16:3 (March, 1969) :61.

forms of beauty. It was at the same time that it became obvious to artists that the medium is the message.⁴⁹

Empirical research by Herbert Krugman of General Electric into the effects of various media on brain activity has tended to confirm McLuhan's theory:

The basic response of the brain wave is clearly to the media and not to the content differences within TV commercials, or to what, in our pre-McLuhan days, we would ordinarily have called the "commercial message"... The old theory was concerned with the fact that the message was transported. The new theory must be concerned with the fact that the viewer is transported, taken on a trip, an instant trip - even to the moon and beyond.⁵⁰

McLuhan's use of this articulation as a probe or pun has yielded many variations each having its own meaning.

The Medium is the Massage.

The Medium is the Mess Age.

The Medium is the Mass Age.

B. Media and culture

McLuhan considers our perception of time and space as a cultural artifact molded by the interaction between humans and their environment.⁵¹ Based on it's existing sense ratios each culture reacts differently to a medium.

Natives, on the other hand, who have very little contact with phonetic literacy and lineal print, have to learn to "see" photographs or film just as

⁴⁹ Marshall McLuhan and Wilfred Watson, From Cliche to Archetype. (New York: The Viking Press, 1970), p. 202.

⁵⁰ Herbert E. Krugman. "Electro-encephalographic Aspects of Low Involvement: Implications for the McLuhan Hypotheses" Meeting of the American Association of Public Opinion Research, (Lake George New York: May 21-23, 1970).

⁵¹ Marshall McLuhan and Harley Parker, Through the Vanishing Point: Space in Poetry and Painting. (World Perspectives Series, edited by Ruth Nanda Anshen, Vol. 37. New York: Harper and Row, 1968), pp.9-10.

much as we have to learn our letters. In fact, after having tried for years to teach Africans their letters by film, John Wilson found it easier to teach them their letters as a means to film literacy. For even when natives have learned to "see" pictures, they cannot accept our ideas of time and space "illusions." On seeing Charlie Chaplin's *The Tramp*, the African audience concluded that Europeans were magicians who could restore life. They saw a character who survived a mighty blow hurt. When the camera shifts, they think they see trees moving, and buildings growing and shrinking, because they cannot make the literate assumption that space is continuous and uniform. Nonliterate people simply don't get perspective or distancing effects of light and shade that we assume are innate human equipment. Literate people think of cause and effect as sequential, as if one thing pushed another along by physical force. Nonliterate people register very little interest in this kind of "efficient" cause and effect, but are fascinated by hidden forms that produce magical results. Inner, rather than outer, causes interest the nonliterate and nonvisual cultures. And that is why the literate West sees the rest of the world as caught in the seamless web of superstition.⁵²

The predominance of a specific medium in a society creates within that society a certain preference or bias for that medium and the forms of organization it tends to promote, McLuhan distinguishes two basic forms of human organization ⁵³

a) The oral form/tribal society

The oral form favors the ear and the dominance of the right hemisphere, it is analogous to acoustic space and is associated with tribal societies.

b) The visual form/literate society

The visual form favors the eye and the dominance of the left hemisphere, it is analogous to visual space and is associated with literate societies.

Eric A. Havelock in Preface to Plato and other authors (Innis, Carothers) share McLuhan's notions:

⁵²Marshall McLuhan, Understanding Media: The Extensions of Man, (New York: McGraw-Hill Book, 1964), pp. 286-7.

⁵³Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout, (Don Mills, Ontario: Longman Canada, 1972), p. 22.

The two technologies of preserved communication known to man, namely the poetised style with its acoustic apparatus and the visual prosaic style with its visual and material apparatus, each within their respective domains control also the content of what is communicable. Under one set of conditions man arranges his experience in words in some one given way; under the second set of conditions he arranges the same experience differently in different words and with different syntax, and perhaps as he does so the experience itself changes. This amounts to saying that the patterns of his thought have historically run in two distinct grooves, the oral and the written.⁵⁴

McLuhan identifies three historical periods based on the bias of certain media:

- A) The tribal world, based on the use of speech
- B) The Gutenberg Galaxy which began with the phonetic alphabet but established itself with the printing press.
- C) The Marconi Constellation which began with the invention of the telegraph in 1844.

1. Acoustic space/tribal society

The Chinese say Westerners are always getting ready to live - "Living as if every moment were his last" (Finnegans Wake). By contrast, in preliterate art forms, the time depicted includes all the possible moments of the thing's existence, rendered with iconic outline. The action of figures does not suggest any future motion but rather depicts the significant profile of an action that is timeless, and therefore inclusive of all possible times and all possible actions in all possible spaces.⁵⁵

In a tribal society speech, is the medium that promotes the social organization. McLuhan defines acoustic space in the following way:

In a pre-literate world, words are not signs. They evoke things directly in what psychologists call acoustic space by being named, the thing is simply there. Acoustic space is a dynamic or harmonic field. It exists

⁵⁴Eric A. Havelock, Preface to Plato, (Oxford, Great Britain: Harvard University Press, 1963), p. 117.

⁵⁵Marshall McLuhan and Harley Parker, Through the Vanishing Point: Space in Poetry and Painting, (World Perspectives Series, edited by Ruth Nanda Anshen, Vol. 37, New York: Harper and Row, 1968), p. 21.

while the music or sound persists. And the hearer is one with it, as with music. Acoustic space is the space-world of primeval man. Even his visual experience is much subordinate to his auditory margin nor point of view.

The pre-literate artist knows no vertical or horizontal axes. He does not enclose space but models it in all dimensions simultaneously, even when drawing or painting. There is no upside down in native art.

In this respect, sculpture stands mid-way between the auditory primeval world and the visual world of literate man.⁵⁶

Acoustic space is integral and organic, it has no center, no margin⁵⁷ and does not favor a particular "point of view". It is a world of simultaneous relationships perceived through the interplay of the senses.⁵⁸

The man of the tribal world led a complex, kaleidoscopic life precisely because the ear, unlike the eye, cannot be focused and is synaesthetic rather than analytical and linear. Speech is an utterance, or more precisely, an outing, of all our senses at once; the auditory field is simultaneous, the visual successive. The nodes of life of nonliterate people were implicit, simultaneous and discontinuous; and also far richer than those of literate man. By their dependence on the spoken word for information, people were drawn together into a tribal mesh; and since the spoken word is more emotionally laden than the written - conveying by intonation such rich emotions as anger, joy, sorrow, fear - tribal man was more spontaneous and passionately volatile. Audile tactile tribal man partook of the collective unconscious, lived in a magical integral world patterned by myth and ritual its values divine and unchallenged, whereas literate or visual man creates an environment that is strongly fragmented, individualistic, explicit, logical, specialized and detached.⁵⁹

⁵⁶ Marshall McLuhan, Counterblast, (Toronto: McClelland and Stewart, 1969), p. 79.

⁵⁷ Eric Norden, "Playboy Interview: Marshall McLuhan," Playboy 16:3 (March, 1969) :59.

⁵⁸ Marshall McLuhan and Quentin Fiore, The Medium is the Message, (New York: Bantam Books), p. 111.

⁵⁹ Eric Norden, "Playboy Interview: Marshall McLuhan," Playboy 16:3 (March, 1969) :59.

In an oral society we find extreme flexibility in the foreground and extreme persistence or rigidity in the the overall pattern.⁶⁰ Since everything affects everything in an oral society the normal state is one of universal terror.⁶¹

The close and intimate collective consciousness of oral society was invaded and disintegrated by the invention of the phonetic alphabet. Plato in *Phaedrus* foresaw writing as a destructive revolution.

The specific which you have discovered is an aid not to memory, but to reminiscence, and you give your disciples not truth but only the semblance of truth; they will be hearers of many things and will have learned nothing; they will appear omniscient and will generally know nothing; they will be tiresome company, having the show of wisdom without the reality.⁶²

The phonetic alphabet precipitated a profound shift from tribal involvement "to civilized" detachment by placing sight at the head of the hierarchy of senses and giving its user an eye for an ear.⁶³

2. Visual space/literate society

⁶⁰ Marshall McLuhan, Verbi-voco-visual Explorations, (New York: Something Else Press, 1967), p. 6.

⁶¹ Marshall McLuhan, The Gutenberg Galaxy: The Making of Typographic Man, (Toronto: University of Toronto Press, 1962.), p. 32.

Marshall McLuhan, Understanding Media: The Extensions of Man, (New York: McGraw-Hill Book, 1964), p. 155.

⁶² Marshall McLuhan and Quentin Fiore, The Medium is the Message, (New York: Bantam Books), p. 113.

Marshall McLuhan, The Interior Landscape: The Literary Criticism of Marshall McLuhan compiled by Eugene MacNarama, (New York: McGraw-Hill, 1969), pp.6-7.

⁶³ Marshall McLuhan, Understanding Media: The Extensions of Man, (New York: McGraw-Hill Book, 1964), pp.86-7.

Print amplified and accelerated the acceptance of the phonetic alphabet it promoted the vernacular and at the same time broke down the international manuscript communication based on Latin and the medieval order of guilds.⁶⁴

...just as the printed book had routed the manuscript between 1500 and 1510, so the vernacular was soon to supersede Latin. For it was inevitable that a larger market existed for the printed book within the bounds of a national speech than the international, clerical elite of Latin readers could ever muster. Book production was a heavy capital venture and needed the utmost markets to survive.⁶⁵

Print transformed most vernaculars by exerting pressure on "correct spelling, syntax and pronunciation".⁶⁶ When literate people see their regional mother tongue "analytically as a uniform entity"⁶⁷ nationalism emerged. The wider diffusion of books and printed matter promoted the new national languages and the uniform, centralizing forces of nationalism. The very nature of print also brought forth the problem of freedom.⁶⁸

Whereas highly literate Westerners have always idealized the condition of integration of races, it has been their literate culture that made impossible real uniformity among races. Literate man naturally dreams of visual solutions to the problems of human differences. At the end of the nineteenth century, this kind of dream suggested similar dress and education for both men and women. The failure of the sex-integration programs has provided the theme of much of the literature and psychoanalysis of the twentieth century. Race integration, undertaken on the basis of visual uniformity, is an extension of the same cultural strategy

⁶⁴Eric Norden, "Playboy Interview: Marshall McLuhan," Playboy 16:3 (March, 1969) :60.

⁶⁵Marshall McLuhan, The Gutenberg Galaxy: The Making of Typographic Man. (Toronto: University of Toronto Press, 1962.), p. 32.

⁶⁶Marshall McLuhan, Understanding Media: The Extensions of Man. (New York: McGraw-Hill Book, 1964), p. 159.

⁶⁷Eric Norden, "Playboy Interview: Marshall McLuhan," Playboy 16:3 (March, 1969) :60.

⁶⁸Marshall McLuhan, The Gutenberg Galaxy: The Making of Typographic Man. (Toronto: University of Toronto Press, 1962.), p. 199.

of literate man, for whom differences always seem to need eradication, both in sex and in race, and in space and in time.⁶⁹

Typography is one of the first examples of mechanization. It reduced scribal art to mechanical terms by fragmenting the page into a set of letters which are animated "one bit at a time".

...print was the first mass-produced thing, so it was the first uniform and repeatable "commodity." The assembly line of movable types made possible a product that was uniform and as repeatable as a scientific experiment.⁷⁰

With the use of print came the process of standardization that led to the visual organization of work and space.⁷¹ Print also created the first mass market in which a mass-produced consumer commodity could be offered. By extending the principle of translating non-visual matters into visual terms print encouraged the development of applied knowledge, this principle was later spread to every kind of learning.⁷² The mechanical principle of print, visual uniformity, repeatability etc., steadily extended themselves to influence most of our activities.⁷³

...it is necessary to see literacy as the printed page applied not only to the rationalizing of the entire procedures of production and marketing, but to law and education and city planning as well. The principles of continuity, uniformity, and repeatability derived from print technology have long permeated every phase of communal life in England and America. In those areas a child learns literacy from traffic and street; from every car and toy and garment. Learning to read and write is a minor facet of literacy in the standardized environments of the English-speaking world. Stress on literacy is rather a distinguishing mark of areas that are striving

⁶⁹Marshall McLuhan, Understanding Media: The Extensions of Man. (New York: McGraw-Hill Book, 1964), p. 159.

⁷⁰Marshall McLuhan, The Gutenberg Galaxy: The Making of Typographic Man. (Toronto: University of Toronto Press, 1962.), pp. 124-5.

⁷¹Marshall McLuhan, Understanding Media: The Extensions of Man. (New York: McGraw-Hill Book, 1964), p. 262.

⁷²Marshall McLuhan, The Gutenberg Galaxy: The Making of Typographic Man. (Toronto: University of Toronto Press, 1962.), p. 124, 155.

⁷³ibid., 209.

to begin that process of standardization which leads to the visual organization of all aspects of life. Without that psychic transformation of the inner life into visual terms by literacy, there cannot be the economic "take-off" that insures a continual movement of augmented production and perpetually accelerated change and exchange of goods and services.⁷⁴

People are thus surrounded by an abstract explicit visual technology of uniform time and uniform continuous space in which "cause" is efficient and sequential, and things move and happen on single planes and in successive order.⁷⁵

The visual sense when extended by phonetic literacy fosters the analytic habit of perceiving the single facet in the life of forms. The visual power enables us to isolate the single incident in time and space, as in representational art. In visual representation of a person or an object, a single phase or moment or aspect is separated from the multitude of known and felt phases, moments and aspects of the person or object. By contrast, iconographic art uses the eye as we use our hand in seeking to create an inclusive image, made up of many moments, phases, and aspects of the person or thing. Thus the iconic mode is not visual representation, nor the specialization of visual stress as defined by viewing from a single position. The tactual mode of perceiving is sudden but not specialist. It is total synesthetic, involving all the senses. Pervaded by the mosaic TV image, the TV child encounters the world in a spirit antithetic to literacy.⁷⁶

The power of the visual sense to capture single aspects of space in brief moments in time permits division and subdivision in various modes.⁷⁷ People in the visual mode find connections, classifications, whereas the nonliterate

⁷⁴ Marshall McLuhan, Audio-Visual Communications Review, xii, No. 2, p138-9

⁷⁵ Marshall McLuhan, The Gutenberg Galaxy: The Making of Typographic Man. (Toronto: University of Toronto Press, 1962.), p. 124, 19.

⁷⁶ Marshall McLuhan, Understanding Media: The Extensions of Man. (New York: New York: New-Hill Book, 1964), p. 291.

⁷⁷ Marshall McLuhan and Harley Parker, Through the Vanishing Point: Space in Poetry and Printing. (World Perspectives Series, edited by Ruth Nanda Anshen, Vol. 37. New York: Harper and Row, 1968), p. 10.

person seeks to create intervals, gaps and interfaces.⁷⁸ Visual appearance cannot interest a society before the interiorization of alphabetic technology.⁷⁹

To the visual or Euclidean man, objects do not create time and space. They are merely fitted into time and space. The idea of the world as an environment that is more or less fixed is very much the product of literacy and visual assumptions.⁸⁰

Literacy gives people the power to focus a little way in front of an image so that we take in the whole image or picture at a glance. Non-literate people have no such acquired habit and do not look at objects in our way. Rather they scan objects and images as we do the printed page, segment by segment. Thus they have no detached point of view. They are wholly with the object. They go empathetically into it. The eye is used, not in perspective but tactually, as it were.⁸¹

Print created an association of men homogeneously trained to be individuals.

Literate mechanical society separated the individual from the group in space, engendering privacy; in thought, engendering point of view; and in work, engendering specialism - thus forging all the values associated with individualism. But at the same time, print technology has homogenized man, creating mass militarism, mass mind and mass uniformity; print gave man private habits of individualism and a public role of absolute conformity.⁸²

⁷⁸ Marshall McLuhan and Wilfred Watson, From Cliche to Archetype, (New York: The Viking Press, 1970), p. 18.

⁷⁹ Marshall McLuhan, The Gutenberg Galaxy: The Making of Typographic Man, (Toronto: University of Toronto Press, 1962.) p. 54.

⁸⁰ Marshall McLuhan and Harley Parker, Through the Vanishing Point: Space in Poetry and Painting, (World Perspectives Series, edited by Ruth Nanda Anshen, Vol. 37. New York: Harper and Row, 1968), pp.249-50.

⁸¹ Marshall McLuhan, The Gutenberg Galaxy: The Making of Typographic Man, (Toronto: University of Toronto Press, 1962.), p. 37.

⁸² Eric Norden, "Playboy Interview: Marshall McLuhan," Playboy 16:3 (March, 1969) :60.

Print made personal memory inadequate by providing a vast record of past writings⁸³ and giving reincarnated life and fame to anything at all.⁸⁴ The portability of the book⁸⁵ and the privacy of the act of reading made books and newspapers the first messages which individuals could consume privately and free of group pressures.⁸⁶ People alienate themselves from the inner events of their subconscious life by reducing everything to a singly outer level of problem, talent and solution.⁸⁷ The rise of the discovery of the unconscious can be seen as a result of the restriction of conscious life within the extreme limits of print technology.⁸⁸ It evolved from the postures of the individual mind to the archetypes of the collective unconscious.⁸⁹

The magical mode disappears in proportion as interior events are made visually manifest. But such manifestation is also reduction and distortion of complex relations which are more fully sensed when there is full interplay of all the senses at once.⁹⁰

Literate people's efforts to suppress their complex emotions and feelings in the name of efficiency and practicality were promoted by the visual emphasis of print which allowed them to act without reacting.⁹¹ Objectivity meant leaving

⁸³Marshall McLuhan, Understanding Media: The Extensions of Man, (New York: McGraw-Hill Book, 1964) p. 158.

⁸⁴Marshall McLuhan, The Gutenberg Galaxy: The Making of Typographic Man, (Toronto: University of Toronto Press, 1962.), p. 259.

⁸⁵ibid., p.206.

⁸⁶Marshall McLuhan, Understanding Media: The Extensions of Man, (New York: McGraw-Hill Book, 1964), p. 158.

⁸⁷Marshall McLuhan and Harley Parker, Through the Vanishing Point: Space in Poetry and Painting, (World Perspectives Series; edited by Ruth Nanda Anshen, Vol. 37. New York: Harper and Row, 1968), p. 1.

⁸⁸Marshall McLuhan, The Gutenberg Galaxy: The Making of Typographic Man, (Toronto: University of Toronto Press, 1962.), p. 245.

⁸⁹ibid., 244.

⁹⁰ibid., 52.

⁹¹Eric Norden, "Playboy Interview: Marshall McLuhan," Playboy 16:3 (March, 1969) :56, 59.

out all experience except the visual⁹². The power to separate thought and feeling when engaged in action has the advantage of allowing literate people to carry out the most dangerous social operations with complete detachment.⁹³ Oral cultures act and react at the same time.⁹⁴

Literate people's emphasis on conformity encouraged psychic withdrawal and the setting up of an interior dialogue⁹⁵ which favored inner direction towards remote goals⁹⁶, free ideation and inner deviation.⁹⁷ The lack of free ideation in oral societies can be explained by the fact they consider inner verbalization effective social action.

3. The Marconi constellation/the Global village

Today it is the instant speed of electric information that, for the first time, permits easy recognition of the patterns and the formal contours of change and development. The entire world, past and present, now reveals itself to us like a growing plant in an enormously accelerated movie. Electric speed is synonymous with light and with the understanding of causes. So, with the use of electricity in previously mechanized situations, men easily discover causal connections and patterns that were quite unobservable at the slower rates of mechanical change. If we play backward the long development of literacy and printing and their effects on social experience and organization, we can easily see how there forms brought about that high degree of uniformity and homogeneity of society that is indispensable for mechanical industry. Play them backward, and we get just that shock of unfamiliarity in the familiar that is necessary for the understanding of the life forms.

⁹² Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout. (Don Mills, Ontario: Longman Canada, 1972), p. 143.

⁹³ Marshall McLuhan, Understanding Media: The Extensions of Man. (New York: McGraw-Hill Book, 1964), p. 20-1.

⁹⁴ *ibid.*, p. 88.

⁹⁵ Marshall McLuhan, The Interior Landscape: The Literary Criticism of Marshall McLuhan, compiled by Eugene MacNarama, (New York: McGraw-Hill, 1969), pp. 6-7.

⁹⁶ Marshall McLuhan, The Gutenberg Galaxy: The Making of Typographic Man. (Toronto: University of Toronto Press, 1962.), p. 214.

⁹⁷ *ibid.*, p. 20.

Electricity compels us to play our mechanical development backward, for it reverses much of that development. Mechanization depends on the breaking up of processes into homogenized but unrelated bits. Electricity unifies these fragments once more because its speed of operation requires a high degree of interdependence among all phases of any operation. It is this electric speed-up and interdependence that has ended the assembly line.⁹⁸

Electricity is organic in character, as information moves at the speed of signals in the central nervous system a total unified field of simultaneous experience and awareness emerges⁹⁹ When action and reaction occur almost at the same time¹⁰⁰, resonance returns as the physical basis of being.¹⁰¹ Electric media transform every sense ratio and restructure all our values, attitudes and institutions.¹⁰²

The tendency of electric media is to create a kind of organic interdependence among all the institutions of society, emphasizing de Chardin's view that the discovery of electromagnetism is to be regarded as "a prodigious biological event." If political and commercial institutions take on a biological character by means of electric communication, it is also common now for biologists like Hans Selye to think of the physical organism as a communication network: "Hormone is a specific chemical messenger-substance, made by an endocrine gland and secreted into the blood to regulate and coordinate the functions of distant organs

This peculiarity about the electric form, that it ends the mechanical age of individual steps and specialist functions, has a direct explanation. Whereas all previous technology (save speech, itself) had, in effect, extended some part of our bodies, electricity may be said to have outered the central nervous system itself, including the brain. Our central nervous system is a unified field quite without segments.¹⁰³

⁹⁸Marshall McLuhan, Understanding Media: The Extensions of Man, (New York: McGraw-Hill Book, 1964), pp. 252-3.

⁹⁹ibid., p.103.

¹⁰⁰ibid., p.20-1.

¹⁰¹Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout, (Don Mills, Ontario: Longman Canada, 1972), p. 19.

¹⁰²Eric Norden, "Playboy Interview: Marshall McLuhan," Playboy 16:3 (March, 1969) :62.

¹⁰³Marshall McLuhan, Understanding Media: The Extensions of Man, (New York: McGraw-Hill Book, 1964), p. 218.

Electronic technology regardless of our literate background fuses private "point of view" and public awareness into a whole and compels us towards total involvement into the world. As socially-conscious people identify more and more with their corporate world they become conservatives, very anxious¹⁰⁴ at the loss of their selfhood¹⁰⁵, completely involved in the total field of interacting events but no longer fighting the battle of the beleaguered individual or concerned with private guilt.¹⁰⁶ Once enmeshed in the magical resonance of the echo chamber people develop reactionary attitudes and values and few dare to fight the tribe.¹⁰⁷

In the electric age private points of view are self-destructive. They lead to multitudes of trivial answers to fragmented questions. The Western individual with his private perspective can scarcely be expected to grasp the coherence of large issues and patterns that emerge with high-speed data processing. He can find the answers for the individual only. The Japanese, unable to imagine a private point of view on anything, are not tempted to waste their time. They go for consensus that happens to be the need of our time.¹⁰⁸

The oral man never asks for a blueprint. He never wants an over-all view. His but to feel he is a member of the team. The only possibility in an oral structure is a monarchical apex of control. Where the activities of many are to be orchestrated there can be only one conductor. But the more necessary the conductor the more expendable he becomes. The first job of a top executive today is to see to it that there are several who can succeed him instantly. They often do!¹⁰⁹

¹⁰⁴ *Ibid.*, p.21.

¹⁰⁵ Marshall McLuhan and Harley Parker, Through the Vanishing Point: Space in Poetry and Painting, (World Perspectives Series, edited by Ruth Nanda Anshen, Vol. 37. New York: Harper and Row, 1968), pp.254-5.

¹⁰⁶ Marshall McLuhan and Quentin Fiore, The Medium is the Message, (New York: Bantam Books), p. 61.

¹⁰⁷ Eric Norden, "Playboy Interview: Marshall McLuhan," Playboy 16:3 (March, 1969) :70.

¹⁰⁸ Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout, (Don Mills, Ontario: Longman Canada, 1972), p. 201.

¹⁰⁹ Marshall McLuhan, Verbi-voco-visual Explorations, (New York: Something Else Press, 1967), no 15.

Print society offered people the freedom to be alienated and dissociated. The tribe in contrast is inclusive, it offers more diversity and less conformity, it tends to fulfill people's psychic and social needs at profound levels. The global village makes maximum disagreement and creative dialogue inevitable, it replaces tranquility and uniformity with conflict and harmony.¹¹⁰ It is a world infinitely more complex, vast and eternal than literate people can imagine.

Through radio, TV and the computer, we are already entering a global theater in which the entire world is a Happening. Our whole cultural habitat, which we once viewed as a mere container of people is being transformed by these media and by space satellites into a living organism, itself contained within a new macrocosm or connubium of a supraterrrestrial nature. The day of the individualist, of privacy, of fragmented or "applied" knowledge, of "points of view" and specialist goals is being replaced by the over-all awareness of a mosaic world in which space and time are overcome by television, jets and computers - a simultaneous, "all-at-once" world in which everything resonates with everything else as in total electrical field, a world in which energy is generated and perceived not by the traditional connections that create linear, causative thought processes, but by the intervals, or gaps, which Linus Pauling grasps as the languages of cells, and which create synaesthetic discontinuous integral consciousness.¹¹¹

McLuhan forecasts popular interest in astrology, clairvoyance and the occult as the announcement of the coming amplification of human consciousness on a world scale. Electricity offers the possibility of a form of global telepathy that would bypass the spoken language.

Via the computer, we could logically proceed from translating languages to bypassing them entirely in favor of an integral cosmic unconsciousness somewhat similar to the collective unconscious envisioned by Bergson: (see note a) The computer thus holds out the promise of a technologically engendered state of universal understanding and unity, a state of absorption in the logos that could knit mankind into one family and create a perpetuity of collective harmony and peace. This is the real use of the computer, not to expedite marketing or solve technical problems but, to speed the process of discovery and orchestrate terrestrial - and eventually galactic - environments and

¹¹⁰Eric Norden, "Playboy Interview: Marshall McLuhan," Playboy 16:3 (March, 1969) :70.

¹¹¹ibid., p. 70.

energies. Psychic communal integration, made possible at last by electronic media, could create the universality of consciousness foreseen by Dante when he predicted that men would continue as no more than broken fragments until they were unified into an inclusive consciousness. In a Christian sense, this is merely a new interpretation of the mystical body of Christ: and Christ, after all is the ultimate extension man.

PLAYBOY: Isn't this projection of an electronically induced world consciousness more mystical than technological?

MCLUHAN: Yes - mystical as the most advanced theories of modern nuclear physics. Mysticism is just tomorrow's science dreamed today.¹¹²

Henri Bergson, the French philosopher, lived and wrote in a tradition of thought in which it was and is considered that language is a human technology that has impaired and diminished the values of the collective unconscious. It is the extension of man in speech that enables the intellect to detach itself from the vast wider reality. Without language, Bergson suggests, human intelligence would have remained totally involved in the objects of its attention. Language does for intelligence what the wheel does for the feet and the body. It enables them to move with greater ease and speed and ever less involvement. Language extends and amplifies man but it also divides his faculties. His collective consciousness or intuitive awareness is diminished by this technical extension of consciousness that is speech.

Bergson argues in *Creative Evolution* that even consciousness is an extension of man that dims the bliss of union in the collective unconscious.¹¹³

Cultures that do not have visual space, who do not rely on a visually represented reality have no consciousness in our sense¹¹⁴, they live in a dream world.¹¹⁵ The consciousness of the Global village is the unconscious of our literate past.

Our unconscious contains everything, but there are no connections. Consciousness is a little insignificant area in which we strive to keep things in place and visually connected.¹¹⁶

¹¹²ibid., p. 72.

¹¹³Marshall McLuhan, *Understanding Media: The Extensions of Man*. (New York: McGraw-Hill Book, 1964), p. 218.

¹¹⁴Marshall McLuhan, *The Gutenberg Galaxy: The Making of Typographic Man*. (Toronto: University of Toronto Press, 1962.), p. 54.

¹¹⁵Marshall McLuhan, "Education in the Electronic Age," *Interchange* 1 (1970) :2.

¹¹⁶ibid., p. 2.

Everything we call rationality is visual. The irrational is the unconscious, where there are no connections. In the electric world everything is the unconscious. We put the unconscious outside in the environment by simply putting everything outside at once without connections. The unconscious has everything, but it has no connections. Our new electric environment has everything but no connections. It is simultaneous but not connected. This is the unconscious, so for most people it looks like crazy, mixed-up energy. Just like the unconscious itself. We have created the unconscious outside ourselves as an environment.¹¹⁷

As we enter the simultaneous field of non-literate awareness we encounter the most advanced ideas of twentieth-century art and science.¹¹⁸ Our vision of ourselves, our body percepts, our corporate social percepts are entirely altered. Space in physics, in sculpture and in painting loses its character of uniformity, continuity and connectedness¹¹⁹, we return to non-objective art, non-representational art.¹²⁰ Thought and feeling are once again reunited.¹²¹ Concern with effect replaces concern with meaning.¹²²

The more that one says about a acoustic space the more one realizes that it's the thing that mathematicians and physicists of the past fifty years have been calling space-time, relativity, and non-Euclidean systems of geometry. And it was into this acoustic world that the poets and painters began to trust in the mid-19th century.¹²³

¹¹⁷Ibid., p. 7.

¹¹⁸Marshall McLuhan, The Gutenberg Galaxy: The Making of Typographic Man, (Toronto: University of Toronto Press, 1962.), p. 26.

¹¹⁹Marshall McLuhan, Understanding Media: The Extensions of Man, (New York: McGraw-Hill Book, 1964), p. 297.

¹²⁰Marshall McLuhan, "The Relation of Environment to Anti-Environment," in Innovations: Where is our Culture Going (London: Macmillan, 1968) :129.

¹²¹Marshall McLuhan, Understanding Media: The Extensions of Man, (New York: McGraw-Hill Book, 1964), pp.57-8.

¹²²Ibid., p. 39.

¹²³Marshall McLuhan, Counterblast, (Toronto: McClelland and Stewart, 1969), p.114.

There is no getting "ahead" in an oral society, everything is there, there is nowhere to go.¹²⁴ Real space is inner space not outer.¹²⁵ Auditory imagination makes for simultaneous awareness of past and present. The most ancient and most recent encounter each other in an eternal simultaneous present.¹²⁶

Thus when T.S. Eliot wished to announce poetic revolution in the poet's attitude toward the medium of language, he proclaimed the primacy of "the auditory imagination":

What I call the "auditory imagination" is the feeling for syllable and rhythm, penetrating far below the conscious levels of thought and feeling, invigorating every word: sinking to the most primitive and forgotten, returning to the origin and bringing something back, seeding the beginning and the end. It works through meanings, certainly, or not without meanings in the ordinary sense, and fuses the old and obliterated, and the trite, the current, and the new and the surprising, the most ancient and the most civilized mentality.¹²⁷

Whether, in producing or in learning electricity tends towards etherealization by making the source of energy independent from the location of the process.¹²⁸ As information becomes the main commodity¹²⁹ the city as form becomes obsolete and people are transformed into a nomads.¹³⁰ Self-employment and artistic autonomy are the latent patterns of the electric environment.¹³¹

¹²⁴Marshall McLuhan, Understanding Media: The Extensions of Man, (New York: McGraw-Hill Book, 1964), p. 232.

¹²⁵Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout, (Don Mills, Ontario: Longman Canada, 1972), p. 259.

¹²⁶Marshall McLuhan and Barrington Nevitt, "Cultures in the Electronic World: Can the Bottom Line Hold Quebec," Perception (November/December 1977) :68.

¹²⁷Marshall McLuhan, "At the Flip Point of Time - The Point of More Return," Journal of Communication (Autumn 1975) :103.

¹²⁸Marshall McLuhan, Understanding Media: The Extensions of Man, (New York: McGraw-Hill Book, 1964) p. 301

¹²⁹Ibid., p. 185.

¹³⁰Ibid., p. 298.

¹³¹Ibid., p. 311.

Whereas Gutenberg had created a service that extended to whole nations, he had at the same time invented a form of hardware that fostered new forms of central organization, including a price system and the markets that came with it. What Arnold Toynbee had discerned as "etherealization" - the tendency in our time to do more and more with less and less - is part of the electronic information revolution of "software," which has the opposite effect of decentralizing. While hardware requires uniformity of product to pay for a centralized operation; the electronic form of information service permits not only decentralizing of organizations but a wide diversity of products without additional expenditure.¹³²

Electric media create an environment in which all cultures suddenly mix uprooting and inundating each others senses and creating endless new patterns of information.¹³³

Mere existence side by side of any two forms of organization generates a great deal of tension. Such, indeed, has been the principle of symbolist artistic structures in the past century. Toynbee observes that the challenge of a civilization set side by side with a tribal society finds its integral economy and institutions "disintegrated by a rain of psychic energy generated by the civilization" of the more complex culture. When two societies exist side by side, the psychic challenge of the more complex one acts as an explosive release of energy in the simpler one.¹³⁴

We presently live in an age of transition between the world of the eye and the world of the ear. Much of our confusion and inner trauma is an identity crisis¹³⁵ which stems from the clash between the old and the new environment.¹³⁶

¹³² Marshall McLuhan "At the moment of Sputnik the planet became a global theater in which there are no spectators but only actors" Journal of Communication (Winter, 1974) : 54.

¹³³ Marshall McLuhan, Understanding Media: The Extensions of Man. (New York: McGraw-Hill Book, 1964), p. 31.

¹³⁴ ibid., p. 74.

¹³⁵ Eric Norden, "Playboy Interview: Marshall McLuhan," Playboy 16:3 (March, 1969) :62.

¹³⁶ Marshall McLuhan "At the moment of Sputnik the planet became a global theater in which there are no spectators but only actors" Journal of Communication (Winter, 1974) :123.

Our literate ways are obsolete and new patterns have not yet clearly emerged.

We are at the beginning of a new culture.¹³⁷

"In the pre-literate times, paleolithic preliterate men had ritual dances and rituals whereby they renewed the energies of the cosmos periodically, and they had the strong impression that they were responsible for the universe and they made it by their own energies and their own art and their own understanding. Then came civilized man, who thought he lived inside the universe, as if it was around him. Then came electronic man, who suddenly realized again that he made the universe and that he was not inside it. Literally in the electronic age man makes his world. He makes the cosmos and programs it.¹³⁸

Conclusion

This chapter organizes McLuhan's ideas on media into two categories, the dynamics of media and their cultural impact on societies. While McLuhan has been criticized¹³⁹ as being a technological determinist, three important arguments seem to counter this. One, McLuhan sees humans in the electronic age interactively making their environment and being shaped by their environment. Two, McLuhan's aim in all of his work, as often stated, is to create awareness so as to counter the somnambulist trance of technological innovation and three, as will be discussed in the last chapter, one of the mental postures he used to probe the environment was to suspend his judgement so as to not be blinded by a nostalgic view of past events. I believe, even though our past record is rather bleak, that McLuhan had faith in the human capacity to control the technological environment.

While McLuhan did not address the issue of power in economic, social or political terms, he demonstrated by his own artistic work and his presence that

¹³⁷Marshall McLuhan, The Gutenberg Galaxy: The Making of Typographic Man (Toronto: University of Toronto Press, 1962.) p.135.

¹³⁸Marshall McLuhan, "Education in the Electronic Age," Interchange 1 (1970) :1.

¹³⁹John Fekete, "Marshall McLuhan; A Study in the Determinist Fetishism of Technology," (Master of Arts Thesis, McGill University, Montreal, 1969)

as most of our technology becomes software oriented the role of the artist can yield some power and effect change through symbolic means. By uncovering new territory and being able to make it available the artist can make an important contribution.

This chapter is particularly important in terms of the structure of the thesis, because it explains the specific cultural and technological context in which we must view McLuhan's ideas on art education. McLuhan situates his notions of art and education within the context of an electronic environment, the Global village. It is within this specific context that one must perceive the value and interest of McLuhan's ideas on art and education. Many artists¹⁴⁰ have been influenced by these ideas, seeing in them interesting hypotheses which provide the basis for exploring and interpreting their environment.

In the chapters two and three, the context in which McLuhan situates art has been established, in the chapter four I will now present definition of the role of art and artists. Since the conditions of art and artists are always changing McLuhan concentrates on defining the art process. An art education program influenced by McLuhan's ideas would probably define art education as a process based on a creative methodology. The program would let that methodology interact with a rich variety of contexts to yield a widely differentiated spectrum of artistic endeavors. The emphasis would be on making, cleansing and renewal, training perception, pattern recognition, anticipation, retrieval and programming. The interface between the artist, the chosen medium and formal language and the public could be explored to yield new directions in art. Even though McLuhan worked with visual artists¹⁴¹ he

¹⁴⁰Gene Youngblood, Expanded Media, (New York: E.P. Dutton, 1970)

¹⁴¹Marshall McLuhan and Harley Parker, Through the Vanishing Point: Space in Poetry and Painting (World Perspectives Series, edited by Ruth Nanda Anshen, Vol. 37. New York: Harper and Row, 1968)

was influenced mainly by literature: Joyce, Eliot, Mallarmé, Pound etc... It is from his study of literature that he developed his personal approach to art and to the artistic methods which will be presented in the sixth chapter.

CHAPTER 4 - MCLUHAN'S NOTION OF ART

Introduction

This chapter presents McLuhan's ideas on the role of the artist and the notion of art. In defining the artist, McLuhan suggests that in the electronic environment everybody tends to be an artist. He contrasts the role of the artist by comparing it to that of the scientist. The contemporary artist is seen as a subversive element more interested in revelation than in self expression. McLuhan describes the actual role of the artist by using the following activities (key words): making, cleansing and renewal, training perception, pattern recognition, anticipation, retrieval and programming.

McLuhan considers art to be the result of the artist's encounter with the public. His notion of art includes the popular arts. The role of art is to act as an antienvironment to restore our perception of the environment and make us aware of what surrounds us.

A. Definition of the artist.

...The artist is the man in any field, scientific or humanistic, who grasps the implications of his actions and of new knowledge in his own time. He is the man of integral awareness. ¹

¹ Marshall McLuhan, Understanding Media: The Extensions of Man. (New York: McGraw-Hill Book, 1964), p. 71.

McLuhan's view of the artist is strongly influenced by Mallarmé, Joyce and Lewis. The artist is intrigued by the world and at the same time refuses to be overwhelmed by it. Artists are not afraid of change, they accept the challenge of the period in which they live and participate in its making:

He exults in the novelties of perception afforded by innovation. The pain that the ordinary person feels in perceiving the confusion is charged with thrills for the artist in the discovery of new boundaries and territories for the human spirit. He glories in the invention of new identities, corporate and private, that for the political and educational establishments, as for domestic life, bring anarchy and despair.²

McLuhan's definitions of the artist and the role of art in society can be applied successfully to describe his own work³ as an artist working in a mixed medium of direct experience and historical analogy.⁴

The electric age of servo-mechanisms suddenly releases men from the mechanical and specialist servitude of the preceding machine age. As the machine age and the motorcar released the horse and projected it onto the plane of entertainment, so does automation with men. We are suddenly threatened with a liberation that taxes our inner resources of self-employment and imaginative participation in society. This would seem to be a fate that calls men to the role of artist in society.⁵

Although the creative act is one of intense activity, artists, the integral persons are always at leisure because their energy is not fragmented, all their faculties are engaged in what they are doing.

Instead of heading into a world of joblessness, we are heading toward a world of creative involvement, which is leisure. Involvement is far more

²Marshall McLuhan, Quentin Fiore and Jérôme Agel, War and Peace in the Global Village. (New York: Bantam Books, 1968), p. 12.

³Blair Francis Stone, "Marshall McLuhan and the Humanist Tradition: Media Theory and Encyclopedic Learning" (Ph.D. Dissertation, University of Massachusetts: Amherst, 1974), p. 46.

⁴Howard Rosenberg, "Philosophy in a Pop Key," in McLuhan: Hot and Cool, ed (New York: Dial Press, 1967), p. 196.

⁵Marshall McLuhan, Understanding Media: The Extensions of Man. (New York: McGraw-Hill Book, 1964), pp. 257-8

demanding of our energies than any job could be. But when you're totally involved you're playing, you're not working. You're at leisure.⁶

1. Everybody is encouraged to be an artist

Today, amidst the total involvement of living on a "scrapped" planet, everyone is encouraged to think of himself as a creative artist, divinely assigned to "do his thing." The culture hero undertakes to relate his world to reality by Herculean labors of probe and retrieval and purgation.⁷

The ability to perceive environmental changes, recognize that the future is the present and prepare the ground for it, once the province of the artist now becomes available to all members of the electronic society.⁸ As reference McLuhan draws many parallels with primitive societies.

The Balinese say, "We have no art, we do everything as well as possible." The artist in the Middle Ages, Renaissance, or the era up to the nineteenth century was regarded as a unique, exceptional person because he used an exceptional, unusual process. In primordial times, as today, the artist uses a familiar, ordinary technique and so he is looked upon as an ordinary person. Every man today is in this sense an artist - the administrator, the scientist, the doctor, as well as the man who uses paint or sculpts stone. Just as archaic man had to follow natural processes of rhythms in order to influence and to purge, cleanse them by ricorso, so modern electric technologies require such timing and precision that only the following processes in nature can be tolerated.⁹

2. Artist / Scientist

McLuhan sees the artist as wanting to arrest the flux of existence in order that the mind may be united with that which is permanent in existence in

⁶Marshall McLuhan, Harley Parker and Jacques Barzun, Exploration of the Ways, Means and Values of Museum Communication with the Viewing Public, A Seminar. (New York: Museum of the City of New York, 1966), p. 23.

⁷Marshall McLuhan and Wilfred Watson, From Cliche to Archetype. (New York: The Viking Press, 1970), p. 207.

⁸Eric Norden, "Playboy Interview: Marshall McLuhan," Playboy 16:3 (March, 1969) : 55.

⁹Marshall McLuhan and Wilfred Watson, From Cliche to Archetype. (New York: The Viking Press, 1970), pp. 118-9.

contrast to this he sees science and philosophy since Newton and Kant as seeking to control the world by magical formula rather than understand it.¹⁰ The artist uses percepts to relate things analogically, the scientist, on the other hand uses concepts to logically connect and classify. For the poet a word is exact in terms of the effect it creates by resonance within the audience. For the scientist or philosopher each word within a particular discipline is confined to a single meaning in abstraction of its cultural heritage.¹¹

The artist starts with a desired effect and learns to create its cause with his chosen medium and audience. By contrast, the scientist looks for the effects to fit (or not to fit) his chosen theory. The scientist is concerned with defining concepts to clarify his theories, while the artist is dedicated to sharpening the perception of his audience in order to share unique human experience.¹²

The differences between art and science originate with the split between visual and audile tactile sensory preferences initiated by the Greeks and amplified with the arrival of print in the sixteenth century.¹³

...what began as a separation of the senses in science became the ground of all artistic opposition. The artist struggled to retain and to regain the integral, the interplay of sense in a world that was seeking madness by the simple road of isolation of the senses.¹⁴

As the present electronic environment tends to reintegrate our senses McLuhan foresees a "quantum leap from science to art."¹⁵

¹⁰Marshall McLuhan, The Interior Landscape: The Literary Criticism of Marshall McLuhan compiled by Eugene MacNarama, (New York: McGraw-Hill, 1969), pp. 84-5.

¹¹Barrington Nevitt, "Visible and Invisible Bias Via Media," Canadian Journal of Communication 7:3 (Nov. Dec. Jan. Feb., 1980-1) :12.

¹²ibid., p. 12.

¹³Marshall McLuhan, The Gutenberg Galaxy: The Making of Typographic Man. (Toronto: University of Toronto Press, 1962.), p. 81.

¹⁴ibid., p.182.

¹⁵Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout. (Don Mills, Ontario: Longman Canada, 1972), p. 123.

Mathematics and physics alike are now abandoning the sciences in favor of the humanities, looking for new models of perception. Models of perception, because the models of perception linguistically and artistically are far more complicated than the models used by the mathematician or the scientist. They are relatively simple-minded people, you know. I mean their models are very severely restricted and specialized and they have got to the point of sophistication in the use of models where they know they have to go back to the languages and the humanities in order to find better models.¹⁶

Siegfried Gideon in "Mechanization Takes Command" draws the parallels between the techniques of science and those of modern art to the great incredulity of the scientific community.¹⁷

What the artist has always known, namely that the greatest effects result from the utmost economy of means, has now become a truism of the material sciences.¹⁸

Art has the utmost relevance not only to the understanding of media but also to the development of media controls.

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.¹⁹

3. Self expression/revelation

McLuhan associates self-expression with other forms of enclosure such as the habits of private property, privacy and individualism. He relates the rise of self-expression with the use of typography which provided the means of

¹⁶ Marshall McLuhan, "Education in the Electronic Age," Interchange 1 (1970): 8.

¹⁷ Marshall McLuhan, The Mechanical Bride: Folklore of Industrial Man. (New York: Vanguard Press, 1951), p. 50.

¹⁸ Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout. (Don Mills, Ontario: Longman Canada, 1972), p. 95.

¹⁹ Marshall McLuhan and Harley Parker, Through the Vanishing Point: Space in Poetry and Painting. (World Perspectives Series, edited by Ruth Nanda Anshen, Vol. 37. New York: Harper and Row, 1968), p. 243.

extending the dimensions of the private author in time and space²⁰ and perspective:

Perspective itself is a mode of perception which in its very nature moves toward specialism and fragmentation. It insists on the single point of view (at least, in its classical phase) and involves us automatically in a single space. Inasmuch as a three dimensional space is a concomitant of one dimension in time, we find fragmentation developing in both space in time, and in both poetry and painting. Because of the insistence on single times and single spaces, the possibility of "self-expression" arises.²¹

These media (typography, perspective) allowed the individual to break out of the group and provided a model of how to add individual to individual to form new commercial (industrialism, mass markets), educational (universal literacy, school systems) military and political (nationalism) corporate structures.²² The artists move towards the idea of more impersonal processes in art production dates back to the nineteenth century when they scolded the new masses for their impersonal process in the consumption of art products.²³

But it was Mallarmé who formulated the lessons of the press as a guide for the new impersonal poetry of suggestion and implication. He saw that the scale of modern reportage and of the mechanical multiplication of messages made personal rhetoric impossible. Now was the time for the artist to intervene in a new way and to manipulate the new media of communication by a precise and delicate adjustment of the relations of words, things, and events. His task had become not self-expression but the release of the life in things. *Un Coup de Dés* illustrates the road he took in the exploitation of all things as gestures of the mind, magically adjusted to the secret powers of being. As a vacuum tube is used to

²⁰ Marshall McLuhan, Understanding Media: The Extensions of Man, (New York: McGraw-Hill Book, 1964), pp.161-2

Marshall McLuhan, The Gutenberg Galaxy: The Making of Typographic Man (Toronto: University of Toronto Press, 1962.) p.131.

²¹ Marshall McLuhan and Harley Parker, Through the Vanishing Point: Space in Poetry and Painting, (World Perspectives Series, edited by Ruth Nanda Anshen, Vol. 37. New York: Harper and Row, 1968), p. 13.

²² Marshall McLuhan, Understanding Media: The Extensions of Man, (New York: McGraw-Hill Book, 1964), p. 157.

²³ Marshall McLuhan, The Gutenberg Galaxy: The Making of Typographic Man, (Toronto: University of Toronto Press, 1962.), p. 277.

shape and control vast reservoirs of electric power, the artist can manipulate the low current of casual words, rhythms, and resonance to evoke the primal harmonies of existence or to recall the dead. But the price he must pay is total self-abnegation,²⁴

And it is plain that Mallarmé regarded the press as this ultimate encyclopedic book in its most rudimentary form. The almost superhuman range of awareness of the press now awaits only the full analogical sense of exact orchestration to perfect its present juxtaposition of items and themes. And this implies the complete self-effacement of the writer, for "this book does not admit of any signature." The job of the artist is not to sign but to read signatures. Existence must speak for itself. It is already richly and radiantly signed. The artist has merely to reveal, not to forge the signatures of existence. But he can only put these in order by discovering the orchestral analogies in things themselves. The result will be "the hymn, harmony and joy, as pure ensemble ordered in the sharpest and most vivid circumstance of their interrelations. Man charged with divine vision has no other mode of expression save the parallelism of pages as a means of expressing the links, the whims, the limpidity on which he gazes."²⁵

By being self-effaced artists can act as a catalyst and create in their audience "a feeling of immediate association with corporate power."²⁶ By not speaking with their own voice they can become an "outlets" for the multiple aspects of reality.²⁷

With the growth of collective art forms such as television and film and the shift from private ideals to corporate images, teamwork succeeds private effort.²⁸

²⁴Marshall McLuhan, The Interior Landscape: The Literary Criticism of Marshall McLuhan compiled by Eugene MacNarama, (New York: McGraw-Hill, 1969), pp.12-3.

²⁵Ibid., p. 15.

²⁶Marshall McLuhan, Counterblast, (Toronto: McClelland and Stewart, 1969), p. 138

²⁷Marshall McLuhan, "James Joyce: Trivial and Quadrivial" Thought, XXVIII (summer, 1953) : 83.

²⁸Marshall McLuhan and Quentin Fiore, The Medium is the Message, (New York: Bantam Books), p. 123.

McLuhan sees artists in the electric age as relinquishing self-expression and becoming prophetic as they discover and reveal social and psychic events ahead of their time.

"Poets and artists live on frontiers. They have no feedback, only feedforward. They have no identities. They are probes."²⁹

4. The artist is subversive

In contrast to the Orient the artist in the Western world has been an alien, an outcast.³⁰ Artists are considered subversive because they often reveal what people do not want to know and in the process change social rules. Their acceptance of this anti-social role empowers them to be more perceptive in their observations by avoiding the limits of conventional wisdom and social trends.

This need to interface, to confront environments with a certain antisocial power, is manifest in the famous story "The Emperor's New Clothes." "Well-adjusted" courtiers, having vested interests, saw the Emperor as beautifully appointed. The "antisocial" brat, unaccustomed to the old environment, clearly saw that the Emperor "ain't got nothin' on" The new environment was clearly visible to him.³¹

As reality unfolds, the interfaces among the many components create new and unexpected forms that do not fit in any system of conventional wisdom. Only the perceptive qualities of the artists allow them to reveal these forms.³²

²⁹ Marshall McLuhan, Culture Is Our Business. (New York: Ballantine Books, 1970), p.44.

During a 1966 television interview with Eric Goldman, McLuhan flatly stated that concern with biographical data about him is "quite unnecessary." mentioned in McLuhan: Hot and Cool, ed, Gerald E. Stearn (New York: Dial Press, 1967), p.xv.

³⁰ Marshall McLuhan, Quentin Fiore and Jerome Agel, War and Peace in the Global Village. (New York: Bantam Books, 1968), p. 20.

³¹ Marshall McLuhan and Quentin Fiore, The Medium is the Message. (New York: Bantam Books), p. 88.

³² Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout. (Don Mills, Ontario: Longman Canada, 1972), p. 173.

McLuhan quotes from Françoise Gilot's book on Life with Picasso the painter to illustrate that such disruptive revelation is the province of the artist:

"Pablo shook his head. "Kahnweiler's right," he said." The point is art is something subversive. It's something that should not be free. Art like liberty, like the fire of Prometheus, are things one must steal, to be used against the established order. Once art becomes official and open to everyone, then it becomes the new academicism." He tossed the cablegram down on the table. "How can I support an idea like that? If art is ever given the keys to the city, it will be because it's been so watered down, rendered so impotent, that it's not worth fighting for."³³

When I (Picasso) paint, I always try to give an image people are not expecting and, beyond that, one they reject. That's what interests me. It's in this sense that I mean I always try to be subversive. That is, I give a man an image of himself whose elements are collected from among the usual way of seeing things in traditional painting and then reassemble in a fashion that is unexpected and disturbing enough to make it impossible for him to escape the questions it raises.³⁴

Art like crime, bad news and other anti-environments is what allows us to perceive the world.³⁵

B. The role of the artist

1. Making versus matching

Perhaps the great revolution produced by photography was in the traditional arts. The painter could no longer depict a world that had been much photographed. He turned, instead to reveal the inner process of creativity in expressionism and in abstract art. Likewise, the novelist could no longer describe objects or happenings for readers who already knew what was happening by photo, press, film, and radio. The poet and novelist turned to those inward gestures of the mind by which we achieve

³³Marshall McLuhan and Harley Parker, Through the Vanishing Point: Space in Poetry and Painting, (World Perspectives Series, edited by Ruth Nanda Anshen, Vol. 37. New York: Harper and Row, 1968), p. 246.

³⁴Ibid., p. 241.

³⁵Marshall McLuhan, "The Relation of Environment to Anti-Environment," in Innovations, ed. by Bernard Bergonzi (London: Macmillan, 1968), p. 126.

insight and by which we make ourselves and our world. Thus art moved from outer matching to inner making.³⁶

McLuhan refers to E.H. Gombrich in discussing the preceding opposite shift from making to matching in Western art which happened in fifth-century Athens:

In discovering the joys of matching or of realistic representation, the Greeks were not behaving like free men, but like robots. In the representation of reality stress is laid upon the visual sense usually at the expense of all other senses. Such representation began with the rise of the phonetic literacy and cannot occur at any other time or at any place without the presence of a technology that favors the visual sense at the expense of all other senses.³⁷

The concept in Western art of trying to match inner and outer environments is what distinguishes it from Oriental art.³⁸ With the idea of matching also came the notion of realism in psychology and narrative. Realism originated from fragmentation, specialism and the social emergence of the individual.³⁹

The Westerner, a visual man, thinks of art as a repetition. He thinks of language as repetition. But we're the only culture of which this has ever been true. All the other cultures think of art forms, as including language, as making.⁴⁰

In the electronic environment art becomes once again making instead of matching.

³⁶Marshall McLuhan, Understanding Media: The Extensions of Man, (New York: McGraw-Hill Book, 1964), pp. 174-5.

³⁷Marshall McLuhan and Harley Parker, Through the Vanishing Point: Space in Poetry and Painting, (World Perspectives Series, edited by Ruth Nanda Anshen, Vol. 37. New York: Harper and Row, 1968), p. 239.

³⁸Marshall McLuhan, Harley Parker and Jacques Barzun, Exploration of the Ways, Means and Values of Museum Communication with the Viewing Public. A Seminar, (New York: Museum of the City of New York, 1966), p. 14.

³⁹Marshall McLuhan and Wilfred Watson, From Cliche to Archetype, (New York: The Viking Press, 1970), p. 89.

⁴⁰Marshall McLuhan, Harley Parker and Jacques Barzun, Exploration of the Ways, Means and Values of Museum Communication with the Viewing Public. A Seminar, (New York: Museum of the City of New York, 1966), p. 14.

"TV bypasses the ballot box as a means of creating political representatives. The politician can no longer "represent" anybody. He must become his admirers by turning himself into a new image of abstract art.

Art abandoned representation a century ago. "Matching" is a visual technique alien to the age of electric involvement and image-making."⁴¹

2. Cleansing and renewal

Influenced by Mallarmé and Joyce, McLuhan considers one of the functions of the artist is to cleanse and renew the popular language of art. By occupying and exploiting the banality of popular expression the artist can transform it.⁴²

When Mallarmé and Eliot and Pound and Joyce designate the poetic task as cleansing and renewal of speech and language, they point to an enterprise of even greater scope than that undertaken by Heracles. Language is befouled and messed up by millions of people each day. It is only periodically restored by poets who create new gaps or intervals in the central rhythms of the tongue. The fissures so opened admit and direct the streams of speech in fresh new patterns that release perceptual life from pestilential linguistic smog.⁴³

3. Training of perception

We may be drowning. But if so, the flood of experience in which we are drowning is very much part of the culture we have created. The flood is not something outside our culture. It is a self-invasion of privacy. And so it's not catastrophic. We can turn it off if we choose, if we wake up to the fact that the faucets of change are inside the ark of society, not outside.⁴⁴

⁴¹ Marshall McLuhan, Culture Is Our Business. (New York: Ballantine Books, 1970), p. 60.

⁴² Marshall McLuhan, The Interior Landscape: The Literary Criticism of Marshall McLuhan compiled by Eugene MacNarama, (New York: McGraw-Hill, 1969), p. 13.

⁴³ Marshall McLuhan and Wilfred Watson, From Cliche to Archetype. (New York: The Viking Press, 1970), p. 115.

⁴⁴ Marshall McLuhan, Counterblast. (Toronto: McClelland and Stewart, 1969), p. 115.

People can control the situation if they are made aware of it. Technological determinism can be avoided by understanding media. Art as the antennae of new awareness and discovery and as a storehouse of achieved values plays a crucial role.

As the unity of the modern world becomes increasingly a technological affair, the techniques of the arts provide the most valuable means of insight into the real direction of our own collective purposes. Conversely, the arts can become a primary means of social orientation and self-criticism.⁴⁵

Artists open the doors of perception to their public. They offer clear vision in the maelstrom of technological change. Art is a teaching machine for the training of perception and judgment.⁴⁶

The function of the arts is training in perception. It is not instruction. It is to train your ability to see and use your senses.⁴⁷

4. Pattern recognition

We have reached a similar point of data gathering when each stick of chewing gum we reach for is acutely noted by some computer that translates our least gestures into a new probability curve or some parameter of social science. Our private and corporate lives have become information processes because we have put our central nervous system outside us in electric technology.⁴⁸

⁴⁵Marshall McLuhan, The Mechanical Bride: Folklore of Industrial Man. (New York: Vanguard Press, 1951), p. 87.

⁴⁶Marshall McLuhan and Harley Parker, Through the Vanishing Point: Space in Poetry and Painting. (World Perspectives Series, edited by Ruth Nanda Anshen, Vol. 37. New York: Harper and Row, 1968), p. 238.

⁴⁷Marshall McLuhan, "Education in the Electronic Age," Interchange 1 (1970) :5.

⁴⁸Marshall McLuhan, Understanding Media: The Extensions of Man. (New York: McGraw-Hill Book, 1964), p.60.

The electronic acceleration of information renders the linear, visual and connected mode of perception obsolete because of its slowness.⁴⁹ When information circulates instantaneously the only alternative is pattern recognition.

Our electrically-configured world has forced us to move from the habit of data classification to the mode of pattern recognition. We can no longer build serially, block-by-block, step-by-step, because instant communication insures that all factors of the environment and of experience co-exist in a state of active interplay.⁵⁰

The artist by making inventories of the effects of developing situations can by contrast and comparison recognize different patterns and processes in the electronic environment.⁵¹ It is by the total field approach of pattern recognition that the artist becomes inclusively aware of situations. Having the capacity to read the language of the outer world the artist can then relate it to the inner world.⁵²

5. Anticipation

The power of the arts to anticipate future social and technological developments, by a generation and more, has long been recognized. In this century Ezra Pound called the artist "the antennae of the race." Art as radar acts as "an early warning system," as it were, enabling us to discover social and psychic targets in lots of time to prepare to cope with them.⁵³

In today's ground of information speed-up, the nineteenth century separation between thinking and doing is reversed and thinking now becomes

⁴⁹Marshall McLuhan and Quentin Fiore, The Medium is the Message. (New York: Bantam Books), p. 63.

⁵⁰Ibid., p. 63.

⁵¹Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout. (Don Mills, Ontario: Longman Canada, 1972), p. 8.

⁵²Eric Norden, "Playboy Interview: Marshall McLuhan," Playboy 16:3 (March, 1969) :55.

⁵³Marshall McLuhan, Understanding Media: The Extensions of Man. (New York: McGraw-Hill Book, 1964), p. xi.

doing.⁵⁴ In this context control over change demands the capacity to anticipate effects before they take place.⁵⁵ This takes much more knowledge than the knowledge of simply producing the product.⁵⁶

We have had to shift our stress of attention from action to reaction. We must now know in advance the consequences of any policy or action since the results are experienced without delay. Because of electric speed, we can no longer wait and see.⁵⁷

The artist through artistic play is engaged in making analogical models⁵⁸ of situations that have not yet matured in society at large in doing so he or she discovers what actually happens in these contexts.⁵⁹ In the allatocness of the global village, the artist creates early warnings, prophetic signals that anticipate the consequences of innovation. The artist's capacity to be ahead of the times comes from the close contact with the present whereas the non-artist translates the uneasiness with the present in a feeling of numbness that makes him or her look at the present through the rear-view mirror of the past.⁶⁰

Man in outer space has yet no means of imagining the nature of his own experience in space. Until artists have provided him with adequate forms

⁵⁴ Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout. (Don Mills, Ontario: Longman Canada, 1972), p. 222.

⁵⁵ Marshall McLuhan, Understanding Media: The Extensions of Man. (New York: McGraw-Hill Book, 1964), p. 179.

⁵⁶ Marshall McLuhan "The password is involvement." Monday Morning (September 1967) :20

⁵⁷ Marshall McLuhan and Quentin Fiore, The Medium is the Message. (New York: Bantam Books), p. 63.

⁵⁸ Marshall McLuhan, The Interior Landscape: The Literary Criticism of Marshall McLuhan compiled by Eugene MacNarama. (New York: McGraw-Hill, 1969), p. 182.

⁵⁹ Marshall McLuhan, Understanding Media: The Extensions of Man. (New York: McGraw-Hill Book, 1964), p. 215.

⁶⁰ Marshall McLuhan and Harley Parker, Through the Vanishing Point: Space in Poetry and Painting. (World Perspectives Series, edited by Ruth Nanda Anshen, Vol. 37. New York: Harper and Row, 1968), p. 221.

to express what he feels in space, he will not know the meaning of the experience.⁶¹

The thoughts that rise in us as we encounter our world are the effect that things have upon us. They are not the things. It is the distinction of the "artist" in any field that he commands this power to convey the effects of things when the ordinary person is merely numbed or robotized by things. The fascination of child behavior and child art is the same.⁶²

The stipple of points of Seurat is close to the present technique of sending pictures by telegraph, and close to the form of the TV image or mosaic made by the scanning finger. All of these anticipate later electric forms because, like the digital computer with its multiple yes-no marks and spaces, they caress the contours of every kind of being by the multiple touches of these points.⁶³

It is for these reasons that John Kenneth Galbraith argues that business must now study art so as to give the artistically perceptive businessperson a decade of leeway in planning operations.⁶⁴

6. Retrieval

As in a speeded-up film, we are traversing all ages, all experience, including the experience of prehistoric man. Our experience is not exclusive of other people's experience but inclusive - symphonic and orchestral, rather than linear or melodic. This gigantic flashback may sound like a collective version of that movie of a man's past life that is said to flash on when he is drowning.⁶⁵

The speed-up of information to instant levels accentuates the need for constantly new information and the disposal of immense quantities of briefly consumed ideas. This inflation of cultural currency creates a decline in

⁶¹Ibid., pp. 30-1.

⁶²Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout. (Don Mills, Ontario: Longman Canada, 1972), p.89.

⁶³Marshall McLuhan, Understanding Media: The Extensions of Man. (New York: McGraw-Hill Book, 1964), p. 249.

⁶⁴Ibid., p. 214.

⁶⁵Marshall McLuhan, Counterblast, (Toronto: McClelland and Stewart, 1969), p. 115

established values.⁶⁶ It is in the growing middenheaps of consumed artifacts that the artist retrieves and revitalizes old ideas for new consumption.⁶⁷

Instead of merely discarding traditional forms, the poet and the artist and inventor are engaged in supplying the ancient forms with youthful vigor. It is perhaps a type of cultural transplant of organs from one body or culture to another.⁶⁸

By studying the dream in our folklore the artist tries to retrace the wish that created our present psychic environment and provide the necessary adjustment.⁶⁹

7. Programming

Shakespeare speaks of a world into which, by programming, as it were, one can play back the materials of the natural world in a variety of levels and intensities of style. We are close to doing just this on a massive scale at the present time electronically. Here is the image of the golden age as one of complete metamorphoses or translations of nature into human art, that stands ready of access to our electric age.⁷⁰

When the entire world becomes a unified and "animated collage," by virtue of the speed of information services, it is a natural step to try and deal with the entire world as a work of art.⁷¹

In both preliterate and postliterate cultures all knowledge and skill is simultaneously accessible to all. The inclusive experience of the electronic

⁶⁶ Marshall McLuhan and Wilfred Watson, From Cliche to Archetype. (New York: The Viking Press, 1970), p. 184.

⁶⁷ *Ibid.*, p. 126.

⁶⁸ Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout. (Don Mills, Ontario: Longman Canada, 1972), p. 139.

⁶⁹ Marshall McLuhan, The Mechanical Bride: Folklore of Industrial Man. (New York: Vanguard Press, 1951), p. 50.

⁷⁰ Marshall McLuhan, Understanding Media: The Extensions of Man. (New York: McGraw-Hill Book, 1964), pp. 65-6.

⁷¹ Marshall McLuhan and Wilfred Watson, From Cliche to Archetype. (New York: The Viking Press, 1970), p. 199.

environment encompasses all times, cultures and technologies.⁷² We wear all of mankind as our skin.⁷³ Every facet of human life now comes within the scope of artistic vision.⁷⁴ Art becomes the orchestration of everyday environmental experience.

"The basic changes of our time lead us towards confronting the environment as artifact. In a non-literate society, there is no art in our sense, but the whole environment is experienced as unitary. Neolithic specialism ended that. The Balinese say: "We have no art. We do everything as well as possible"; that is, they program the environment instead of its content."⁷⁵

The return to group involvement and tribal togetherness threatens private identity as a cultural form.⁷⁶ Instead of providing privileged modes of perception for the few, art becomes a means of participation in corporate life.⁷⁷

Art has become as total in its mandate for human order as the mass markets that created the plateau from which all can now share the awareness of new scope and potential for everyday beauty and order in all aspects of life at once. Retrospectively it may well prove necessary to concede to the period of mass marketing the creation of the means of a world order in beauty as much as in commodities.⁷⁸

⁷²Marshall McLuhan and Harley Parker, Through the Vanishing Point: Space in Poetry and Painting. (World Perspectives Series, edited by Ruth Nanda Anshen, Vol. 37. New York: Harper and Row, 1968), pp. 6-7.

⁷³Marshall McLuhan, Understanding Media: The Extensions of Man. (New York: McGraw-Hill Book, 1964), p. 56.

⁷⁴Marshall McLuhan, Quentin Fiore and Jerome Agel, War and Peace in the Global Village. (New York: Bantam Books, 1968) pp. 177-8.

⁷⁵Marshall McLuhan, Counterblast, (Toronto: McClelland and Stewart, 1969), p.,31.

⁷⁶Marshall McLuhan, "Extracts from statements," Place and Function of Art in Contemporary Life: Report of an International Symposium organized by Unesco, (September, 1976) :20-1.

⁷⁷Marshall McLuhan, Counterblast, (Toronto: McClelland and Stewart, 1969), p. 32.

⁷⁸Marshall McLuhan, The Gutenberg Galaxy: The Making of Typographic Man. (Toronto: University of Toronto Press, 1962.), p. 275.

Artists because of their perceptual abilities and their understanding of media are most capable of controlling the shifts in sensory ratios by orchestrating the environment.

The symbolist esthetic theory of the late nineteenth century seems to offer an even better conception than social biology for resolving the problems created by technology. This theory leads to a concept of orchestrating human arts, interests, and pursuits rather than functioning in a functional biological unit, as even with Giedion and Mumford. Orchestration permits discontinuity and endless variety without the universal imposition of any one social or economic system. It is a conception inherent not only in symbolist art but in quantum physics. Unlike Newtonian physics, it can entertain a harmony that is not unilateral, monistic, or tyrannical. It is neither progressive nor reactionary, but embraces all previous actualizations of human excellence while welcoming the new in a simultaneous present.⁷⁹

At electronic speed, when everything causes everything and any form of imbalance proves fatal, new knowledge has to be developed to be able to adjust our environment to our behavior and vice versa⁸⁰. In total situations a point of view is of little use.⁸¹ As seen in previous chapters much of McLuhan's work centered on artistic methods for generating such knowledge.

"The need of our time is for the means of measuring sensory thresholds and of discovering exactly what changes occur in these thresholds as a result of the advent of any particular technology. With such knowledge in hand it would be possible to program a reasonable and orderly future for any human community. Such knowledge would be the equivalent of a thermostatic control for room temperatures. It would seem only reasonable to extend such controls to all the sensory thresholds of our being."⁸²

⁷⁹Marshall McLuhan, The Mechanical Bride: Folklore of Industrial Man. (New York: Vanguard Press, 1951), p. 34.

⁸⁰Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout. (Don Mills, Ontario: Longman Canada, 1972), p. 145.

⁸¹Marshall McLuhan, "Extracts from statements," Place and Function of Art in Contemporary Life: Report of an International Symposium organized by Unesco. (September, 1976) :9-10.

⁸²Marshall McLuhan, "The Relation of Environment to Anti-Environment," in Innovations, ed. by Bernard Bergonzi (London: Macmillan, 1968), p. 133.

McLuhan considers the computer as the medium that will allow the orchestrating of our environment and energy in a harmonious way. Since Sputnik contained the earth, people have perceived the lack of symmetry and proportion in their global environment. By programming the environment the emotional spastic condition due to a lack of interrelation among the senses can be relieved ⁸³ and from the programmed corporate action of these extended senses a new consciousness can arise. Our obsession with ESP and occult awareness anticipates this new extension. ⁸⁴

In fact, this image of a united ratio among the senses was long held to be the mark of our rationality, and may in the computer age easily become so again. For it is now possible to program ratios among the senses that approach the condition of consciousness. Yet such a condition would necessarily be an extension of our own consciousness as much as wheel is an extension of feet in rotation. Having extended or translated our central nervous system into the electromagnetic technology, it is but a further stage to transfer our consciousness to the computer world as well. ⁸⁵

For the best part of a century, we have been programming human consciousness with retrievals and replays of the tribal unconscious. The complementary of this process would seem to be the "natural" program for the period ahead: programming the unconscious with the recently achieved forms of consciousness. This procedure would evoke a new form of consciousness radically different from former consciousness. Everybody becomes a voluntary participant in creating diversity without loss of identity. ⁸⁶

C. Art

⁸³ Marshall McLuhan, Quentin Fiore and Jerome Agel, War and Peace in the Global Village. (New York: Bantam Books, 1968), p. 89.

⁸⁴ Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout. (Don Mills, Ontario: Longman Canada, 1972), p. 14.

⁸⁵ Marshall McLuhan, Understanding Media: The Extensions of Man. (New York: McGraw-Hill Book, 1964), p. 67.

⁸⁶ Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout. (Don Mills, Ontario: Longman Canada, 1972), p. 297.

1. Art forms

Art in the electronic environment aspires to the simultaneous, many-layered and involving structure of music.⁸⁷ The world becomes a museum without walls,⁸⁸ a museum of objects that have been encountered before in some other medium⁸⁹ and who bestow a delightful playback of earlier awareness.⁹⁰ Supermarkets and used car lots become part of a unified cosmic happening continuously involving the public in new experiences.

Whereas in the Renaissance it was the encounter with the new pictorial or visual space that created discomfort and dismay, the reverse is true in our time. It is the rediscovery of nonvisual, multisensuous spaces that bothers and confuses us.⁹¹

Even if the artistic process can be said to be the same the conditions of art and the artist are always changing.⁹² The established acceptance of new media as art forms can be retraced historically to the liberation of a new medium by the even newer medium who takes over many of its functions. The photograph became an art form with the advent of film, film turned into an art form as it lost its place to its rival TV, and video art appear with the widespread use of computers.⁹³

⁸⁷ Marshall McLuhan "At the moment of Sputnik the planet became a global theater in which there are no spectators but only actors," Journal of Communication (Winter, 1974) :49-50.

⁸⁸ Marshall McLuhan, "Crack in the rear-view mirror," McGill Journal of Education (Spring, 1966) : 32

⁸⁹ Marshall McLuhan, Understanding Media: The Extensions of Man. (New York: McGraw-Hill Book, 1964), p. 179.

⁹⁰ *ibid.*, p. 189.

⁹¹ Marshall McLuhan and Harley Parker, Through the Vanishing Point: Space in Poetry and Painting. (World Perspectives Series, edited by Ruth Nanda Anshen, Vol. 37. New York: Harper and Row, 1968), p. 28.

⁹² Marshall McLuhan, The Interior Landscape: The Literary Criticism of Marshall McLuhan compiled by Eugene MacNarama, (New York: McGraw-Hill, 1969), p. 119.

⁹³ Marshall McLuhan and Wilfred Watson, From Cliche to Archetype. (New York: The Viking Press, 1970), p. 197.

The social emergence of the individual from the corporate role was a parallel to the rise of realism in psychology and narrative. Realism is specialism and fragmentation. Whatever diminishes fragmentation also diminishes realism. That is why electric circuitry, in creating new integral patterns of social organization, also re-creates iconic patterns in daily life, as well as in the arts.⁹⁴ The dynamics of media as they pertain to the arts is discussed further in the chapter on media.

When any medium becomes the content of another, that which is contained becomes an art form. When the movie became the content of TV, the movie was at once elevated to the status of an art form. Prior to that, the movie had been common, or popular, entertainment. When Sputnik (1957) went around the planet, the planet became programmable content, and thus became an art form. Ecology was born, and Nature was obsolesced.⁹⁵

2. Art as Nature

At the speed of light, minus his physical body, man is discarnate, and discarnate man is not related to "Natural Law."⁹⁶

McLuhan considers Nature as an artificial figure that acts as a ground for existence. He retraces its conceptual origin to the Greeks.⁹⁷

The literate Greeks abstracted visual order out of preliterate oral chaos and called their artifact "Nature" (phusis). This "natural" order consciously relegated the ancient gods and magic to the irrational "unconscious" and "chaotic". Magic played existence by ear. In today's electric world, man becomes aware that this artificial "Nature" of the Greeks is an extension of himself, just as he is an extension of nature - all that exists.⁹⁸

⁹⁴Ibid., p. 89.

⁹⁵Marshall McLuhan, "The Rise and Fall of Nature", Journal of Communication (1977), :80.

⁹⁶Ibid., p. 80.

⁹⁷Marshall McLuhan, "McLuhan open earlids vs Barkway's bite," Financial Times (September 18, 1972), p. 11.

⁹⁸Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout. (Don Mills, Ontario: Longman Canada, 1972), p. 223.

Discoveries in nuclear physics by Werner Heisenberg and Edwin Schrodinger in the 1920's showed the irrelevancy of the concept of nature as a construct. Since Sputnik in 1957 circled the earth people have become aware of nature as an artifact to be programmed. In such an electronic environment art supplants nature as the norm.⁹⁹

Every movie and every issue of Vogue breezily sets out to revamp not only our clothes but our physiology. Such is the amount of power available today that the boundaries between art and nature have disappeared. Art has substituted for nature, and various new political regimes naturally tend to act on these assumptions. We have as little doubt about our ability to control global climate as the climate of opinion.¹⁰⁰

3. Primitive art.

Artists are hunters continuously probing and searching the electronic nature that surround them in search of new percepts. Artists are primitives:

The artist of the modern movement is a savage (in no sense an "advanced", perfected, democratic, Futuristic Individual of Mr. Marinetti's limited imagination); this enormous, jangling, journalistic, fiery desert of modern life serves him as Nature did more technically primitive man.¹⁰¹

Preilliterate and postilliterate art is the art of being in the world, the art of life that lies in the constant readjustment to the changing present.¹⁰² It is not a specialist or fragmented activity, the Balinese say "We have no art we do

⁹⁹ibid., p. 98.

¹⁰⁰Marshall McLuhan, Counterblast, (Toronto: McClelland and Stewart, 1969), p. 134.

¹⁰¹Marshall McLuhan, Verbi-voco-visual Explorations, (New York: Something Else Press, 1967), p. 14.

¹⁰²Marshall McLuhan, Quentin Fiore and Jerome Agel, War and Peace in the Global Village, (New York: Bantam Books, 1968), p. 20.

everything as well as possible". Art seeks to make possible a unified and an inclusive human consciousness.¹⁰³

The Japanese view the artist as one who makes bridges between old and new experience. So in a changing world, new art is always needed to tune our perceptions to "where it's at." The artist of the preliterate society is a bridge between the visible worlds. He is a "pontiff." His work may be in dance, music, or varied materials. His art is to create designs, masks, or vortices of power and energy, which "put on" the public.

As the detective reconstructs events, so the artist by retracing the processes of cognition (mimesis) bridges the world of sense and the world of awareness.

Environmental awareness creates a bridge between the old accidental and the newly programmed events of human existence for enrichment through diversity.¹⁰⁴

4. New Art

McLuhan considers art psychically valuable only when it is new. It is only by the deliberate dislocation of ordinary perception that art can remake the world eternally afresh.¹⁰⁵

Here is another thought for you that is controversial. I don't see any point in making anything but controversial statements. There is no other way of getting any attention at all: I mean you cannot get people thinking until you say something that really shocks them; dislocates them. That is the way the arts work; the painters, the poets, all work like that. They work by dislocation of attention. That is why new styles are necessary for perception.¹⁰⁶

One of the ways by which art dislocates our usual sensory responses is by offering minimal sensory input:

When the sensory inputs are dim, the sensory response is correspondingly strong. This is why small children are always "poetic" in

¹⁰³Marshall McLuhan, The Mechanical Bride: Folklore of Industrial Man. (New York: Vanguard Press, 1951), pp. 85-7.

¹⁰⁴Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout. (Don Mills, Ontario: Longman Canada, 1972), pp. 10-1.

¹⁰⁵ibid., p. 139.

¹⁰⁶Marshall McLuhan, "Education in the Electronic Age," Interchange 1 (1970) :5.

their responses to anything at all. A child's sensory reception is very selective, somewhat in the manner of what is offered our senses by "abstract" art. And just because the sensory offering is meager, the sensory response is full. As we grow older, we dim down the sensory responses and increase the sensory inputs, turning ourselves into robots. That is why art is indispensable for human survival.¹⁰⁷

Such art at the frontier of experience, exerts too much sensory violence to be commercially acceptable in the usual sense.¹⁰⁸

The dislocation created by rapid technological changes puts technology during its innovative and controversial phase in the role of art as a disruption that challenges established and yet hidden assumptions and creates new awareness.¹⁰⁹

The rise of print since the Greeks emphasized the verbal narrative expression of human values based on the psychology of the individual. With the arrival and widespread use of electronic media McLuhan notices a shift back to a primitive approach to art that favors group participation in a mimetic or dancelike ritual that seeks to reach an understanding of the cosmos.¹¹⁰

The avant-garde art forms of jazz, performances, etc... with their primitive characteristics of depth involvement and integral expression find their origin in the impact of electronic media.¹¹¹

Our rediscovery of a passion for contours is inseparable from the recognition of precise interdependence and function, and of all forms as organic, which is thrust upon us by the electro-magnetic wave technology. That is, the recovery of primitive organic values in art and architecture is the central technical pressure of our time.¹¹²

¹⁰⁷Ibid., p. 11.

¹⁰⁸Marshall McLuhan, Culture Is Our Business. (New York: Ballantine Books, 1970), p. 46.

¹⁰⁹Marshall McLuhan, Understanding Media: The Extensions of Man (New York: McGraw-Hill Book, 1964), p. xi.

¹¹⁰Ibid., pp. 209-10.

¹¹¹Ibid., p. 40.

¹¹²Marshall McLuhan, The Gutenberg Galaxy: The Making of Typographic Man. (Toronto: University of Toronto Press, 1962.), p. 67.

McLuhan's claim that the present changes the past stems from the hypothesis that the interaction between the present stimulation and the historically accumulated repertory of human reactions is transformative.

Awareness of all-at-once history or tradition goes with a correlative awareness of the present as modifying the entire past. It is characteristic of the artistic perception which is necessarily concerned with making and change rather than with any point of view or any static position.¹¹³

It is the task of the artist to make us consciously aware of the profoundly tactile and unified sensibility generated by electric forms.¹¹⁴

5. Vulgarity and banality

McLuhan sees vulgarity and banality as materials to be used by artists¹¹⁵ in their strategy to relate to something that is familiar to their audiences and be in a better position to create a dislocation, a shift towards new awareness.¹¹⁶

Any medium whatever, as it becomes pervasive, is to that degree common and vulgar and therefore attracts and demands only common vulgar materials. To the artist this vulgarity is an opportunity so far as he is competent to set it in opposition to another equally pervasive form. Since the artist is typically interested in revealing forms, he never balks at contact with the most vulgar material.¹¹⁷

A merely private expression, or rhythm, is necessarily lacking the dimension of corporate power. The banal, as such, is rich in energy for the artist who has the skill to trigger it.¹¹⁸

¹¹³Marshall McLuhan and Harley Parker, Through the Vanishing Point: Space in Poetry and Painting, (World Perspectives Series, edited by Ruth Nanda Anshen, Vol. 37. New York: Harper and Row, 1968), p. 257.

¹¹⁴Marshall McLuhan, Understanding Media: The Extensions of Man, (New York: McGraw-Hill Book, 1964), p. 220.

¹¹⁵Marshall McLuhan, The Mechanical Bride: Folklore of Industrial Man, (New York: Vanguard Press, 1951), p. 152.

¹¹⁶Marshall McLuhan and Wilfred Watson, From Cliche to Archetype, (New York: The Viking Press, 1970), p. 174.

¹¹⁷Ibid., pp. 178-9.

¹¹⁸Ibid., p. 204

6. Genuine fake

Corot said: "I have painted 2,000 pictures; 5,000 of them are in the U.S.A."¹¹⁹

The reproduction of art allows us to know more about other cultures than we once did about our own.¹²⁰ The genuine fake is just as valid as the real thing because it provides the same awareness.¹²¹ Camp on the other hand is seen by McLuhan as a way of escaping into a form of rear-view nostalgia to avoid the present.¹²²

It could be argued that the international motley of jeans and beards of the young TV generation shows subliminal nostalgia for the work costume of our grandfathers of the frontier time. Nostalgic sentiment extends even to the craving to restore old furniture to its earlier state, and antique shops are a large industry that keeps the shops well stocked with "genuine fakes".¹²³

7. Good Taste

Good taste because it does not challenge the perception of the audience and create awareness of forms and situations, is considered by McLuhan as an

¹¹⁹ Marshall McLuhan, Counterblast. (Toronto: McClelland and Stewart, 1969), p. 109.

¹²⁰ *ibid.*, p. 109.

¹²¹ Marshall McLuhan, Culture Is Our Business. (New York: Ballantine Books, 1970), p. 46.

¹²² Marshall McLuhan and Wilfred Watson, From Cliche to Archetype. (New York: The Viking Press, 1970), p. 189.

¹²³ Marshall McLuhan and Barrington Nevitt, "Cultures in the Electronic World: Can the Bottom Line Hold Quebec," Perception (November/December 1977)

anesthetic, a highly effective strategy of the pretentious¹²⁴ and a refuge for the witless and the frightened¹²⁵.

A commercial society whose members are essentially ascetic and indifferent in social ritual has to be provided with blueprints and specifications for evoking the right tone for every occasion. The same spirit rules the erection of historical sets in Hollywood. Accuracy without vitality or spontaneity. Creative confidence can only be permitted in neutral social territories dominated by the adolescent or by Greenwich Village. Here manners and taste have free play. But where money transactions are somehow at stake, panic enters the socially spotlighted host or hostess. "It's got to be just right if it kills us." And both rectitude and ostentation are best secured by adherence to a mechanical and arbitrary code. So that the socially immature cling aggressively to the books of Emily Post with the same baleful discomfort as the mentally exempt latch onto Reader's Digest.¹²⁶

If it is true that the artist possesses the means of anticipating and avoiding the consequences of technological trauma, then what are we to think of the world and bureaucracy of "art appreciation?" Would it not seem suddenly to be a conspiracy to make the artist a frill, a fribble, or a Milltown?¹²⁷

D. The role of art.

In art we are in a sense playing at being what we designate as matter. We are entering the forms of the mighty phenomena around us, and seeing how near we can get to being a river or a star, without actually becoming that. The game consists in seeing how near you can get, without the sudden extinction and neutralization that awaits you as

¹²⁴Marshall McLuhan and Harley Parker, Through the Vanishing Point: Space in Poetry and Painting, (World Perspectives Series, edited by Ruth Nanda Anshen, Vol. 37. New York: Harper and Row, 1968); p. 213.

¹²⁵Marshall McLuhan, Harley Parker and Jacques Barzun, Exploration of the Ways, Means and Values of Museum Communication with the Viewing Public. A Seminar, (New York: Museum of the City of New York, 1966), p. 52.

¹²⁶Marshall McLuhan, The Mechanical Bride: Folklore of Industrial Man, (New York: Vanguard Press, 1951), p. 51.

¹²⁷Marshall McLuhan, Understanding Media: The Extensions of Man, (New York: McGraw-Hill Book, 1964), p. 71.

matter, or as the machine. In our bodies we have got already so near extinction.¹²⁸

The function of art in the electronic environment is to train perception. To develop the ability to use our senses.¹²⁹ The purpose of this training is to accommodate humans to the everchanging present by correcting their sense-ratios before the impact of a new technology numbs their consciousness and disrupts their sense of direction.¹³⁰ The artist renders to consciousness the unrecognized environment that surrounds humans. The work of art is understood as precise and tangible advance knowledge of how to cope with the psychic dimensions of new experience.¹³¹

The new media and technologies by which we amplify and extend ourselves constitute huge collective surgery carried out on the social body with complete disregard for antiseptics. If the operations are needed, the inevitability of infecting the whole system during the operation has to be considered. For in operating on society with a new technology, it is not the incised area that is the most affected. The area of impact and incision is numb. It is the entire system that is charged. The effect of radio is visual, the effect of the photo is auditory. Each new impact shifts the ratios among all the senses. What we seek today is either a means of controlling these shifts in the sense-ratios of the psychic and social outlook, or a means of avoiding them altogether. To have a disease without its symptoms is to be immune. No society has ever known enough about its actions to have developed immunity to its new extensions or technologies. Today we have begun to sense that art may be able to provide such immunity.¹³²

¹²⁸ Marshall McLuhan, The Interior Landscape: The Literary Criticism of Marshall McLuhan compiled by Eugene MacNarama, (New York: McGraw-Hill, 1969), p. 89

¹²⁹ Marshall McLuhan, "Education in the Electronic Age," Interchange 1 (1970) :5.

¹³⁰ Marshall McLuhan, Understanding Media: The Extensions of Man, (New York: McGraw-Hill Book, 1964), p. xi.

¹³¹ Marshall McLuhan and Harley Parker, Through the Vanishing Point: Space in Poetry and Painting, (World Perspectives Series, edited by Ruth Nanda Anshen, Vol. 37. New York: Harper and Row, 1968), p. 28.

¹³² Marshall McLuhan, Understanding Media: The Extensions of Man, (New York: McGraw-Hill Book, 1964), p. 70.

The effect of art is to create new relationships and postures within the human community. To create awareness by shifting familiar experience into new forms.¹³³ As manifestations of preferences for specific modes of experience¹³⁴, media like art forms should be entrusted to new artists so as to yield new ways of perception.¹³⁵ The artist is always the first to discover how to make one medium release the power of another.¹³⁶

It is the artist's job to try to dislocate older media into postures that permit attention to the new. To this end, the artist must ever play and experience with new means of arranging experience, even though the majority of his audience may prefer to remain fixed in their old perceptual attitudes."¹³⁷

Artistic creation is the playback of ordinary experience, it is in the probing of everyday experience that the artist uncovers new percepts.¹³⁸ The artist "has the courage to read the language of the outer world and relate it to the inner world."¹³⁹

1. Anti-environment (figure)

One of the peculiarities of art is to serve as an environment, a probe that makes the environment visible. It is a form of symbolic, or parabolic, action. Parable means literally to 'throw against', just as symbol means to 'to throw together'.¹⁴⁰

¹³³ibid., p. 214.

¹³⁴Marshall McLuhan, Counterblast, (Toronto: McClelland and Stewart, 1969), p. 64.

¹³⁵ibid., p. 53.

¹³⁶Marshall McLuhan, Understanding Media: The Extensions of Man, (New York: McGraw-Hill Book, 1964), p. 62.

¹³⁷ibid., p. 224.

¹³⁸Eric Norden, "Playboy Interview: Marshall McLuhan," Playboy 16:3 (March, 1969) :55.

¹³⁹ibid., p. 55.

¹⁴⁰Marshall McLuhan, "The Relation of Environment to Anti-Environment, in Innovations," ed. by Bernard Bergonzi (London: Macmillan, 1968), p. 132.

The inner workings of our electronic environment are not easily perceptible. To distinguish between what appears and what is the kernel of an event is the perceptually demanding task of the artist. By creating an "anti-environment" the artist can dislocate our attention into a new posture of awareness and allow us to escape from the automatism imposed by our technologies. This release from established conceptual limits allows us to adjust ourselves to the ever changing situations in our environment.¹⁴¹

By imposing its own assumptions art establishes new relationships within the human community. When the equilibrium between individual responsibility and mass solidarity is lost, the artist avoids the refuge of somnambulism and moves to the side of the individual.¹⁴²

Private consciousness is anti-environment for collective unconscious as environment.¹⁴³

2. Environment (ground)

Every technology creates an active environment that fashions people and other technologies. As people shape their tools they are also shaped by them and they also shape each other in turn.¹⁴⁴ This highly dynamic and unpredictable set of actions and reactions that exert tremendous influence on humans are associated with the notion of the collective unconscious.¹⁴⁵ Like

¹⁴¹ Marshall McLuhan, Culture Is Our Business, (New York: Ballantine Books, 1970), p. 192.

¹⁴² Marshall McLuhan, The Interior Landscape: The Literary Criticism of Marshall McLuhan compiled by Eugene MacNarama, (New York: McGraw-Hill, 1969), p. 50.

¹⁴³ Marshall McLuhan, Counterblast, (Toronto: McClelland and Stewart, 1969),

30

¹⁴⁴ Marshall McLuhan, The Gutenberg Galaxy: The Making of Typographic Man, (Toronto: University of Toronto Press, 1962), p. 0.

¹⁴⁵ Marshall McLuhan, Counterblast, (Toronto: McClelland and Stewart, 1969), p. 31.

the fish who does not know water¹⁴⁶, people take their everyday environment for granted and is not conscious of the effect it has on them. The environment renders itself imperceptible by saturating people's perception.

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 a 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. When the social environment is stirred up to exceptional intensity by technological change and becomes a focus of much attention, we apply the terms "war" and "revolution." All the components of "war" are present in any environment whatsoever. The recognition of war depends upon there being stepped up to high definition.¹⁴⁷

The role of all arts, science and philosophy is to exert some control over the imperceptible environment by creating awareness through contrast and provocation. Each new art as it saturates perception, loses its capacity to awaken and becomes less and less visible and more and more environmental or unperceived.¹⁴⁸

The ground rules, the pervasive structure, the overall pattern elude perception except insofar as an anti-environment or a countersituation is constructed to provide a means of direct attention.¹⁴⁹

McLuhan draws from Jacques Ellul¹⁵⁰ the analogy that the environmental action of all media at once is like propaganda it blankets

¹⁴⁶ Marshall McLuhan, Quentin Fiore and Jerome Agel, War and Peace in the Global Village. (New York: Bantam Books, 1968), p. 175.

¹⁴⁷ Marshall McLuhan and Harley Parker, Through the Vanishing Point: Space in Poetry and Painting. (World Perspectives Series, edited by Ruth Nanda Anshen, Vol. 37. New York: Harper and Row, 1968), p. 247.

¹⁴⁸ Marshall McLuhan, Counterblast. (Toronto: McClelland and Stewart, 1969) p.31

Marshall McLuhan and Harley Parker, Through the Vanishing Point: Space in Poetry and Painting (World Perspectives Series, edited by Ruth Nanda Anshen, Vol. 37. New York: Harper and Row, 1968), p. 2

¹⁴⁹ *Ibid.*, p. 242.

¹⁵⁰ Jacques Ellul, Propaganda: The Foundation of Man's Attitudes. (New York: Albert Knopf, 1965), p. 47.

perception and suppresses awareness making the need for artistic intervention indispensable for survival and freedom.¹⁵¹ Whether in a literate society or not¹⁵² if instead of revealing new percepts artists rehash established observations, they become an accomplice in maintaining the somnambulist trance.

The function of the artist in correcting the unconscious bias of perception in any given culture can be betrayed if he merely repeats the bias of the culture instead of readjusting it. In fact, it can be said that any culture that feeds merely on its direct antecedents is dying.¹⁵³

When art becomes a consumer commodity instead of a means of training perception and judgment it loses its navigational purpose.¹⁵⁴ It becomes a "package" instead of a probe.¹⁵⁵

To keep up we must be far ahead. It would have been proper to say "ahead with the poets and the artists," if they had not become so eager to adjust to the consumer mores. Now they are what we have to adjust to.¹⁵⁶

To reward and to make celebrities of artists can, also, be a way of ignoring their prophetic work, and preventing its timely use for survival.¹⁵⁷

¹⁵¹ Marshall McLuhan and Wilfred Watson, From Cliche to Archetype, (New York: The Viking Press, 1970), p. 77.

¹⁵² Marshall McLuhan, Quentin Fiore and Jerome Agel, War and Peace in the Global Village, (New York: Bantam Books, 1968), p. 170.

¹⁵³ Marshall McLuhan and Harley Parker, Through the Vanishing Point: Space in Poetry and Painting, (World Perspectives Series, edited by Ruth Nanda Anshen, Vol. 37. New York: Harper and Row, 1968), pp. 241-2.

¹⁵⁴ Marshall McLuhan, Understanding Media: The Extensions of Man, (New York: McGraw-Hill Book, 1964), pp. ix-x.

¹⁵⁵ Marshall McLuhan and Harley Parker, Through the Vanishing Point: Space in Poetry and Painting, (World Perspectives Series, edited by Ruth Nanda Anshen, Vol. 37. New York: Harper and Row, 1968), p. 251.

¹⁵⁶ Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout, (Don Mills, Ontario: Longman Canada, 1972), p. 216.

¹⁵⁷ Marshall McLuhan, Understanding Media: The Extensions of Man, (New York: McGraw-Hill Book, 1964), pp. 70-1.

E. The audience

... all art is the product of the artist's encounter with the public.¹⁵⁸

The effect of art is the result of the public's encounter with art. The notion of participation in McLuhan's approach is based on a perceptual model that explains the dynamics between the viewer and the art object. It is based on the concept that the public is always the ground of any work of art.

In F.C. Bartlett's Remembering, there is extensive illustration of the principle that perception itself is a kind of remembering. Almost in the moment of perception, a simultaneous afterimage or effect occurs in the subconscious. All sensation, Dallas Smyth has pointed out (in The Problem of Perception), is always 100 percent. But the afterimage which we provide to complement such sensation is an altogether different case. Only the artist has the power to elevate it to the conscious life. Our response to experience is typically so inadequate and confused that without the artistic confrontation of the unconscious image the human condition becomes confused indeed.¹⁵⁹

The effect of a sensation is what the viewer brings to it in the form of a subconscious afterimage. It is through the artistic process that awareness of these images is brought forth by the artist who has the capacity to perceive these effects and manipulate the necessary forms to communicate them to the viewer. The viewer is the co-creator of the work since the effect of the work depends on the capacity to respond.¹⁶⁰

The willing beholder responds to the artist's suggestion because he enjoys the transformation that occurs in front of his eyes. It was in this enjoyment that a new function of art emerged ... The artist gives the

¹⁵⁸Marshall McLuhan, "Extracts from statements," Place and Function of Art in Contemporary Life: Report of an International Symposium organized by Unesco (September, 1976): 26-7.

¹⁵⁹Marshall McLuhan and Harley Parker, Through the Vanishing Point: Space in Poetry and Painting, (World Perspectives Series, edited by Ruth Nanda Anshen, Vol. 37. New York: Harper and Row, 1968), p. 5

¹⁶⁰Marshall McLuhan, The Interior Landscape: The Literary Criticism of Marshall McLuhan compiled by Eugene MacNarama, (New York: McGraw-Hill, 1969), pp. 139-40.

beholder increasingly "more to do," he draws him into the magic circle of creation and allows him to experience something of the thrill of "making" which had once been the privilege of the artist. It is the turning point which leads to those visual conundrums of twentieth century art that challenge our ingenuity and make us search our own minds for the unexpressed and inarticulate. (Art and Illusion, Gombrich 1960)

Hallam is insisting, just as much later Mallarmé, Eliot, and Valéry were to insist, that in "pure poetry," the poetry of suggestion rather than statement, or poetry in which the statements are themselves suggestions and in which the poetic form is the mode of the creative process itself, the reader is co-creator with the poet; since the effect depends on the reader's precision of response, and the poet is himself only another reader of his own poetry.¹⁶¹

The saying that suggestion is better than statement finds its rationale in this approach. McLuhan also uses the more radical formal technique of omission to provoke the reader.

In leaving something unsaid the beholder is given a chance to complete the idea and thus a great masterpiece irresistibly rivets your attention until you seem to become actually a part of it. A vacuum is there for you to enter and fill up to the full measure of your aesthetic emotion.¹⁶²

Artists are inspired by their audience, they are eager to open the doors of perception. They know their audience and is able to manipulate them and make them respond.¹⁶³ The artists' familiarity with the audience allows them to get close enough to provoke and change perceptual habits. Their audience is the content of their art.

Publics and nations were the creation of print technology.

With electric circuitry publics and nations became the content of new technology: "Mass audience is not a public as environment but a public as content of a new electric environment." And whereas "the public" as an environment created by print technology consisted of separate individuals with varying points of view, the mass audience consists of the same individuals involved in the creative process of the art or educational situation that is presented to them. Art and education were

¹⁶¹ Ibid., pp. 139-40.

¹⁶² Ibid., p. 141.

¹⁶³ Marshall McLuhan, "Extracts from statements," Place and Function of Art in Contemporary Life: Report of an International Symposium organized by Unesco, (September, 1976), pp. 26-7.

presented to the public as consumer packages for instruction and edification. The members of the mass audience are immediately involved in art and education as participants and co-creators rather than consumers.¹⁶⁴

The public is the immediate source of inspiration and its misunderstandings and stupidities are the immediate occasion of inspiration.¹⁶⁵

The formal aspects of the artifact are the creative process itself, the audience is co-creator with the poet since the effect of the work is dependent on the precision of the audience's response. Artists and their audience make each other.

The reader wears the mask of the poet's work even as the author puts on the public as a mask.¹⁶⁶

There is something rather mysterious about the process of the "put on" which is inseparable from communication. Baudelaire's famous phrase "hypocrite lecteur mon semblable, mon frère" captures the entire process. The reader is hypocrite in very act of putting on the author's poem as his mask, for in reading the poem he is perceiving the world in a very special way, using what another poet, S.T. Coleridge, called "a willing suspension of disbelief for the moment." When we put on any man-made mask, such as painting, poem, or music, or when we read a book or a newspaper, we are looking at the world in a very special way, altering our own perceptions by an artistic act of faith in the process in which we are engaged.

The second part of Baudelaire's phrase, "mon semblable, mon frère," draws attention to the reciprocal part of the action. Whereas the reader or the user of any form puts it on as his mask, as an extension of his own perception and energy, the author or maker has also to put on his public, the potential reader or user of whatever he has made. The maker tends to project his own image as the mask of the user or reader which he endeavors to "put on." This complex process of communication, by which the medium is "put on" by its users in order that they may experience some alteration and extension of their own perceptions or powers,

¹⁶⁴Marshall McLuhan and Harley Parker, Through the Vanishing Point: Space in Poetry and Painting, (World Perspectives Series, edited by Ruth Nanda Anshen, Vol. 37. New York: Harper and Row, 1968), pp. 247-8

¹⁶⁵Marshall McLuhan, "Extracts from statements," Place and Function of Art in Contemporary Life: Report of an International Symposium organized by Unesco (September, 1976), p. 28

¹⁶⁶Marshall McLuhan and Wilfred Watson, From Cliche to Archetype, (New York: The Viking Press, 1970), pp. 27-8.

includes the "putting on" of the user by the medium. Commercially, this latter operation is referred to "as giving the public what it wants" or "the customer is always right." The complexity of this process is such that even literary critics have despaired of ever unravelling it. Critics of the press, on the other hand, are accustomed to labeling the whole thing as degrading, even as Shakespeare did with his own profession of acting. One thing that needs to be noted in both connections is the great increase of the sense of power on the part of both the maker and the user. Since the process in question is at the very heart of the communication activity, it is certain to remain central to the issue so long as readers are human and not merely robots. Since "human scale" is indispensable for human satisfactions, the future of the press must inevitably retain this dimension. At present, electric speed may already have violated human scale, tending as it does to transport man instantly everywhere. When you are "on the air" you are simultaneously here and in many other places in a manner that is discarnate and angelic, to say the least.¹⁶⁷

Joyce put it in a phrase: "My consumers, are they not my producers?"¹⁶⁸

The audience creates the author as much as the author creates the taste by which he is to be enjoyed.¹⁶⁹

Art moves from an individual need for personal expression to a corporate need for involvement in the electronic community.¹⁷⁰

Thus Charlie Chaplin did not spend his life expressing his personal feelings, he selected from the environment of his audience the equipment he needed.¹⁷¹

¹⁶⁷ Marshall McLuhan "At the moment of Sputnik the planet became a global theater in which there are no spectators but only actors," Journal of Communication (Winter, 1974), :54.

¹⁶⁸ Marshall McLuhan and Wilfred Watson, From Cliche to Archetype, (New York: The Viking Press, 1970), pp. 27-8.

¹⁶⁹ Marshall McLuhan, Culture Is Our Business, (New York: Ballantine Books, 1970), p. 134.

¹⁷⁰ Marshall McLuhan and Harley Parker, Through the Vanishing Point: Space in Poetry and Painting, (World Perspectives Series, edited by Ruth Nanda Anshen, Vol. 37. New York: Harper and Row, 1968), pp. 258-9.

¹⁷¹ Marshall McLuhan and Wilfred Watson, From Cliche to Archetype, (New York: The Viking Press, 1970), p. 203.

As artist and audience seek a new relationship, market research acts as a dating service, stressing the need for awareness of the inner processes of our electronic environment.¹⁷²

Literature as a consumer commodity is an inevitable development of an age of industrial mass production. Such a world is ingenious in devising ever-new packages:

...The young author is often confused by a rejection which simply says, "This is not a Harper story." That does not mean it is not a good story; it simply means that the tale does not, in the editor's trained mind conform to the type of fiction which his magazine has established."

Exploration of the function of audience forms is not easy for literary people who can understand only "content".¹⁷³

Authors of promise are now built up for the public by the same means as movie stars... Techniques for walloping the public, learned from Pop Cult, Hollywood and radio, are tried out in books. And books commissioned as sure fire "aluge" in the book-club machines are also written with an eye on Hollywood.¹⁷⁴

Today the tyrant rules not by club or fist, but disguised as a market researcher, he shepherds his flocks in the ways of utility and comfort.¹⁷⁵

The previously held distance between art and the audience can be related to the visual stress imposed by sixteenth century culture which made art into a special kind of object, to be inserted in a special kind of space, reserved for the elite and connoisseurs.¹⁷⁶

The non-visual mosaic structures of modern art, like those of modern physics and electric-information patterns, permit little detachment. The mosaic form of the TV image demands participation and involvement in depth of the whole being, as does the sense of touch. Literacy, in

¹⁷²Marshall McLuhan, The Mechanical Bride: Folklore of Industrial Man, (New York: Vanguard Press, 1951), p. 50.

¹⁷³Marshall McLuhan and Wilfred Watson, From Cliche to Archetype, (New York: The Viking Press, 1970), p. 175.

¹⁷⁴Marshall McLuhan, The Mechanical Bride: Folklore of Industrial Man, (New York: Vanguard Press, 1951), p. 23.

¹⁷⁵Ibid., p. vi.

¹⁷⁶Marshall McLuhan and Harley Parker, Through the Vanishing Point: Space in Poetry and Painting, (World Perspectives Series, edited by Ruth Nanda Anshen, Vol. 37. New York: Harper and Row, 1968), pp. 29-30.

contrast, had, by extending the visual power to the uniform organization of time and space, psychically and socially, conferred the power of detachment and noninvolvement.¹⁷⁷

The mass audience of the electronic age distinguishes itself from the Public of the pre-electric age of literacy by being far more individualistic and active.

The printed word created the Public. The Public consists of separate individuals, each with his own point of view. Electric circuitry does not create a Public. It creates the Mass. The Mass does not consist of separate individuals, but of individuals profoundly involved in one another. This involvement is a function not of numbers but of speed.¹⁷⁸

As we react in depth to our global village our instant technologies transform most socially conscious people into conservatives.¹⁷⁹ In such an insecure environment group events as forms of transitory identifications offer protection.

A mask as a genre is the group-face, a dialect as genre is the group-speech. Conversely, a genre is dialect, mask, dress, or any other group furniture. In a world where the communications satellite is the latest and all-embracing service environment, and where service environment upon service environment operates to produce a milieu of total irresponsibility, the importance of the group-creating characteristics of genre can hardly be overestimated.¹⁸⁰

F. Popular art

¹⁷⁷ Marshall McLuhan, Understanding Media: The Extensions of Man. (New York: McGraw-Hill Book, 1964), p. 291.

¹⁷⁸ Marshall McLuhan and Harley Parker, Through the Vanishing Point: Space in Poetry and Painting. (World Perspectives Series, edited by Ruth Nanda Anshen, Vol. 37. New York: Harper and Row, 1968), p. 251.

¹⁷⁹ Marshall McLuhan, Understanding Media: The Extensions of Man. (New York: McGraw-Hill Book, 1964), p. 46.

¹⁸⁰ Marshall McLuhan and Wilfred Watson, From Cliche to Archetype. (New York: The Viking Press, 1970), p. 104.

Popular art is the clown reminding us of all the life and faculty that we have omitted from our daily routines. He ventures to perform the specialized routines of society, acting as integral man.¹⁸¹

Popular entertainment is usually unconsciously expressive of the inner life of the community, it reflects its interests and concerns¹⁸² and can "cool off the hot situations of life by miming them"¹⁸³. Studying the popular arts before they become entirely environmental and unperceived¹⁸⁴ is a way of updating our awareness of the changing social context¹⁸⁵

No culture will give popular nourishment and support to images or patterns which are alien to its dominant impulses and aspirations. And among the multifarious forms and images sustained by any society it is reasonable to expect to find some sort of melodic curve. There will be many variations, but they will tend to be variations on certain recognizable themes. And these will be the "laws" of that society, laws which will mould its songs and art and social expression.¹⁸⁶

As electronic media¹⁸⁷ have invaded our entire lives¹⁸⁷ popular art has adopted the sophistication and techniques of highbrow arts¹⁸⁸ and often

¹⁸¹Marshall McLuhan, Understanding Media: The Extensions of Man, (New York: McGraw-Hill Book, 1964), p. 153.

¹⁸²Marshall McLuhan with Kathryn Hutchon and Eric McLuhan, City As Classroom: Understanding Language and Media, (Agincourt, Ontario: Book Society of Canada, 1977), p. 151.

Marshall McLuhan, The Mechanical Bride: Folklore of Industrial Man, (New York: Vanguard Press, 1951), p. 113.

¹⁸³Marshall McLuhan, Understanding Media: The Extensions of Man, (New York: McGraw-Hill Book, 1964), p. 44.

¹⁸⁴Marshall McLuhan and Harley Parker, Through the Vanishing Point: Space in Poetry and Painting, (World Perspectives Series, edited by Ruth Nanda Anshen, Vol. 37. New York: Harper and Row, 1968), p. 2.

¹⁸⁵Marshall McLuhan with Kathryn Hutchon and Eric McLuhan, City As Classroom: Understanding Language and Media, (Agincourt, Ontario: Book Society of Canada, 1977), p. 170.

¹⁸⁶Marshall McLuhan, The Mechanical Bride: Folklore of Industrial Man, (New York: Vanguard Press, 1951), p. 96.

¹⁸⁷Marshall McLuhan with Kathryn Hutchon and Eric McLuhan, City As Classroom: Understanding Language and Media, (Agincourt, Ontario: Book Society of Canada, 1977), p. 171.

¹⁸⁸Marshall McLuhan, The Mechanical Bride: Folklore of Industrial Man, (New York: Vanguard Press, 1951), pp.59, 85-87.

serves as a source of inspiration for the "serious" artists.¹⁸⁹ McLuhan's critique of the popular arts stems from their exploitation of the Barnum and Bailey technique.

The endless use of the Barnum and Ripley technique of stressing the feasibility of the impossible as a challenge to curiosity and emulation results in the tediously terrific and the forcible feeble.

It is the sheer presence of successful stupidity which commonly blocks and clutters the minds of those who might conceivably prefer something better.

It destroys human autonomy, freezes perception, and sterilizes judgment.¹⁹⁰

2. Advertising.

Some writers have argued that the Graphic Revolution has shifted our culture away from private ideals to corporate images. That is really to say that the photo and TV seduce us from the literate and private "point of view" to the complex and inclusive world of the group icon. That is certainly what advertising does. Instead of presenting a private argument or vista, it offers a way of life that is for everybody or nobody. It offers this prospect with arguments that concern only irrelevant and trivial matters.¹⁹¹

Advertising by incantation and repetition creates brands and totems that generate power and energy-based on collective emotion.¹⁹²

"You feel better when you use well-known brands!"¹⁹³

¹⁸⁹ Marshall McLuhan, "Extracts from statements", Place and Function of Art in Contemporary Life: Report of an International Symposium organized by Unesco, (September, 1976), p.21.

¹⁹⁰ Marshall McLuhan, The Mechanical Bride: Folklore of Industrial Man, (New York: Vanguard Press, 1951), p. 148.

¹⁹¹ Marshall McLuhan, Understanding Media: The Extensions of Man, (New York: McGraw-Hill Book, 1964), p. 205.

¹⁹² Marshall McLuhan, "The Age of Advertising," Commonweal, LVIII (September 11, 1953) :555.

¹⁹³ Marshall McLuhan with Kathryn Hutchon and Eric McLuhan, City As Classroom: Understanding Language and Media, (Agincourt, Ontario: Book Society of Canada, 1977), p. 160.

The use of such primitive and iconic symbolism relates advertising to the major art movements.¹⁹⁴ McLuhan traces the contempt that the art community expresses towards popular arts has having its origin in the fragmentation and specialization process of print.¹⁹⁵ He regards advertising as a folk art, the community's "garment of abundance" an art form where all the skills, knowledge and techniques of the community meet.¹⁹⁶ Advertising in actuality is seen as supporting many of the best artists (musicians, designers, writers etc..) which hide under its curtain of anonymity.¹⁹⁷

He describes the world of advertising as a huge educational enterprise¹⁹⁸ to be remembered as "the richest and most faithful daily reflections that any society ever made of its entire range of activities".¹⁹⁹ More resources are allocated to advertising than to either the schooling system or the programs which act as carriers. It is the "most innovative and educative art form of the twentieth century."²⁰⁰

¹⁹⁴ Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout. (Don Mills, Ontario: Longman Canada, 1972), p. 177.

¹⁹⁵ Marshall McLuhan, "Extracts from statements," Place and Function of Art in Contemporary Life: Report of an International Symposium organized by Unesco, (September, 1976), p.21.

¹⁹⁶ Marshall McLuhan, Culture Is Our Business, (New York: Ballantine Books, 1970), p.5.

¹⁹⁷ Marshall McLuhan, "Extracts from statements", Place and Function of Art in Contemporary Life: Report of an International Symposium organized by Unesco, (September, 1976), p.21.

¹⁹⁸ Marshall McLuhan, Understanding Media: The Extensions of Man, (New York: McGraw-Hill Book, 1964), pp. 202-3.

¹⁹⁹ *Ibid.*, p. 206

²⁰⁰ Marshall McLuhan, Culture Is Our Business, (New York: Ballantine Books, 1970), p. 48.

Successful advertising, like great art is most powerful when it shapes awareness at the subliminal level and communicates without being understood.²⁰¹ It is not intended to be seen but to produce an effect.²⁰²

And it is here that the ad agencies are so very useful. They express for the collective society that which dreams and uncensored behavior do in individuals. They give special form to hidden impulse and, when analysed, make possible bringing into reasonable order a great deal that could not otherwise be observed or discussed. Gouging away at the surface of public sales resistance, the ad men are constantly breaking through into Alice in Wonderland territory behind the looking glass which is the world of the subrational impulse and appetites. Moreover, the ad agencies are so set on the business of administering major wallops to the buyer's unconscious, and have their attention so concentrated on the sensational effect of their activities, that they unconsciously reveal the primary motivations of large areas of our contemporary existence.

So Hollywood is like the ad agencies in constantly striving to enter and control the unconscious minds of a vast public, not in order to understand or to present these minds, as the serious novelist does, but in order to exploit them for profit.²⁰³

Today's rhetoric of slogans, cliches and current figures of folk awareness has become propaganda. McLuhan refers to Jacques Ellul (Propaganda: The Formation of Men's Attitudes. New York: A.A. Knopf, 1965 and Vintage Books, 1973.) in comparing cultural dynamics and propaganda.

...propaganda forms culture and is in a certain sense culture²⁰⁴

²⁰¹ Marshall McLuhan, "Extracts from statements", Place and Function of Art in Contemporary Life: Report of an International Symposium organized by Unesco, (September, 1976), pp.228-9

²⁰² Marshall McLuhan, Culture Is Our Business, (New York: Ballantine Books, 1970), p. 48.

²⁰³ Marshall McLuhan, The Mechanical Bride: Folklore of Industrial Man, (New York: Vanguard Press, 1951), p. 97.

²⁰⁴ Marshall McLuhan with Kathryn Hutchon and Eric McLuhan, City As Classroom: Understanding Language and Media, (Agincourt, Ontario: Book Society of Canada, 1977), p. 157.

...the greatest propaganda in the world is our mother tongue, that which we learn unconsciously. That shapes our perceptions for life. That is propaganda at its most extreme form.²⁰⁵

The Madison Avenue frog-men-of-the-mind ²⁰⁶ powerfully aggress us by demanding that we yield our private consciousness to public manipulation.²⁰⁷

Advertising achieves its aims by being omnipresent; in doing so it manages to impose itself and put our critical faculties to sleep.²⁰⁸

Advertisers pay for space and time in paper and magazine, on radio and TV; that is, they buy a piece of the reader, listener or viewer as definitely as if they hired our homes for a public meeting. They would gladly pay the reader, listener, or viewer directly for his time and attention directly for his time and attention if they knew how to do so. The only way so far devised is to put on a free show.²⁰⁹

Effective advertising gains its ends partly by distracting the attention of the reader from its presuppositions and by its quiet fusion with other levels of experience. And in this respect it is the supreme form of cynical demagogic flattery.²¹⁰

McLuhan's identification of advertising as good news brought forth a new understanding of the dynamics of contrast between the ads and the carrier programs (news, action series, soap operas etc..).

Ads are news. What is wrong with them is that they are always good news. In order to balance off the effect and to sell good news, it is necessary to have a lot of bad news.

²⁰⁵Marshall McLuhan, "Extracts from statements", Place and Function of Art in Contemporary Life: Report of an International Symposium organized by Unesco, (September, 1976), pp.28-9.

²⁰⁶Marshall McLuhan, Understanding Media: The Extensions of Man. (New York: McGraw-Hill Book, 1964), p. 203.

²⁰⁷"Interview With Professor Marshall McLuhan," Macleans (March 7, 1977), :6

²⁰⁸Marshall McLuhan, Understanding Media: The Extensions of Man. (New York: McGraw-Hill Book, 1964), pp. 230-1.

²⁰⁹Ibid., p. 185.

²¹⁰Marshall McLuhan, The Mechanical Bride: Folklore of Industrial Man. (New York: Vanguard Press, 1951), pp. 82.

Real news is bad news - bad news about somebody, or bad news for somebody.²¹¹

It takes an awful lot of bad news to sell good news.²¹²

2. Slang

Slang is a form of popular art that McLuhan has often used to illustrate his work. It is of particular value in studying patterns of change in society.

Slang develops in areas of experience that are changing rapidly, and can therefore seem very dramatic and highly charged with tension. Slang can be a device for exploring areas of uncertainty where people are experiencing new perceptions and new awareness. Ask yourselves why some slang is so transient. If language is an attempt to relate unfamiliar situations to familiar ones, the situations slang treats would seem to be in a process of change.²¹³

3. Games

Men without art, and men without the popular arts of games tend toward automatism.²¹⁴

Games like any art form are models of our psychological lives providing the release of tension, new awareness²¹⁵ and self confidence. They translate experience from one situation to another, shifting familiar experience into new forms.²¹⁶

²¹¹ Marshall McLuhan, Understanding Media: The Extensions of Man. (New York: McGraw-Hill Book, 1964), p. 183.

²¹² Marshall McLuhan, Harley Parker and Jacques Barzun, Exploration of the Ways, Means and Values of Museum Communication with the Viewing Public. A Seminar. (New York: Museum of the City of New York, 1966), p. 53.

²¹³ Marshall McLuhan with Kathryn Hutchon and Eric McLuhan, City As Classroom: Understanding Language and Media. (Agincourt, Ontario: Book Society of Canada, 1977) pp. 166-7.

²¹⁴ Marshall McLuhan, Understanding Media: The Extensions of Man. (New York: McGraw-Hill Book, 1964), p. 213.

²¹⁵ *ibid.*, p. 209.

²¹⁶ *ibid.*, p. 214.

Art and games enable us to stand aside from the material pressures of routine and convention, observing and questioning. Games as popular art forms offer to all an immediate means of participation in the full life of society, such as no single role or job can offer to any man.²¹⁷

Sports are a deep reaction to the typical action of society whereas fine arts constitute a profound reappraisal.²¹⁸ By miming hot situations art and games cool them off.²¹⁹

Furthermore, the audience is too fully participant in war and business, just as in a native society there is no true art because everybody is engaged in making art. Art and games need rules, conventions, and spectators. They must stand forth from the over-all situation as models of it in order for the quality of play to persist. For "play", whether in life or in a wheel, implies interplay. There must be give and take, or dialogue, as between two or more persons and groups.²²⁰

By compensating the uncertainty of the outcome of games by rigid rules and mechanical procedures, games adjust and at the same time release men from their environment.²²¹

Conclusion

In this chapter McLuhan defines the art process which he considers to be applicable to many different historical periods and at the same time he situates his personal perception of the role of the artist in the electronic age.

Though the artistic intentions of the primitive artist and the Renaissance artist may be poles apart, the artistic effect under all conditions is a situation that serves to heighten perception. All the arts might be considered to act as counterenvironments or countergradients.²²²

²¹⁷ibid., p. 210

²¹⁸ibid., p. 213

²¹⁹ibid., p. 44.

²²⁰ibid., pp. 212-3.

²²¹ibid., p.211.

²²²Marshall McLuhan and Harley Parker, Through the Vanishing Point: Space in Poetry and Painting (World Perspectives Series, edited by Ruth Nanda Anshen, Vol. 37. New York: Harper and Row, 1968), p.226

In developing an art education program based on McLuhan's ideas it is probably important to distinguish the methods which will be more clearly identified in the sixth chapter from the specific personal applications which McLuhan makes of them. Even though the applications can be quite revealing of the method as shown in this chapter the importance of making such a distinction is to avoid what McLuhan feared most, founding a school of orthodox McLuhannites. (Turning his percepts into precepts and putting people to sleep with them.) I believe that his method can be used independently of the specific application which he made of it. At the same time I believe that McLuhan's application of this methodology is certainly the proof of its worth as a method to stimulate creative thought in art.

In chapter five McLuhan's ideas on education are presented. As the basis for his criticism of the educational establishment McLuhan emphasizes understanding the general role of education in the context of an electronic environment. He sees the need for a more creative approach one which recognizes the importance of perceptual discovery. As schools lose their monopoly on the printed word and society depends more and more on other forms of information, how should we view our educational environment? McLuhan suggests that the answer lies in encouraging students to interrelate knowledge and perceptually explore their environment.

CHAPTER 5. - MCLUHAN'S NOTION OF EDUCATION

Introduction

In this chapter McLuhan's ideas on the need for a new approach to education are presented. McLuhan suggests that our electronic technology has transformed the environment into a teaching machine and humans into information hunters, who learn a living, who prefer a role to a job, who prefer involvement to distant goals etc... This information environment by the vast quantities of information it makes available obsolesces the traditional role of the educational establishment.

The clash between the TV child and the classroom environment illustrates well McLuhan's hypothesis that the literary establishment has failed in assuming the responsibility for bridging the gap between the visual values of the past and the present acoustic and tactile values. This leads McLuhan to suggest an approach to education based on understanding the media that shape our environment.

A newspaper headline recently read, "Little Red Schoolhouse Dies When Good Road Built." One-room schools, with all subjects being taught to all grades at the same time, simply dissolve when better transportation permits specialized teaching. At the extreme of speeded-up movement, however, specialism of space and subject disappears once more. With automation it is not only jobs that disappear, and complex roles that reappear. Centuries of specialist stress in pedagogy and in the arrangement of data now end with the instantaneous retrieval of information made possible by electricity. Automation is information and

it not only ends jobs in the world of work, it ends subjects in the world of learning. It does not end the world of learning. The future of work consists of learning a living in the automation age. This is a familiar pattern in electric technology in general. It ends the old dichotomies between culture and technology, between art and commerce, and between work and leisure. Whereas in the mechanical age of fragmentation leisure had been the absence of work, or mere idleness, the reverse is true in the electric age. As the age of information demands the simultaneous use of all our faculties, we discover that we are most at leisure when we are most intensely involved, very much as with the artists in all ages.¹

A. Information hunter

As the information environment is speeded up by our electronic technology new knowledge surpasses every means of systematic retrieval.² In this non-visual space people's business and survival depends on their capacity to gather information.³ Investigative techniques become essential in understanding technologies that communicate by their effects instead of their contents.⁴ Electronic people return to the condition of the primitive hunter and have to train their perception to include all previous cultures.⁵

In fact, most people in the commercial world (including politics) spend their time and energy investigating each others' lives. Espionage, or the gathering of data, has become the biggest business in the world, both nationally and internationally. Top spies and double agents have to be trained in the latest sociology and perform their multiple meditations on

¹ Marshall McLuhan, Understanding Media: The Extensions of Man. (New York: McGraw-Hill Book, 1964), pp. 300-1.

² Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout. (Don Mills, Ontario: Longman Canada, 1972), p. 105.

² *Ibid.*, p. 7.

³ Marshall McLuhan, Understanding Media: The Extensions of Man. (New York: McGraw-Hill Book, 1964), p. 248.

⁴ Marshall McLuhan, "English Literature as Control Tower in Communication Study," The English Quarterly (University of Waterloo, Volume 7, #1, Spring, 1974), :6.

⁵ Marshall McLuhan and Harley Parker, Through the Vanishing Point: Space in Poetry and Painting. (World Perspectives Series, edited by Ruth Nanda Anshen, Vol. 37. New York: Harper and Row, 1968), p. 7.

the meaning of changes in fashion and changes in sport and changes in ideas.⁶

1. Learning a living

The electronic age is literally one of illumination. Just as light is at once energy and information, so electric automation unites production, consumption, and learning in an inextricable process.⁷

Information like light is non specialist, it makes a multiplicity of tasks possible, it is total field. Contrary to mechanical systems where the power and the work to be done were always in direct relation electric information can be applied in a great variety of ways, any resource can become a substitute for another.⁸

Energy and production now tend to fuse with information and learning. Marketing and consumption tend to become one with learning, enlightening, and the intake of information. This is all part of the electric implosion that now follows or succeeds the centuries of explosion and increasing specialism.⁹

The speed of electric information breaks down the divisions of function and knowledge. The global village has no boundaries and no monopolies of knowledge.¹⁰ Work, learning and leisure tend to merge.¹¹ The business of

⁶ Marshall McLuhan with Kathryn Hutchon and Eric McLuhan, "The Laws of the Media," English Journal (November 1978) :92-3.

⁷ Marshall McLuhan, Understanding Media: The Extensions of Man. (New York: McGraw-Hill Book, 1964), p. 350.

⁸ Marshall McLuhan, Counterblast. (Toronto: McClelland and Stewart, 1969), p. 37.

⁹ Marshall McLuhan, Understanding Media: The Extensions of Man. (New York: McGraw-Hill Book, 1964), p. 350.

¹⁰ Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout. (Don Mills, Ontario: Longman Canada, 1972), p. 232.

¹¹ *Ibid.*, p. 230.

humans become learning and knowing and their source of wealth comes from the movement of information.¹² Education and culture become big business.¹³

Now that man has extended his central nervous system by electric technology, the field of battle has shifted to mental image making and breaking, both in war and in business. Until the electric age, higher education had been a privilege and a luxury for the leisured classes; today it has become a necessity for production and survival. Now, when information itself is the main traffic, the need for advanced knowledge presses on the spirits of the most routine-ridden minds.¹⁴

With the advent of electronic technology the walls of the classroom disappear because more education goes on outside the classroom. The outside information environment becomes richer than the school environment.¹⁵ In this situation the classroom educator must respond by assuming a larger new role and emphasizing knowledge by dialogue (rather than lecture).¹⁶

The speed of information movement in the global village means that every human action or event involves everybody in the village in the consequences of every event. The new human settlement in terms of the contracted global village has to take into account the new factor of total involvement of each of us in the lives and actions of all. In the age of electricity and automation, the globe becomes a community of continuous learning, a single campus in which everybody, irrespective of age, is involved in learning a living.¹⁷

These changes provoked by electronic speed up can be followed by observing the different varieties of "moonlighting", the retrievals of recycled old

¹²Marshall McLuhan, Understanding Media: The Extensions of Man. (New York: McGraw-Hill Book, 1964), p. 65.

¹³Marshall McLuhan, "The Password is involvement," Monday Morning (September 1967) :20

¹⁴Marshall McLuhan, Understanding Media: The Extensions of Man. (New York: McGraw-Hill Book, 1964), p. 102.

¹⁵Marshall McLuhan, Counterblast. (Toronto: McClelland and Stewart, 1969), p. 134.

¹⁶Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout. (Don Mills, Ontario: Longman Canada, 1972), p. 232.

¹⁷Marshall McLuhan, Counterblast. (Toronto: McClelland and Stewart, 1969), p. 41.

skills and artifacts, the patterns of drop-ins and dropouts and the shift from training for a job to training on the job.¹⁸ The acceleration of information has as a possible consequence the shift from the single job¹⁹ to the concept of the Renaissance person²⁰ with a multiplicity of jobs for life time. Even though the problem of discovering occupations or employment may prove difficult²¹ McLuhan believes that with a new faith in the ultimate harmony of all being and the proper control and utilization, a new role for men in society will evolve and will lead to greater fulfillment.²²

2. Environment as teaching machine

Plato in all his striving to imagine an ideal training school failed to notice that Athens was a greater school than any university even he could dream up. In other words, the greatest school had been put out for human use before it had been thought. Now this is especially true of our media. They are put out long before they are thought out. In fact, their being put outside us tends to cancel the possibility of their being thought of at all.²³

Consumers depend on symbolic data to direct their energies and production is incidental to information.²⁴ As ideas have become the main

¹⁸Marshall McLuhan with Kathryn Hutchon and Eric McLuhan, City As Classroom: Understanding Language and Media. (Agincourt, Ontario: Book Society of Canada, 1977), p. 173.

¹⁹Marshall McLuhan, Counterblast, (Toronto: McClelland and Stewart, 1969), p. 28.

²⁰Marshall McLuhan with Kathryn Hutchon and Eric McLuhan, City As Classroom: Understanding Language and Media. (Agincourt, Ontario: Book Society of Canada, 1977), p. 173.

²¹Marshall McLuhan, Understanding Media: The Extensions of Man, (New York: McGraw-Hill Book, 1964), p. 102.

²²Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout. (Don Mills, Ontario: Longman Canada, 1972), p. 230.

²³Marshall McLuhan, Understanding Media: The Extensions of Man, (New York: McGraw-Hill Book, 1964), p. 58.

²⁴Marshall McLuhan, Culture is our Business, (New York: Ballantine Books, 1970), p. 138.

ingredient of the new economy, the electronic environment has emerged as a corporate teaching machine with much greater budgets than the traditional education environment.²⁵

All the industries of our time are service industries. With Xerox the book becomes a service industry. It ceases to be a package or a product. The future of the book in school or outside of school is a service. You will go on the phone or use some other means of announcing your interest, and say "The history of Egyptian arithmetic" and that you know a little Sanskrit and a lot of French and a lot of this and that and, "Please send me the latest." You will receive in an hour or so a package with all the latest studies on Egyptian arithmetic from every journal in the world, and custom-made for your resources and your means. The idea of just having mass produced books the same for every one, and just going out and buying one is automatically liquidated by Xerox. Xerox makes the book into a service industry - information service - and entirely tailor-made, custom built.²⁶

The classroom cannot compete with the intensity and glitter of commercial education which disguises itself as entertainment to by-pass the intelligence while working directly on the will and desires.²⁷

For every fact or attitude which the teacher can initiate or direct, the visual and auditory environment provides many thousands of facts and experiences.²⁸

Traditional answers for all subjects can now be found in the urban environment.²⁹ This commercial education does not have any goals it only rests on the pressure of daily need and urgency.³⁰ Planned obsolescence

²⁵ibid., p. 80.

²⁶Marshall McLuhan, "Education in the Electronic Age," Interchange 1 (1970) :3.

²⁷Marshall McLuhan, The Mechanical Bride: Folklore of Industrial Man. (New York: Vanguard Press, 1951), p. 72.

²⁸Marshall McLuhan, Counterblast. (Toronto: McClelland and Stewart, 1969), p. 132.

²⁹Marshall McLuhan with Kathryn Hutcheon and Eric McLuhan, "The Laws of the Media," English Journal (November 1978) :92-3.

³⁰Marshall McLuhan, "Electronics and The Psychic Drop-out," p. 38

forces the public to continuously update itself by means of newspapers, magazines and other media.³¹

3. Living in two worlds

An age in rapid transition is one which exists on the frontier between two cultures and between conflicting technologies. Every moment of its consciousness is an act of translation of each of these cultures into the other. Today we live on the frontier between five centuries of mechanism and the new electronics, between the homogeneous and the simultaneous. It is painful but fruitful.³²

During this period of radical change people's only recourse is to understand the on going processes and in doing so gain some control over them. "There is no place to hide."³³ This is the only approach that will stop all of Western culture from being "destroyed and swept into the dustbin of history."³⁴ By understanding the new vortex of electronic technology humans can bring the best elements of visual culture into coexistence with the new society.

The critical anxiety which is felt comes from the incompatibility of having an establishment, school and job structure which is visual and left hemisphere whereas the atmosphere which is influencing decisions is oral and right hemisphere.³⁵ Suspended between these two value systems the young exist in "a hybrid limbo of constantly conflicting values".³⁶

³¹ Marshall McLuhan with Kathryn Hutchon and Eric McLuhan, City As Classroom: Understanding Language and Media, (Agincourt, Ontario: Book Society of Canada, 1977), p. 153.

³² Marshall Mc Luhan, The Gutenberg Galaxy: The Making of Typographic Man, (Toronto: University of Toronto Press, 1962.), p. 141.

³³ Eric Norden, "Playboy Interview: Marshall McLuhan," Playboy 16:3 (March, 1969) :74.

³⁴ Ibid., p. 74.

³⁵ "Interview With Professor Marshall Mc Luhan," Macleans (March 7, 1977, :4,6.

³⁶ Eric Norden, "Playboy Interview: Marshall McLuhan," Playboy 16:3 (March, 1969) :62.

"Now the suburban kid lives in the Picasso world of primitive art, primitive abstract, sensory-like, highly tactile and kinetic, and yet he is the one who is expected to be the most visually oriented and most completely civilized and ordered person in our kind of society. He is a privileged kid.

In actual fact the suburban kid is the most culturally disadvantaged. He lives in a slum. The suburb is in every sense, in terms of century life, a slum. Picasso is slum art in the sense it is entirely tactile: it is not visual. In educational terms you have this paradox: that the most economically advantaged part of our community is the most disadvantaged culturally in terms of the sensory life. Now these people are in trouble. They are torn because they want to belong to the establishment - in fact they think of it as theirs - and yet they are, in terms of their new century involvement in the electric age, so deeply involved that their capacities for establishing contact with the visual world of rational order and visual connectives, their capacities for making that adjustment, are just about zero.³⁷

The hope and challenge of the new era lies in developing creative processes oriented towards the continuous discovery of new imaginative solutions and postures to these conflicts.³⁸

4. Discarnate person

At the speed of light, minus his physical body, man is discarnate, and discarnate man is not related to the "Natural Law." His sudden emancipation from Natural law, in a sense, makes him "greater than the angels." He can be everywhere at once, whereas they are subject to limitations of space and can only be in one space at a time.³⁹

As discarnate people travel across the world from "one phone to another" their private consciousness dissolves and they are transformed into another

³⁷ Marshall Mc Luhan, "Education in the Electronic Age," Interchange 1 (1970) :5-6.

³⁸ Eric Norden, "Playboy Interview: Marshall McLuhan," Playboy 16:3 (March, 1969) :62.

Marshall Mc Luhan, Understanding Media: The Extensions of Man, (New York: McGraw-Hill Book, 1964), p. x,

³⁹ Marshall McLuhan, "The Rise and Fall of Nature," Journal of Communications, (1977), p. 81.

kind of being. Electric media deprive them of relating their experience to their private selves.⁴⁰

When things come at you very fast, naturally you lose touch with yourself. Anybody moving into a new world loses identity. If you go to China, and you've never been there before, you're a nobody. You can't relate to anything there. So, loss of identity is something that happens in rapid change. But everybody at the speed of light tends to become a nobody. This is what's called the "Masked-Man" by the way. The masked man has no identity. He is so deeply involved in other people that he doesn't have any personal identity.⁴¹

The environment created by a new technology alters peoples private and corporate image of themselves. The fear and anxiety created by this loss of identity provokes violence and nostalgic rear-mirrorism. By recycling the past people hope to find the lost thread and reestablish their persona.

Nobody has ever studied what degree of innovation is required to shatter the selfimage of a man or a society. In our time, at least, the amount of innovation far exceeds all the impacts of innovation of all the past cultures of the world. We are more frantic to recover and put together the pieces of the shattered image than any past society whatever. It is this impulse that motivates the orgy of rear-view mirrorism, everything from the scholarly reconstruction of remote and dinky cultures to Gone With the Wind.⁴²

The erosion of private consciousness projects people into a collective form of awareness, a tribal dream. The insecurity and fragility of this dream leads to violence and terrorism as a tribal quest for identity.⁴³

When people have been robbed of their identities in some way they become violent because strangely enough, violence is a way of finding out who you are. If you want to know who you are, you have to discover

⁴⁰Marshall McLuhan, "The Violence of the Media," The Canadian Forum (September 1976, vol. LVI No. 664) :9.

⁴¹"Interview With Professor Marshall Mc Luhan," Macleans (March 7, 1977) : 9.

⁴²Marshall McLuhan, War and Peace in the Global Village, (New York: Bantam Books, 1968), p.126.

⁴³Barrington Nevitt, "Visible and Invisible Bias Via Media," Canadian Journal of Communication 7:3 (Nov. Dec. Jan. Feb., 1980-1) :9-10.

where your boundaries are, what the limits are, what kinds of situations you are in, what kinds of people you are dealing with.⁴⁴

Whereas literate people take refuge in the zombie trance of Narcissus narcosis that numbs their state of shock the young strive for an identity that eludes them.⁴⁵

5. Violence and identity (War as education)

War is a quest for the recovery⁴⁶ of corporate identity through compulsory education⁴⁷, showing others and ourselves who we are. It is information technology being used to by one community to reshape another. With the advent of television the public becomes participant in every phase⁴⁸, war becomes the "little red schoolhouse of the global village". The technologies that take away our identities are used to recover past images of ourselves.

The old men from Iron Mountain have not a clue to the origins or persistence of war as a quest for the identity that is always threatened by technological innovations. They are quite aware of the vast research and development activities that are accelerated by war, but it has never occurred to them that the innovations resulting from this research and development are precisely the ones that obliterate the identity image, indispensable to peace and tranquillity among nations.⁴⁹

6. Private and group identity

⁴⁴Carl Scharle, "Marshall Mc Luhan and Barrington Nevitt with students and guests: A Fireside Chat," The Innis Herald 10:4 (March 10 1977) :6.

⁴⁵Eric Norden, "Playboy Interview: Marshall McLuhan," Playboy 16:3 (March, 1969) :62.

⁴⁶Marshall McLuhan, War and Peace in the Global Village. (New York: Bantam Books, 1965), pp.127-8.

⁴⁷ibid., p. 125.

⁴⁸ibid., p. 134.

⁴⁹ibid., p. 120.

Love my label as myself⁵⁰

For industrial man, unprepared for leisure, loss of job means loss of identity, which leads to violence. But for youth born in a surround of global services leisure is the norm. Such youth are like gentlemen with no visible means of support.⁵¹

Western civilization is founded on the isolation and domination of the visual sense. Labels act as identifiers in such a visual culture.⁵² Neurosis is often the price we paid for civilization as Freud noted in *Civilization and its discontent*.

It can be argued that neurosis is primarily a print-oriented malady--a reflection of the difficulty of having to create one's own identity from whole cloth. The fact that psychologists have put much stress on the importance of resolving one's identity, finding one's "real self", "becoming the self that one truly is," and so forth, is evidence of the paramount importance of the identity quest in Western society.⁵³

The Third world is right hemisphere and stresses group or corporate identity instead of private identity. When they learn the power of the phonetic literacy, they loose their group identity which is as violent an experience as for us to loose our private identity.⁵⁴ With the presence of electronic media the visual bias declines and other senses come into play.

Among the unexpected features of the information revolution are the extraordinary diminution of private identity and egotistic conviction, as a result of major involvement in the lives of other people, and the extraordinary enlargement of the public sector. We have moved into an age in which everybody's activities affect everybody else, and therefore

⁵⁰ Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout. (Don Mills, Ontario: Longman Canada, 1972), p.112. quote from James Joyce, Finnegans Wake. (New York: The Viking Press., 1958), p. 273

⁵¹ Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout. (Don Mills, Ontario: Longman, Canada, 1972), pp. 233-34.

⁵² Marshall Mc Luhan and Harley Parker, Through the Vanishing Point: Space in Poetry and Painting. (World Perspectives Series, edited by Ruth Nanda Anshen, Vol. 37. New York: Harper and Row, 1968), p. xxiv.

⁵³ William Kirk Kilpatrick, "McLuhan: An Inquiry Into His Retribalization Theory," (Ph.D. Dissertation, Purdue University, 1970), p.94

⁵⁴ Carl Scharle, "Marshall Mc Luhan and Barrington Nevitt with students and guests: A Fireside Chat," The Innis Herald 10:4 (March 10 1977) :6.

the whole matter of privacy is suspect, even as it is impractical. One result has been a relaxing of private morals (sometimes referred to as "Permissiveness") and at the same time an extraordinary new intensity in public morals.⁵⁵

7. Role and job

Would you explain what you mean by "roles?"

A mother does not have a job; she has a role; she has 60 jobs. A surgeon does not have a job; he has 40 jobs; that is a role. The top executive does not have a job; he has many jobs; that is a role. The role is a multitude of jobs in a syndrome, all tied together. An artist does not have a job; he is totally involved with all his energies all the time. That is a role; it is not work. You only begin to work when you fragment yourself into little specialist jobs. When you are making out your income tax, that is work. When you are performing some joyful thing, some hobby, that is play; that is involvement; that is a role. Role-playing means total involvement, the whole being, non-specialist. We are moving into a non-specialist age. We still talk and look in the rear-view mirror and think we are heading into specialization. We are heading into a highly encyclopediac non-specialized world, like the world of the hunter. The hunter knew everything. He had to in order to survive.⁵⁶

Automation has brought back the need for depth involvement which the mechanical print culture had destroyed by fragmentation and detachment.⁵⁷

The need to play a role in society, to be somebody, is deeply felt by the young who with costumes and rituals create their own space⁵⁸ in a similar way as minority groups get their group identities recognized.⁵⁹

⁵⁵Marshall McLuhan "At the moment of Sputnik the planet became a global theater in which there are no spectators but only actors." Journal of Communication (Winter, 1974) :53.

⁵⁶Marshall Mc Luhan, "Education in the Electronic Age," Interchange 1 (1970) :10-1

⁵⁷Marshall Mc Luhan, Understanding Media: The Extensions of Man. (New York: McGraw-Hill Book, 1964), p. 23.

⁵⁸Marshall Mc Luhan, "Education in the Electronic Age," Interchange 1 (1970) :6.

⁵⁹Marshall Mc Luhan, Understanding Media: The Extensions of Man. (New York: McGraw-Hill Book, 1964), p. 31.

To get into a role as opposed to merely having a job, is to put on the corporate social power of one's culture. In our still very literate society many people continue to seek corporate power by matching appearances. This has the exactly opposite effect from what is desired. It dilutes rather than enriches the experience, just as competition encourages people to resemble one another. The genuine role-player, on the other hand, doesn't have any competition whatever, since the items he selects from the environment from which to create his image are of the utmost inclusiveness.⁶⁰

Education must now provide more than information on how to hold down a job and achieve the standard goals of social status and material affluence. It must prepare students to play a role in the molding of society.⁶¹ Being becomes more important than job holding. The need to be part of something, to intercommunicate, is in opposition to the relative impersonal stance of the job.⁶²

8. Goals

McLuhan compares the television generation to hunters who are totally involved in their "survival". They have very little capacity for detachment and cannot visualize distant goals. They are completely absorbed in the present, total-field environment.⁶³

When you are deeply involved and participate in the life of your time, you don't have goals. The man who is involved doesn't have ideals. A mother does not have a job; she has a role, she has about forty jobs at once and she doesn't have any ideals whatever. She is thoroughly involved. It's like a man and his hobby; he doesn't have any ideals about his hobby; he is involved in it. Anybody who is involved in what he's doing doesn't

⁶⁰Marshall Mc Luhan and Wilfred Watson, From Cliche to Archetype. (New York: The Viking Press, 1970), p. 204.

⁶¹James Costigan, "Communication Theory In The Works of Marshall McLuhan,"(Ph.D. Dissertation, Southern Illinois University, 1969)

⁶²Carl Scharfe, "Marshall Mc Luhan and Barrington Nevitt with students and guests: A Fireside Chat," The Innis Herald 10:4 (March 10 1977) :5

⁶³Marshall Mc Luhan, "Education in the Electronic Age," Interchange 1 (1970) :2.

have any goals or ideals whatever; he's just with it. He's doing something that takes every ounce of his energy.⁶⁴

If well understood the children's need for high involvement can be channelled into very productive ventures such as the recent fascination with the in depth immediate world of personal computers. Instead of being turned off by the traditional educational environment with it's slowly developing distant goals.

... every kind of entertainment in the TV age favors the same kind of personal involvement. Hence the paradox that, in the TV age, Johnny can't read because reading, as customarily taught, is too superficial and consumerlike an activity. Therefore the highbrow paperback, because of its depth character, may appeal to youngsters who spurn ordinary narrative offerings. Teachers today frequently find that students who can't read a page of history are becoming experts in code and linguistic analysis.⁶⁵

In a time when targets are changing faster than the aims image making succeeds goal matching.⁶⁶

9. Involvement

... at the moment of Sputnik the planet became a global theater in which there are no spectators but only actors. On Spaceship Earth there are no passengers; everybody is a member of the crew.⁶⁷

The acceleration created by the use of electricity transforms a visually organized world into to an acoustically resonating information environment. People adapt to the information overload created by the simultaneity of the

⁶⁴ Marshall McLuhan, "Electronics and The Psychic Drop-out", p. 41.

⁶⁵ Marshall Mc Luhan, Understanding Media: The Extensions of Man, (New York: McGraw-Hill Book, 1964), pp.153-4.

⁶⁶ Marshall McLuhan, Culture is our Business, (New York: Ballantine Books, 1970), p. 80.

⁶⁷ Marshall McLuhan "At the moment of Sputnik the planet became a global theater in which there are no spectators but only actors," Journal of Communication (Winter, 1974) :50.

electronic environment by an in depth involvement in the recognition of electronic information patterns that surround them.

As we merge with our omnipresent environment we lose our capacity for detachment and the values of our previous mechanical world. The immediacy of the television screen demands a psychic response. People have to participate in depth to make sense out of the thousands of light dots that bombard their eyes.⁶⁸

B. TV child

Children spend more time watching TV than any other activity except sleeping.⁶⁹ By the time they get to kindergarten, they are attuned to the up-to-the-minute "adult world" of news-inflation, rioting, war, taxes, crime, bathing beauties etc...⁷⁰ The effects of such an upbringing are multiple, McLuhan is mainly preoccupied by the acoustic/tactile bias promoted by television.

The reading postures of children in elementary school are a pathetic testimonial to the effects of television: children of the TV generation separate book from eye by an average distance of four and a half inches, attempting psychomimetically to bring to printed page the all-inclusive sensory experience of TV. They are becoming Cyclops, desperately seeking to wallow in the book as they do in the TV screen.⁷¹

This preference that the child develops for the highly involving acoustic/tactile mode is associated with the development of right hemisphere

⁶⁸Tolby Goldberg, "An Examination, Critique and Evaluation of the Mass Communications Theories of Marshall McLuhan", (Ph.D. Dissertation, University of Wisconsin, 1971), p. 301.

⁶⁹Ibid., p. 283.

⁷⁰Marshall McLuhan and Quentin Fiore, The Medium is the Message. (New York: Bantam Books), p. 18.

⁷¹Eric Norden, "Playboy Interview: Marshall McLuhan," Playboy 16:3 (March, 1969) pp.62.

Marshall McLuhan, Understanding Media: The Extensions of Man. (New York: McGraw-Hill Book, 1964), pp.153-4.

functions.⁷² This is in direct opposition with the traditional school system which is left hemisphere and biased towards a preference for the visual mode. The conflict makes the child's adaptation to the educational establishment strenuous. As children are asked to detribalize themselves, the latest technology is retribalizing the entire world.⁷³

The TV child finds it difficult if not impossible to adjust to the fragmented visual goals of our education after having had all his senses involved by the electric media; he craves in-depth involvement not linear detachment and uniform sequential patterns. But suddenly and without preparation, he is snatched from the cool, inclusive womb of television and exposed - within a vast bureaucratic structure of courses and credits - to the hot medium of print. His natural instinct, conditioned by the electric media, is to bring all his senses to bear on the book he's instructed to read, and print resolutely rejects that approach, demanding an isolated visual attitude to learning rather than the Gestalt approach of the unified sensorium.⁷⁴

The educational system should ease the transition from one mode to another. It should bridge the gap between both cultures and avoid being an instrument of cultural aggression.

Recently an imaginative school principal in a slum area provided each student in the school with a photograph of himself. The classrooms of the school were abundantly supplied with large mirrors. The result was an astounding increase in the learning rate. The slum child has ordinarily very little visual orientation. He does not see himself as becoming something. He does not envisage distant goals and objectives. He is deeply involved in his own world from day to day, and can establish no beachhead in the highly specialized sense life of visual man. The plight of the slum child, via the TV image, is increasingly extended to the entire population.⁷⁵

⁷²Interview With Professor Marshall Mc Luhan," Macleans (March 7, 1977, :6.

⁷³Marshall McLuhan, "All of The Candidates are asleep," Saturday Evening Post (August 10, 1968) :36.

⁷⁴Eric Norden, "Playboy Interview: Marshall McLuhan," Playboy 16:3 (March, 1969):62.

⁷⁵Marshall Mc Luhan, Understanding Media: The Extensions of Man. (New York: McGraw-Hill Book, 1964), p. 120.

The speed of change in a society modifies the relationship between the generations. The generation gap is not limited just to a question of age or of ideas it is basically a difference in sensory life.⁷⁶ McLuhan identifies three types of situations:

In the "post-figurative" society, it is assumed that the future repeats the past. There is no difference in the life which the older generation led and that which the new generation will lead. The older generation knows what the new generation has to learn and the older generation transmits the cultural heritage to the new generation without any transformations. In this society, the older generation has a total authority over the new generation. In the "co-figurative society," the older generation is unable to teach the new generation because the present environments are strange to both the older generation and the new generation. Therefore, the new generation has to learn from its peer groups. In the "pre-figurative society" the older generation has to learn from the new generation because the older generation's thinking was formed in the past and bound them to the past so they could not open their eyes to the future.⁷⁷

The high suicide rate in school age children might confirm McLuhan's perception that children having familiarized themselves with the adult TV world see little hope for themselves and do not want to grow up.⁷⁸ They reject the older legalistic, hierarchical quality of central and personal authority.⁷⁹ Most tend to seek security and a guide for behavior in highly developed peer groups and live with some of the disadvantages that this sometimes involves.

Teen-agers deliberately seek mediocrity as a means of achieving togetherness. They are strengthened in this tendency by the goading of the adult world, which is essentially individualistic. Teen-agers want to be

⁷⁶Marshall Mc Luhan, "Education in the Electronic Age," Interchange 1 (1970) :1.

⁷⁷Marshall McLuhan and Barrington Nevitt, "Cultures in the Electronic World: Can the Bottom Line Hold Quebec?," Perception (November/December 1977, vol. 1 no 2) :67.

⁷⁸Tolby Goldberg, "An Examination, Critique and Evaluation of the Mass Communications Theories of Marshall McLuhan," (Ph.D. Dissertation, University of Wisconsin, 1971), p. 485.

⁷⁹Marshall McLuhan and Barrington Nevitt, "Cultures in the Electronic World: Can the Bottom Line Hold Quebec?," Perception (November/December 1977, vol. 1 no 2) :67

artists, but they cannot stay "together" if they are exceptional; therefore they boycott the exceptional.⁸⁰

In contrast to the old visual habits of classification, detachment and specialism electronic technology offers in exchange for the erosion of private identity the hope of the "total integration of life and knowledge."⁸¹

1. Drop-out

I had to quit school to find out who I was.⁸²

The meaning of the electronic is total decentralism, total diversity so in terms of the educational effort, you can say that any kid will drop out of a system which demands that he study the same things at the same time as anybody else. That is automatic dropout because he knows that this is not related to the world he lives in. Drop-out is alienation. It is not a failure of talents or capacities. It is alienation; a sense that "I do not belong here", that there has been some dreadful mistake.⁸³

The alienation of today's youth comes from it's incapacity to discover how the visually structured nineteenth-century⁸⁴ educational institutions can relate to the immediate, pulsating, mythic electronic world of everyday life.

No wonder the Watts kids said, "Why should we go to school and interrupt our education?"

Today, in the much greater junkyard of entertainment and advertising presented on radio and television, the child has access to every corner of the cultures of the world, past and present. Roaming this vast jungle as a "hunter," the child feels like a primitive native of totally new kind of environment. When he encounters older educational hardware (schools and structured courses), he responds exactly as natives have always

⁸⁰Edmund Carpenter and Marshall McLuhan, Explorations in Communication, (Boston: Beacon Press, 1960), p. xi.

⁸¹Marshall McLuhan, "All of The Candidates are asleep", Saturday Evening Post (August 10, 1968) :36.

⁸²Marshall McLuhan, Culture is our Business, (New York: Ballantine Books, 1970), p.64. quote from TV Guide, May 11/68

⁸³Marshall Mc Luhan, "Education in the Electronic Age," Interchange 1 (1970) :3-4.

⁸⁴Marshall McLuhan and Quentin Fiore, The Medium is the Message, (New York: Bantam Books), p. 101.

done to colonial and imperial exploiters of their unstructured "thing." He says, with an eye cocked at the satellite proscenium arch, "The globe is my theater. I shall not want for parts nor pastures."⁸⁵

The student like the top executives faces the problem of a lack of involvement.⁸⁶

The higher an executive gets inside any big organization, the sooner he drops out; because he has less and less to do with the operation.⁸⁷

McLuhan suggests that one of the solutions to the drop out problem in our school's would be to allow today's youth to approach people's traditional heritage through the door of technological awareness.

Many of our institutions suppress all the natural direct experience of youth, who respond with untaught delight to the poetry and the beauty of the new technological environment, the environment of popular culture. It could be their door to all past achievement if studied as an active (and not necessarily benign) force.⁸⁸

C. Failure of the literary establishment

McLuhan compares our present changing situation to the disappearance of scholastic culture in the sixteenth century and criticizes the present literary establishment for not coming up with a new synthesis of oral and visual education as the scholastics should have done many centuries ago to avoid the impoverishment that followed.⁸⁹ The major shift from eye to ear, from a visual to

⁸⁵Marshall Mc Luhan and Wilfred Watson, From Cliche to Archetype, (New York: The Viking Press, 1970), p. 182.

⁸⁶Marshall McLuhan, Culture is our Business, (New York: Ballantine Books, 1970), p. 64.

⁸⁷ibid., p. 78

⁸⁸Marshall Mc Luhan, Understanding Media: The Extensions of Man, (New York: McGraw-Hill Book, 1964), p. 100.

⁸⁹ibid., p. 77.

an acoustic bias is what leads McLuhan to state that literary culture is through.⁹⁰

In the piece "Why Johnny Can't Write" I am cited as a prophet of current literacy crisis, saying "literary culture is through" (10, p. 58). TV simply shaped totally different situations for readers and writers alike. On the one hand, the TV image, with its simultaneous but discontinuous mosaic of millions of illuminated points, is not so much a visual as an acoustic image. Tony Schwartz puts it very well in *The Responsive Chord* when he says that TV uses the eye as an ear (9). On the other hand, the social environment has, likewise become a simultaneous mosaic of electric information. That is to say, both the small and the large aspects of the contemporary world have none of the continuous, connected qualities that go with alphabetic writing, and none of the qualities that go with visual or "rational" space.⁹¹

Because of its bias against popular culture, technological society's high culture⁹², the professoriate has disconnected itself from the present aural/oral electronic environment and remained faithful to a disappearing visual culture.⁹³

1. Critique of specialism

Of much greater import is the fact that education as a status escalator or mobility agent is also a very crude device for insuring that its products will often be mentally narrow to the point of helplessness. Those who submit to training only because it will link them more effectively to a great economic and bureaucratic mechanism are using their best years and faculties as a means of enslaving themselves. They are seizing opportunities in order to have the economic means to be exactly like everybody else.⁹⁴

⁹⁰Marshall McLuhan, "Inside on the Outside, or the Spaced-Out American," Journal of Communication, (Autumn, 1976) pp.51-2.

⁹¹*Ibid.*, pp. 51-2.

⁹²Edmund Carpenter and Marshall McLuhan, Explorations in Communication, (Boston: Beacon Press, 1960), p. 181.

⁹³Marshall McLuhan, "Environment as Programmed Happening," in Knowledge and the Future of Man: An International Symposium, ed. by Walter J. Ong, S.J. (New York: Holt, Rinehart and Winston, 1968), p. 119.

⁹⁴Marshall McLuhan, The Mechanical Bride: Folklore of Industrial Man, (New York: Vanguard Press, 1951). p. 126.

McLuhan traces the development of specialism to the development of the phonetic alphabet and more specifically to Plato who devised a new written program based on the ideas to replace the memorized operational wisdom of the oral tribal encyclopedia.⁹⁵ In an ecologically oriented world knowledge can not be private. Commercial interests are self defeated in the process of protecting their knowledge through patents which in fact make it available to everybody.⁹⁶

The lumping together of a multitude of independent processes under the heading of old specialist categories obscures knowledge.⁹⁷ Specialism constantly disrupts any type of equilibrium as "one segment of experience usurps and overlays the others in aggressive, brawling sequence and cycle."⁹⁸ People's willingness to ignore interrelationships because they slow down the achieving of specialist expertness undermines their adaptive and survival skills.⁹⁹

It is plain that fragmentation or specialism as a technique of achieving security under tyranny and oppression of any kind has an attendant danger. Perfect adaptation to any environment is achieved by a total channeling of energies and vital force that amounts to a kind of static terminus for a creature. Even slight changes in the environment of the very well adjusted find them without any resource to meet new challenge. Such is the plight of the representatives of "conventional wisdom" in any society. Their entire stake of security and status is in a single form of

⁹⁵ Marshall McLuhan, Understanding Media: The Extensions of Man. (New York: McGraw-Hill Book, 1964), p. viii.

⁹⁶ David O'Neil, "Marshall McLuhan An Interview?" The Mike 22 (February, 1971) :4.

⁹⁷ Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout. (Don Mills, Ontario: Longman Canada, 1972), p. 105.

⁹⁸ Marshall McLuhan, "Marshall McLuhan and Gerald E. Stearn: A Dialogue," McLuhan: Hot and Cool, ed. Gerald E. Stearn (New York: Dial Press, 1967), p.152.

⁹⁹ Marshall McLuhan, Understanding Media: The Extensions of Man. (New York: McGraw-Hill Book, 1964), p. 101.

acquired knowledge, so that innovation is for them not novelty but annihilation.¹⁰⁰

Professionalism merges the individual into patterns of total environment. Amateurism seeks the development of the total awareness of the individual and the critical awareness of the groundrules of society. The amateur can afford to lose. The professional tends to classify and to specialize, to accept uncritically the groundrules of the environment. The groundrules provided by the mass response of his colleagues serve as a pervasive environment of which he is contentedly and unaware. The "expert" is the man who stays put.¹⁰¹

It is based on these reflections that McLuhan provokes us by quoting J.

Robert Oppenheimer:

There are children playing in the street who could solve some of my top problems in physics, because they have modes of sensory perception that I lost long ago.¹⁰²

2. Comprehensive awareness

Any subject taken in depth at once relates to other subjects.¹⁰³

If the manuscript tradition encouraged encyclopedism, book culture naturally tended to specialism. There were enough books to make reading a full-time occupation and to ensure an entirely withdrawn and private existence for the whole class of bookmen. Eventually there were enough books to splinter the reading public into dozens of noncommunicating groups. This has meant a large degree of unawareness in our culture of the meaning and drift of its most obvious developments.¹⁰⁴

¹⁰⁰ *Ibid.*, p. 74.

¹⁰¹ Marshall McLuhan and Quentin Fiore, The Medium is the Message. (New York: Bantam Books), p. 93.

¹⁰² *Ibid.*, p. 93

¹⁰³ Marshall McLuhan, Understanding Media: The Extensions of Man. (New York: McGraw-Hill Book, 1964), p. 301.

¹⁰⁴ Marshall McLuhan, The Interior Landscape: The Literary Criticism of Marshall McLuhan compiled by Eugene MacNarama, (New York: McGraw-Hill, 1969), p. 9.

Whether it be in physics or in anthropology or anything else, the technique for obtaining depth is by interrelating knowledge.¹⁰⁵ Nothing studied in depth can remain isolated as a separate subject.

Subjects are meaningless. They may have the same meaning that a village on the highway has. You may stop momentarily for a cup of coffee, or a look at a monument. That's all a subject can be.¹⁰⁶

In the Age of Implosion the emphasis in education should not be on the partitioning of knowledge but on the structural study of the making and learning process itself.¹⁰⁷

However, what the computer means on education is this. As information movement speeds up, information levels rise in all areas of mind and society, and the result is that any subject of knowledge becomes substitutable for any other subject. That is to say, any and all curricula are obsolete with regard to subject matter. All that remains to study are the media themselves, as forms, as modes ever creating new assumptions and hence new objectives.¹⁰⁸

At electric-information speeds art and science and nature converge through understanding media.¹⁰⁹

Unfortunately instead of seeking solutions inside the process patterns of the problems themselves, our visual tradition persists in applying a bigger dose of specialism to cure the problem of specialism.¹¹⁰

¹⁰⁵ Marshall McLuhan, "Electronics and The Psychic Drop-out", p.37

¹⁰⁶ David O'Neil, "Marshall Mc Luhan An Interview?" The Mike 22 (February, 1971) :4.

¹⁰⁷ Marshall McLuhan, Counterblast. (Toronto: McClelland and Stewart, 1969), p. 37.

¹⁰⁸ Marshall McLuhan, "Marshall McLuhan and Gerald E. Stearn: A Dialogue," McLuhan: Hot and Cool, ed. Gerald E. Stearn (New York: Dial Press, 1967), p.152.

¹⁰⁹ Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout. (Don Mills, Ontario: Longman Canada, 1972), p. 148.

¹¹⁰ ibid., p. 185.

For the specialist is one who never makes small mistakes while moving toward the grand fallacy.¹¹¹

3. McLuhan as comprehensivist

I consider myself a generalist, not a specialist who has staked out a tiny plot of study and is oblivious to everything else.¹¹²

In the tradition of the classical scholar or the scholastic humanist McLuhan sees himself as a generalist who consumes vast amounts of information from a large variety of sources before generating a synthesis of knowledge.¹¹³ His commitment to encyclopedic erudition and public discourse associate him with the medieval manuscript culture.¹¹⁴

The know-how of the twelfth century was dedicated to an all-inclusive knowledge of human and divine ends. The secularizing of this system has meant the adaptation of techniques not for knowledge but for use. Instead of an intelligible map of man and creation, modern technology offers immediate comfort and profit. But it is still paradoxically permeated with a medieval spirit of religious intensity and moral duty, which causes much conflict of mind and confusion of purpose in producers and consumers alike. So that the Marxists urge that technology be finally cut loose from religion as a means of resolving these conflicts; but this is merely to repudiate the parent while idolizing the offspring. More common and hopeful is the effort to modify the social and individual effects of technology by stressing concepts of social biology, as Lewis Mumford and others do.¹¹⁵

4. Critique of schools

¹¹¹ Marshall McLuhan, Understanding Media: The Extensions of Man, (New York: McGraw-Hill Book, 1964), p. 118.

¹¹² Eric Norden, "Playboy Interview: Marshall McLuhan," Playboy 16:3 (March, 1968) : 54.

¹¹³ Blair Francis Stone, "Marshall McLuhan and the Humanist Tradition: Media Theory and Encyclopedic Learning," (Ph.D. Dissertation, University of Massachusetts, 1974), pp. 153-4.

¹¹⁴ Marshall McLuhan, The Interior Landscape: The Literary Criticism of Marshall McLuhan compiled by Eugene MacNarama, (New York: McGraw-Hill, 1969) p. 8.

¹¹⁵ Marshall McLuhan, The Mechanical Bride: Folklore of Industrial Man, (New York: Vanguard Press, 1951), pp. 33-4.

McLuhan describes our current schooling system as an intellectual penal institution¹¹⁶ where students are asked to put aside their own impulses and ideas to adapt to an environment created for children a hundred years ago.¹¹⁷

In today's world, to paraphrase Jefferson, the least education is the best education, since very few young minds can survive the intellectual tortures of our educational system.¹¹⁸

His critique of schools focuses on many different issues, one being the fact that television has considerably altered the child's way of processing information. When entering school after being exposed to 4000 hours of television before kindergarten the TV children's sensory development demands a different kind of information environment than what precede them.

The mosaic image of the TV screen generates a depth-involving oneness and simultaneity in the lives of children that makes them scorn the distant visualized goals of traditional education as unreal, irrelevant and puerile. ¹¹⁹

Another problem is the lack of recognition by the educational establishment that the traditional analytic methods of teaching cannot cope with the information overload created by the electronic environment.¹²⁰ Competition from outside sources erode the school system's pretensions as an information distributor.

It would be very misleading to look at the existing bureaucracy and organization of curriculum for evidence of change and what is happening

¹¹⁶Eric Norden, "Playboy Interview: Marshall McLuhan," Playboy 16:3 (March, 1969) p. 64.

¹¹⁷Nancy Hanks, "Education Through Art: A Gateway," Art Education (v.24 n.7) :12 quotes an article by Peter Martin in This Magazine.

¹¹⁸Eric Norden, "Playboy Interview: Marshall McLuhan", Playboy 16:3 (March, 1969) p. 64

¹¹⁹ibid., p. 64

¹²⁰ibid., p. 64

in our world. The changes have gone on outside, not inside the school. The outside environment perhaps for the first time in history is, in terms of information, many times more heavily laden than the inside environment of the school. What is going on inside the school is puny and undernourished compared to what goes on the moment the child steps outside. In Watts there was a report of kids saying quite freely, "We are dropouts because we do not want to go to school and disrupt our education.

What goes on inside the school is an interruption of education, of the education available in the current environment."¹²¹

McLuhan's book City as Classroom presents some solutions to these issues for instance the use of the outside environment as object of study and the use of his own methodology of creative analysis as a pedagogical procedure.

The METROPOLIS today is a classroom; the ads are its teachers.¹²²

McLuhan's criticism is not limited to the fact the present educational system has not responded to the changes brought about by television it is also a criticism of the values of an education system that follows the mechanical rules of fragmentation and specialization to stamp out the standardized components of the social system.

In this setting, education's task was fairly simple: decide what the social machine needs, then turn out people who match those needs. The school's function was not so much to encourage people to keep exploring, learning and therefore, changing throughout life as to slow and control those very processes of personal growth and change. Providing useful career or job skills was only a small part of this educational matching game. All students, perhaps moreso in the humanities than the sciences and technologies, were furnished standard "bodies of knowledge," vocabularies, concepts and ways of viewing the world. Scholarly or trade journals generally held a close check on standard perceptions in each special field.

Specialization and standardization produced close resemblance and, therefore, hot competition between individuals. Normally, the only way a person could differentiate himself from the fellow specialists next to him was by doing the same thing better and faster. Competition, as a matter

¹²¹ Marshall Mc Luhan, "Education in the Electronic Age," Interchange 1 (1970)
:1

¹²² Marshall McLuhan, Verbi-voco-visual Explorations. (New York: Something Else Press, 1967), p. 14.

of fact, became the chief motive force in mass education, as in society, with grades and tests of all sorts gathering about them a power and glory all out of proportion to their quite limited function as learning aids.¹²³

"Our educational process is necessarily geared to eliminate all bone. The supple, well-adjusted man is the one who has learned to hop into the meat grinder while humming a hit-parade tune. Individual resistance to that process is labeled destructive and uncooperative.

Far from teaching detachment or developing the power of gauging human goals, our higher education is servile and unrealistic. For to develop individuals with powerful minds and independent characters is to create a supply for which there is no demand. Why train men if there is only a market for robots? Most university presidents and deans understand the logic of their world. They are on the band wagon. Why train individuals, if the only available life is the collective dream of uniform tasks and mass entertainment? Why make life difficult? Why be different Why use your brains to ensure poverty?

To put the whole thing briefly, a power economy cannot tolerate power that cannot be centrally controlled. It will not tolerate the unpredictable actions and thoughts of individual men. That is plain from every gesture and intonation of current social and market research as well as from the curricula of our schools.¹²⁴

D. Need for a new approach to education

Unfortunately, no society in history has ever known enough about the forces that shape and transform it to take action to control and direct new technologies as they extend and transform man. But today, change proceeds so instantaneously through the new media that it may be possible to institute a global education program that will enable us to seize the reins of our destiny-but to do this we must first recognize the kind of therapy that's needed for the effects of the new media.¹²⁵

McLuhan considers children to be a kind of backward country of the mind he stresses the importance of getting them involved in the learning process.¹²⁶

¹²³Marshall McLuhan and George B. Leonard, "The Class of 1989," Look, (Feb. 21, 1967) :24.

¹²⁴Marshall Mc Luhan, The Mechanical Bride: Folklore of Industrial Man, (New York: Vanguard Press, 1951), p. 128.

¹²⁵Eric Norden, "Playboy Interview: Marshall McLuhan," Playboy 16:3 (March, 1969) p. 64.

¹²⁶Marshall McLuhan, Harley Parker and Jacques Barzun, Exploration of the Ways, Means and Values of Museum Communication with the Viewing Public. A Seminar, (New York: Museum of the City of New York, 1966), p. 14.

Making them part of the discovery team. The mere accumulation of data is insufficient, students in an high information environment are capable of participating in various types of high level research. Their unique modes of perception allow them to configure problems in innovative ways.

Edmund Bacon, for example, the head of the Town Planning commission in Philadelphia, a few years ago became world-famous overnight when he enlisted the aid of the elementary schools in solving some of his top problems in Town Planning. He got children in the early grades to study the plans for Philadelphia and to discuss them among themselves and their parents and neighbors, and to study their communities physically and geographically, and they came up with some of the top solutions to the whole problem.¹²⁷

In the electronic information environment where everybody is involved with everybody else the visual notion of a grading system is useless.

...if you live in a community where the information levels are very high - just in the sense of the amount of data moving on the radio and TV and movies and so on - then the idea that you should use your school system as a means of eliminating half or three quarters of the community from higher education is ludicrous.¹²⁸

As roles of knowledge and action once again fuse, human dialogue becomes essential for the overall consideration of human unity. Specialisms pushed into top gear flip into encyclopedic awareness.¹²⁹ Men abandon their fragmented specialist points of view to become nomadic gatherers of knowledge instantly interrelating every human experience.¹³⁰ Compartmentalized knowledge becomes unacceptable as it has always been

¹²⁷ Marshall McLuhan, "Electronics and The Psychic Drop-out," p. 39

¹²⁸ *ibid.*, p. 39

¹²⁹ Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout. (Don Mills, Ontario: Longman Canada, 1972), p. 168.

¹³⁰ Marshall McLuhan, Understanding Media: The Extensions of Man. (New York: McGraw-Hill Book, 1964), pp. 257-8.

irrelevant.¹³¹ The electronic environment makes liberal education mandatory.¹³²

Electronic man is not a specialist, but a "man for all seasons" and will want to be educated to be a master of all disciplines to play a role of deep involvement in society. The student of the right hemisphere will demand an extensive 'general' education which specialist professors cannot deliver. Without intense and constant dialogue and interweaving between all disciplines, a 'general education' cannot exist.¹³³

1. Understanding media

The art of being ruled is the art of ignoring what you yourself have made. And we're all very good at this, because whatever you make as an immediate environment for yourself tends to be invisible anyway. You tend to notice, not that environment not the new one, but the old one. We tend, therefore, in our images of ourselves and of our society, to live in the 19th century, because there we feel at home, there we feel comfortable and secure. What we have already lived through gives reassurance.¹³⁴

The first step to avoid becoming automatons unconsciously ruled by our technology is to understand the hidden effects of our media. By knowing the cause of these effects, it becomes possible to understand social and cultural change¹³⁵ and it becomes optional whether one wishes to remove or counteract these effects.¹³⁶ Everyone is intellectually and emotionally a

¹³¹ Marshall Mc Luhan, The Gutenberg Galaxy: The Making of Typographic Man. (Toronto: University of Toronto Press, 1962.), pp.253-4.

¹³² Marshall Mc Luhan, Understanding Media: The Extensions of Man. (New York: McGraw-Hill Book, 1964), p. 310.

¹³³ Carl Scharfe, "Marshall Mc Luhan and Barrington Nevitt with students and guests: A Fireside Chat," The Innis Herald 10:4 (March 10 1977) :9.

¹³⁴ Marshall McLuhan, "The Password is involvement," Monday Morning (September 1967) p. 21.

¹³⁵ Marshall McLuhan and Quentin Fiore, The Medium is the Message. (New York: Bantam Books), p. 26.

¹³⁶ Marshall McLuhan, War and Peace in the Global Village. (New York: Bantam Books, 1968), p. 136.

patchwork quilt of occupied and unoccupied territory¹³⁷ To achieve autonomous existence by resisting the mechanism of mass delirium and collective irrationalism¹³⁸ promoted by the environments created by our new technologies is a task at which the individual organism is quite helpless.¹³⁹ Yet the price of complete surrender is too high.¹⁴⁰

The low quality of mental habit engendered thus far by universal literacy, when confronted with the extreme complexity of current affairs, cannot be said to produce thought. So that the exhortation to "think for yourself" is, in these circumstances, a cause of discouragement only. It positively encourages a plunge into any collective myth that happens to have appeal.¹⁴¹

The educational establishment founded on print offers civil defense against print but does not recognize any other responsibilities.¹⁴²

Education is ideally civil defense against media fall-out. Yet Western man has had, so far, no education or equipment for meeting any of the new media on their own terms. Literate man is not only numb and vague in the presence of film or photo, but he intensifies his ineptness by a defensive arrogance and condescension to "pop kulch" and "mass entertainment." It was in this spirit of bulldog opacity that the scholastic philosophers failed to meet the challenge of the printed book in the sixteenth century. The vested interests of acquired knowledge and conventional wisdom have always been by-passed and engulfed by new media. The study of this process, however, whether for the purpose of fixity or of change, has scarcely begun.¹⁴³

¹³⁷ Marshall McLuhan, The Mechanical Bride: Folklore of Industrial Man, (New York: Vanguard Press, 1951), p. 144.

¹³⁸ *Ibid.*, 144.

¹³⁹ Marshall McLuhan, War and Peace in the Global Village, (New York: Bantam Books, 1968), p. 136.

¹⁴⁰ Marshall McLuhan, The Mechanical Bride: Folklore of Industrial Man, (New York: Vanguard Press, 1951), p. 144.

¹⁴¹ *Ibid.*, 144.

¹⁴² Marshall McLuhan, Understanding Media: The Extensions of Man, (New York: McGraw-Hill Book, 1964), p. 267.

¹⁴³ *Ibid.*, p. 175.

When thousands of the best-trained men make their full-time occupation the manipulation, exploitation and control of the public mind it becomes important to make students and the public conscious of the unconscious.¹⁴⁴ Emancipation from determinism is the goal of all education.¹⁴⁵ Unfortunately most people resent having the subliminal part of their world surface.¹⁴⁶

Self-consciousness of the causes and limits of one's own culture seems to threaten the ego structure and is, therefore, avoided. Nietzsche said understanding stops action, and men of action seem to have an intuition of the fact in their shunning the dangers of comprehension.¹⁴⁷

This would seem to be confirmed by McLuhan's observation that most corporate structures lack any interest in any other medium than their own even in defiance to self interest and in view of the startling changes resulting from new hybrids and crossings of media.¹⁴⁸

There may be some hitherto unsuspected and wise motive for mental sleep and self-hypnosis in man which the confrontation of the effects of media technology would reveal. However this maybe, it is plain that the pseudo-dichotomies and visual quantities, imposed on our psychology by print began in the seventeenth century to assume the character of consumer packages or "systems" of philosophy. They are of the kind that can be described and presented in a few minutes, but, thanks to the mesmerism of print, were to occupy the attention of generations.¹⁴⁹

2. Language of form

Until we have mastered the multiple grammars of the new nonwritten media, we shall have no curriculum relevant to the new languages of

¹⁴⁴ibid., p. 267.

¹⁴⁵Marshall Mc Luhan, The Gutenberg Galaxy: The Making of Typographic Man, (Toronto: University of Toronto Press, 1962.), p. 247.

¹⁴⁶"Interview With Professor Marshall Mc Luhan," Macleans (March 7, 1977, :6.

¹⁴⁷Marshall Mc Luhan, Understanding Media: The Extensions of Man, (New York: McGraw-Hill Book, 1964), p. 93.

¹⁴⁸ibid., p. 175.

¹⁴⁹Marshall Mc Luhan, The Gutenberg Galaxy: The Making of Typographic Man, (Toronto: University of Toronto Press, 1962.), p. 246.

knowledge and communication which have come into existence via the new media. These new languages are known to most people but their grammars are not known at all. We have "read" these new languages in the light of the old. The result has been distortion of their character and blindness to their meaning and effects.¹⁵⁰

Education must shift from instruction, from the rubber stamping of minds to the exploration of the new languages of form that are shaping our environment. The new media are not aids to understand previous forms of experience they are new forms.¹⁵¹ One of the ways of probing these new languages of form is to study their grammar or how they translate the modal powers of another medium.¹⁵² By comparing and contrasting information as it passes from one medium to another we can distinguish the different formal characteristics of each medium.¹⁵³ A previous chapter describes the many approaches McLuhan developed to explore the languages of media.

3. School as an antienvironment

Your child is coming out in an intensely literate world, so he can take a fair amount of TV without too much harm. But to the ordinary kid without a lot of literacy, TV will just turn off any possibility of left hemisphere.¹⁵⁴

People should use all of their senses in making sense, the abuse of one medium or another whether print or television distorts people's capacity to view their world interactively.

¹⁵⁰ Marshall McLuhan, "Marshall McLuhan and Gerald E. Stearn: A Dialogue," McLuhan: Hot and Cool, ed. Gerald E. Stearn (New York: Dial Press, 1967), p.160.

¹⁵¹ Marshall McLuhan, Counterblast, (Toronto: McClelland and Stewart, 1969), p. 133.

¹⁵² Marshall McLuhan, "Report on Understanding New Media," (Prepared and published by The National Association of Educational Broadcasters, pursuant to a contract with the Office of Education, United States Department of Health, Education and Welfare, June 30, 1960), part 1, p.1

¹⁵³ Marshall McLuhan, Counterblast, (Toronto: McClelland and Stewart, 1969), p. 133.

¹⁵⁴ "Interview With Professor Marshall Mc Luhan," Macleans (March 7, 1977, :9.

The content of any system or organization naturally consists of the preceding system or organization, and in that degree the old environment acts as a control on the new. It is useful to notice that the arts and sciences serve as antienvironments that enable us to perceive the environment. In a business civilization we have long considered liberal study as providing necessary means of orientation and perception. When the arts and sciences themselves become environments under conditions of electric circuitry, conventional liberal studies, whether in the arts or sciences, will no longer serve as an antienvironment. When we live in a museum without walls, or have music as a structural part of our sensory environment, new strategies of attention and perception have to be created.¹⁵⁵

Our traditional schools, by being in contrast with their immediate environment, were designed as antienvironments to develop the perception and judgment of the printed word. As our present schools merge with their immediate electronic environment, we lose the possibility of providing training in the perception and judgement of the electronic environment.

From the development of phonetic script until the invention of the electric telegraph, human technology had tended strongly toward the furtherance of detachment and objectivity, detribalization and individuality. Electric circuitry has quite the contrary effect. It involves in depth. It merges the individual and the mass environment. To create an antienvironment for such electric technology would seem to require a technological extension of both private and corporate consciousness.¹⁵⁶

One of McLuhan's suggestions to this problem is to bring the study of the electric environment¹⁵⁷ and the popular arts¹⁵⁸ into the classroom. With the hope that such study would create some detachment and generate a better understanding of our mediated environment.

¹⁵⁵Marshall McLuhan and Harley Parker, Through the Vanishing Point: Space in Poetry and Painting. (World Perspectives Series, edited by Ruth Nanda Anshen, Vol. 37. New York: Harper and Row, 1968), p. 243.

¹⁵⁶ibid., p. 243.

¹⁵⁷reference to Marshall McLuhan with Kathryn Hutchon and Eric McLuhan, City As Classroom: Understanding Language and Media. (Agincourt, Ontario: Book Society of Canada, 1977).

¹⁵⁸Marshall McLuhan, "Education in the Electronic Age," Interchange 1 (1970)

4. Making versus matching

Perhaps the great revolution produced by photograph was in the traditional arts. The painter could no longer depict a world that had been much photographed. He turned, instead, to reveal the inner process of creativity in expressionism and in abstract art. Likewise, the novelist could no longer describe objects or happenings for readers who already knew what was happening by photo, press, film and radio. The poet and novelist turned to those inward gestures of the mind by which we achieve insight and by which we make ourselves and our world. Thus art moved from outer matching to inner making. Instead of depicting a world that matched the world we already knew, the artists turned to presenting the creative process for public participation. He has given us now the means of becoming involved in the making-process. Each development of the electric age attracts, and demands, a high degree of producer-orientation.¹⁵⁹

Education like art must shift from matching or instruction to making. It has to move from the mere conveying of data to the experimental discovering of new dimensions of experience. It should be a probe not a package.¹⁶⁰ Comprehension is never mere classification, it means making sense by using all of our senses.¹⁶¹ A search for patterns of experience and discovery of principles of organization which have universal applications, not for facts or the translation of everything into matching categories and classifications. Experience is a metamorphosing of reality¹⁶² and history is fabricated by the

¹⁵⁹ Marshall McLuhan, Understanding Media: The Extensions of Man. (New York: McGraw-Hill Book, 1964), pp. 174-5.

¹⁶⁰ Marshall McLuhan, "Electronics and The Psychic Drop-out", pp. 40-1.

¹⁶¹ Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout (Don Mills, Ontario: Longman Canada, 1972), p. 270.

¹⁶² Marshall McLuhan, Culture is our Business. (New York: Ballantine Books, 1970), p. 132.

preferences of the present.¹⁶³ We must move from consuming to producing¹⁶⁴ and from acquisition to involvement.¹⁶⁵

After the death of Mrs. Johnson, with whom he had been very happy, Dr. Johnson was asked by Boswell whether there were another woman in the world with whom he could have been happy. "Yes, sir. Forty thousand." Johnson knew marriage was not matching but making.¹⁶⁶

Matching refers to the outer fact, it is a visual technique alien to the age of electric involvement and image-making.¹⁶⁷ Making on the other hand captures the inner fact.¹⁶⁸

Q.: What do you think about competition in schools?

A.: It is like many other issues, very complicated and confused. The more you can make any two people or two situations resemble each other, the more competition there will be. It is based on a principle of absolute conformity. You don't get competition until you get complete likeness. People who are just slightly different in some respects, income or something, they are competitive; but they are totally different, like one artist and another artist, they are never competitive because they are totally different. When people are really involved in being something or doing something there is no competition possible. Competition belongs to the old visual world of matching.¹⁶⁹

¹⁶³ Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout. (Don Mills, Ontario: Longman Canada, 1972), p. 67.

¹⁶⁴ Marshall McLuhan, Culture is our Business, (New York: Ballantine Books, 1970), p. 138.

¹⁶⁵ Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout. (Don Mills, Ontario: Longman Canada, 1972), p. 265.

¹⁶⁶ Marshall McLuhan, Culture is our Business, (New York: Ballantine Books, 1970) p. 128.

¹⁶⁷ *ibid.*, p. 60.

¹⁶⁸ Marshall McLuhan and Harley Parker, Through the Vanishing Point: Space in Poetry and Painting, (World Perspectives Series, edited by Ruth Nanda Anshen, Vol. 37. New York: Harper and Row, 1968), p. 165.

¹⁶⁹ Marshall McLuhan, "Education in the Electronic Age," Interchange 1 (1970) :7.

In the electronic environment where the quantity of information exceeds people's power of human response or adaptation¹⁷⁰, education as replication and repetition must be changed for discovery through investigation.¹⁷¹

Of course, it is more difficult to learn to ask yourself productive questions than it is to look for answers to other people's questions, but learning to ask productive questions helps you to become self-reliant. You will find that you do not have to wait until somebody else asks you a question in order to learn.¹⁷²

5. Educational media

Education must always concentrate its resources at the point of major information intake. But from what sources do growing minds nowadays acquire most factual data and how much critical awareness is conferred at these points? It's a complementary on our extreme cultural lag that when we think of criticism of information flow we still use only the concept of book culture, namely, how much trust can be reposed in the words of the message. Yet the bias of each medium of communication is far more distorted than the deliberate lie.¹⁷³

The character of our knowledge is determined by the mode of acquiring it. Children learn a language in a year or two because it is an environment. Physics and mathematics could be given the same environmental codification and learned with the same speed and ease.¹⁷⁴

How about Educational Television? When the three-year-old sits watching the President's press conference with Dad and Grandad, that

¹⁷⁰ Marshall Mc Luhan and Wilfred Watson, From Cliche to Archetype, (New York: The Viking Press, 1970), p. 196.

¹⁷¹ Marshall Mc Luhan, "Education in the Electronic Age," Interchange 1 (1970) :7.

¹⁷² Marshall McLuhan with Kathryn Hutchon and Eric McLuhan, City As Classroom: Understanding Language and Media, (Agincourt, Ontario: Book Society of Canada, 1977), :4.

¹⁷³ Marshall McLuhan, Counterblast, (Toronto: McClelland and Stewart, 1969), p. 119.

¹⁷⁴ Marshall McLuhan, War and Peace in the Global Village, (New York: Bantam Books, 1968), pp. 150-1.

illustrates the serious educational role of TV. If we ask what is the relation of TV image, by its stress on participation, dialogue, and depth, has brought to America new demand for crash-programming in education. Whether there ever will be TV in every classroom is a small matter. The revolution has already taken place at home. TV has changed our sense-lives and our mental processes. It has created a taste for all experience in depth that affects language teaching as much as car styles. Since TV, nobody is happy with a mere book of knowledge of French or English poetry. The unanimous cry is, "Let's talk French," and "Let the bard be heard." And oddly enough, with the demand for depth, goes the demand for crash-programming.¹⁷⁵

Television can illustrate the interplay of process and the growth of forms of all kinds as nothing else can.¹⁷⁶ It can deeply involve in the learning process by presenting graphically the complex interplay of people and events and the multileveled interrelationships between arbitrarily isolated subjects.¹⁷⁷ Television demands social completion and dialogue.¹⁷⁸

But it is plain that our new culture is not going to lean very heavily on any one means of encoding experience or of representing reality. Already we are accustomed to a concert of the arts, of the sensuous channels and of the media. And in this respect we shall resemble pre-literate and pre-historic societies in the inclusiveness of our awareness.¹⁷⁹

Conclusion

McLuhan's ideas about education are put forward in this chapter. He feels that as our whole environment, under the influence of electricity, becomes a teaching machine and information becomes the main commodity, the specific

¹⁷⁵Marshall Mc Luhan, Understanding Media: The Extensions of Man, (New York: McGraw-Hill Book, 1964), p. 289.

¹⁷⁶ibid., p. 93.

¹⁷⁷Eric Norden, "Playboy Interview: Marshall McLuhan," Playboy 16:3 (March, 1969) p. 64.

¹⁷⁸Marshall Mc Luhan, Understanding Media: The Extensions of Man, (New York: McGraw-Hill Book, 1964), p. 255.

¹⁷⁹Marshall McLuhan, Counterblast, (Toronto: McClelland and Stewart, 1969), p. 131.

role of education in this context should be to provide training in the perception and judgement of the electronic environment. McLuhan suggests that we should focus on the structural study of the making and learning process to understand the formal language of our environment and its hidden effects. McLuhan believes that human dialogue is the best medium to use in the experimental discovery through investigation of new dimensions of experience. ("Experience" being defined as: the metamorphosing of the present through metaphor, the interplay of all of our senses.)

The electronic age is an age of illumination. As computers translate our environment into information I believe that humans tend to redefine themselves as something more than a computer. They seek a new form of identity based on their capacity to be creative, to go beyond the mere categorization of phenomena, beyond established languages and images, into the areas of "authentic" or human in contrast to artificial intelligence. Creative artistic manifestations based on inspiration, prophecy or revelation have been associated with most great artists and are generally accepted and valued in the art environment. In the area of art education on the other hand the theoretical fragility of such undefined notions make their applicability in the educational context much more difficult to defend. I believe that one of McLuhan's contributions to art education can be a theoretical model and a methodology that values and promotes the importance and development of intuition in art making. It can also offer, through the richness of McLuhan's personal insights, an understanding of the electronic environment in which we live and a vision of our past and our future.

The following chapter will present McLuhan's methods of exploration and presentation which are the basis of his investigative techniques. These methods are the result of McLuhan's research in art analysis mainly in English literature

and also in the visual arts. They constitute the foundation of McLuhan's work. his insights derive from his use of these methodologies. It is on the basis of this creative technology that a program in art education could be developed.

CHAPTER 6 -- MCLUHAN'S METHODS

Introduction

McLuhan defines awareness and perceptual training by a methodology of exploration. While very little attention has been given to this area of his work I believe that it is probably his greatest possible contribution to art education. The notion of exploration can be thought of as an effort to reach some insight into the unconscious world of how our senses perceive the environment and what effect these percepts have on us and the environment.

In this chapter McLuhan suggests many strategies to throw us off balance and thus force us out of our usual patterns of thought and into new ways of perceiving our environment. McLuhan used these strategies for his own work. I have tried not to exclude any of these methods even though some might seem to be redundant. For those readers who are familiar with the evolution in McLuhan's thinking over time some strategies might seem more relevant than others. I have considered all of them on equal footing. I find the material used in his first years of writing to yield much insight into his way of thinking. The aim of these methods is to orient us towards new ways of perceiving so as to gain a new understanding of the electronic environment we live in.

This chapter is divided into three parts. The method of exploration, the first part, is devoted to different ways of exploring issues by altering our

preconceived notions to yield new insight. The second part deals with the mosaic form which is the formal strategy McLuhan used to present the findings of his explorations. After discussing McLuhan's method in the first two parts, the third part presents his ideas on scientific methodology. With such a transformational approach McLuhan situates himself in contrast to the traditional scientific methodology which he criticizes for ignoring causation and isolating itself from a more comprehensive approach to understanding and awareness.

A. The method of exploration.

As the unity of the modern world becomes increasingly a technological rather than a social affair, the techniques of the arts provide the most valuable means of insight into the real direction of our own collective purposes.¹

The rational use of power and the method of art analysis as applied to the critical evaluation of society serves the purpose of transforming society into a work of art.² This approach constitutes McLuhan's strategy for survival in the maelstrom of technological change.

McLuhan's method is based on "an analytical awareness of the nature of the creative process involved in human cognition"³. It assumes that artistic creation is the playback of ordinary experience⁴.

The discipline and techniques of the arts for creative analysis originate in the work of contemporary artists (Yeats, Pound, Joyce etc...) McLuhan does not

¹ Marshall McLuhan, The Mechanical Bride: Folklore of Industrial Man, (New York: Vanguard Press, 1951), pp. 85-6.

² *ibid.*, p. vi.

³ Marshall McLuhan, "Sight, Sound and Fury," Commonweal, LX (April 9, 1954) :11.

⁴ Eric Norden, "Playboy Interview: Marshall McLuhan," Playboy 16:3 (March, 1969) pp. 7-15.

consider the general use of this approach to be exclusive to himself he sees many other fields (history, anthropology, sociology, etc...) incorporating the essence of these techniques⁵.

McLuhan's main focus on understanding multisensory inner life was not easily approachable by the scientific method; for he avoided the categories "objective" and "subjective" as visually biased. McLuhan also saw the need for a new approach based on his observations that the simultaneity and human interdependence of the electronic environment demanded that we be able to forecast effects before causes.

The method of trial and error is too costly and wasteful (as well as too imprecise) to be tolerated in a global society.

We have to repeat what we were about to say.⁶

With the development in the nineteenth century of many new technologies (cliques), the supremacy of unified print consciousness gave way to multiconsciousness (note: ex: Joyce's *Finnegan's Wake*, Jarry's *Ubu Roi* more ex cited)... even in the abstruse arguments of the phenomenologists (funambulists), the Existentialists, and the logical positivists, they reveal no awareness of the problems imposed upon philosophy by multiconsciousness. However, in their attempts to deal with contemporary problems they arrive at a complexity which is philosophical breakdown. These people show themselves to be literally "simple-minded".⁷

In response to these issues McLuhan developed his own methodology, the method of "exploration", which he characterizes by comparing and contrasting it to the method of "exposition".

The method of exploration distinguishes itself by avoiding fixed attitudes, points of view and value judgments so as to make oneself open to insight and

⁵Marshall McLuhan, The Interior Landscape: The Literary Criticism of Marshall McLuhan compiled by Eugene MacNarama, (New York: McGraw-Hill, 1969), pp. 115-6.

⁶Marshall McLuhan, Verbi-voco-visual Explorations, (New York: Something Else Press, 1967), :4.

⁷Marshall McLuhan and Wilfred Watson, From Cliche to Archetype, (New York: The Viking Press, 1970), p. 152.

the surprise of discovery. In contrast the method of exposition associates truth and practicality to repetition⁸. One seeks to map new terrain and the other prefers to chart old landmarks.⁹

The basis of the method of exploration is its capacity to bring us to use all human faculties in the process of understanding and artistically controlling the operational premises of our environment. McLuhan considers intuition to be the main source of insight.

Scientists make their discoveries as "artists" or as "magi", using all their faculties - their human intuition - rather than their specialist knowledge. Any new laws they may discover always lie beyond normal science. In his preface to *Where Is Science Going?*, Albert Einstein insists: "There is no logical way to the discovery of these elemental laws. There is only the way of intuition, which is helped by a feeling for the order lying behind the appearance."¹⁰

The process of intuition or invention involves synesthesia, the translation of one space into another¹¹. This process tends to occur unexpectedly, on the fringe of consciousness, when one is between two states¹², often the result of "breakdowns" or "hang ups". Much of McLuhan's writings on method suggest many approaches to stimulate this creative process.

Possibly one of McLuhan's most original contributions to art education could be the use of the method of exploration. The techniques included in this method are the result of his investigation into the process of creativity. Even

⁸Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout. (Don Mills, Ontario: Longman Canada, 1972), p. 8.

⁹Eric Norden, "Playboy Interview: Marshall Mc Luhan," Playboy 16:3 (March, 1969) p. 54.

¹⁰Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout. (Don Mills, Ontario: Longman Canada, 1972), p. 128.

¹¹Marshall Mc Luhan, The Gutenberg Galaxy: The Making of Typographic Man. (Toronto: University of Toronto Press, 1962.), p.,44.

¹²Marshall Mc Luhan and Wilfred Watson, From Cliche to Archetype. (New York: The Viking Press, 1970), p.,44.

Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout. (Don Mills, Ontario: Longman Canada, 1972), p.,102.

though references to this method appear relatively often throughout his work, very little attention has been given to it. Its value in generating an original, challenging and thought provoking view of the world can be observed in McLuhan's own writings. This method which constitutes the infrastructure of his work is made up of the following techniques and principles:

1. Reconstruction/invention
2. Suspended judgment
3. Interface
4. Figure/ground
5. Cliche and archetype
6. Radial logic
7. Direct comparison and examination
8. Paradox
9. Probes
- 10 Organization and sharing of ignorance
11. The importance of dialogue
12. The analogical method of analysis

1. Reconstruction/Invention.

McLuhan refers to A.N. Whitehead, Edgar Allan Poe, T.S. Elliot, Rimbaud and Mallarmé in saying that the great discovery of the nineteenth century in the arts and sciences was the the discovery of the technique of invention. Instead of working from causes to effect, one establishes the effect before knowing what will cause it. One starts with the solution (effect) and then backtracks to possible causes.

Instead of developing a narrative straight forward, inventing scenes, characters, and description as he proceeded, in the Sir Walter Scott manner, Poe said : "I prefer commencing with the consideration of an effect." Having in mind the precise effect the author has then to find the situations, the persons, and the images, and the order which will produce that effect and no other.¹³

... just as the chemist begins with the end product and then seeks the formula which will produce it.¹⁴

In most of the significant painting and poetry since Poe and Baudelaire McLuhan considers that what is important is the effect of the work, what it does, not what it says.

When Picasso presented the multi-perspective object in a simultaneous experience, he was not expressing his idea of the world, he was telling all of us where it was at.¹⁵

The right word is not the one that names the thing but the one that gives the effect of the thing.¹⁶

The effect of starting with effect is one of rendering all the parts of a work of art simultaneous.¹⁷ This approach assumes that the causes of such effects are everywhere¹⁸, and that insight into the understanding of effect is the dominant preoccupation.

In the first great age of mass production of commodities, and of literature as a commodity for the market, it became necessary to study the

¹³ Marshall McLuhan, The Mechanical Bride: Folklore of Industrial Man, (New York: Vanguard Press, 1951), p. 106.

¹⁴ Marshall McLuhan, The Interior Landscape: The Literary Criticism of Marshall McLuhan compiled by Eugene MacNarama, (New York: McGraw-Hill, 1969), pp. 137-8.

¹⁵ Marshall McLuhan, "McLuhan's open earlids vs Barkway's bite," Financial Times (September 18, 1972) :11.

¹⁶ Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout, (Don Mills, Ontario: Longman Canada, 1972), p. 142.

¹⁷ Marshall McLuhan, Counterblast, (Toronto: McClelland and Stewart, 1969) p.48.

¹⁸ Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout, (Don Mills, Ontario: Longman Canada, 1972), p. 99.

consumer's experience. In a word it became necessary to examine the effect of art and literature before producing anything at all."¹⁹

"...to invent the market before the product."²⁰

In the global village the process of retracing the stages of human apprehension leads to empathy and insight into the processes and impulses behind products and events that are utterly alien to our immediate experience. Such "an awareness of the modes of imagination as producer represents an enormous extension of the bonds of human sympathy and understanding, socially and historically."²¹

"...the only way of expressing emotion in the form of art is by finding an objective correlative; in other words, a set of objects, a situation, a chain of events which shall be the formula of that particular emotion; so that when the external facts, which must terminate in sensory experience are given, the emotion is immediately evoked"²²

2. Suspended judgment.

"I don't necessarily agree with what I say"²³

The technique of suspended judgment, considered by Bertrand Russell as the major discovery of the twentieth century, is associated to many modern disciplines such as psychoanalysis, metallurgy and structural analysis.²⁴

¹⁹ Marshall McLuhan, The Gutenberg Galaxy: The Making of Typographic Man. (Toronto: University of Toronto Press, 1962.), p. 276.

²⁰ Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout. (Don Mills, Ontario: Longman Canada, 1972), p. 195.

²¹ Marshall McLuhan, The Interior Landscape: The Literary Criticism of Marshall McLuhan compiled by Eugene MacNarama, (New York: McGraw-Hill, 1969), pp. 115-6.

²² *ibid.*, pp. 137-8 quoting Elliot

²³ Marshall McLuhan, "The Emperor's Old Clothes," cited in The Man-Made Object, ed. by Gyorgy Kepes (New York: George Braziller, 1966), p. 90.

²⁴ Marshall McLuhan, The Gutenberg Galaxy: The Making of Typographic Man. (Toronto: University of Toronto Press, 1962.) p. 45.

McLuhan's believes that under "electric conditions of simultaneous information movement and human interdependence"²⁵ the origin and action of media cannot be understood in terms of a single isolated cause. He stresses the need to achieve an overall structural awareness of the interactions between effects and causes.

The technique of suspended judgment achieves this structural awareness by following the contours of process while avoiding contamination by the process itself²⁶ To follow the process without involvement is an effort to transcend the limitations of our assumptions by a critique of them.²⁷

Civilized, rationally educated people expect and prefer to have problems described and analysed sequentially. They try to follow your argument to a conclusion. They expect the conclusion to be your point of view, illustrative of your values. In contrast to the method of exposition is the method of exploration. This begins by the admission of ignorance and difficulties. Such statement will tend to be tentative groping. The blind man's cane picks up the relation of things in his environment by the quality of resonance. His tapping tells him what objects are adjacent to his stick. If his stick were connected to any of these objects, he would be helpless so far as orientation was concerned. This is always the plight of the logical method. It is useless for exploration. Its very strength makes it irrelevant. "Proof" of sanity is available only to those discharged from mental institutions.²⁸

In writing to newspapers I am expounding my thoughts. In my books I am not expounding or making exposition -- I am making exploration. When you are exploring, you don't know what's coming next. It's like climbing up a rockface. You reach for every ledge, foothold, or cranny that you can grab as you go. You make your way over the terrain as best you can. You can't possibly have a point of view in these conditions. That is the way I write.²⁹

²⁵ibid., p. 276.

²⁶ibid., p. 45.

²⁷ibid., p. 31.

²⁸Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout. (Don Mills, Ontario: Longman Canada, 1972), p. 8.

²⁹David O'Neil, "Marshall Mc Luhan An Interview?" The Mike 22 (February, 1971) :3.

McLuhan sees our cultural need today to be similar to "the scientist who seeks to become aware of the bias of the instruments of research in order to correct the bias."³⁰

As an investigator, I have no fixed point of view no commitment to any theory - my own or anyone else's. As a matter of fact, I am completely ready to junk any statement I've ever made if events don't bare me out, or if I discover it isn't contributing to an understanding of the problem.³¹

I have no devotion to any of my probes as if they were sacred opinions. I have no proprietary interest in my ideas and no pride of authorship as such.³²

McLuhan's objective, to achieve open field perception and "avoid the witless repetitive response to the unperceived"³³, leads him to say that he has no philosophy, no concepts only percepts.³⁴

With the technique of suspended judgment comes a particular view of the future development of mankind:

We can now live, not just amphibiously in divided and distinguished worlds, but pluralistically in many worlds and cultures simultaneously. We are no more committed to one culture-to a single ratio among the human senses - any more than to one book or to one language or to one technology... Compartmentalizing of human potential by single cultures

³⁰ Marshall Mc Luhan, The Gutenberg Galaxy: The Making of Typographic Man, (Toronto: University of Toronto Press, 1962.), p. 31.

³¹ Eric Norden, "Playboy Interview: Marshall Mc Luhan," Playboy 16:3 (March, 1969) :54

³² Marshall McLuhan, "Marshall McLuhan and Gerald E. Stearn: A Dialogue," McLuhan: Hot and Cool, ed. Gerald E. Stearn (New York: Dial Press, 1967), p.285.

³³ Marshall McLuhan and Quentin Fiore, The Medium Is the Massage: An Inventory of Effects, (New York: Bantam Books, 1968), p. 10.

³⁴ "I have no philosophy and no concepts, I have only percepts." quoted in Kamala Gosh Bhatia, "An Explication of the Perceptions of Marshall McLuhan as indicated in His Major Works with a View to Discovering His Underlying Philosophy and Its Educational and Sociological Implications," (Unpublished Ph.D Dissertation, State University of New York at Buffalo), p. iv.

will soon be as absurd as specialism in subject or discipline has become.³⁵

McLuhan's belief in "diagnosis before therapy" and the use of the technique of suspended judgment, explains why he has not played an advocacy role.

3. Interface.

In analogy, like a method of analysis in chemistry, the method of interface is based on the notion that there are no connections in the material universe, the only physical bond in Nature is the resonating interval or "interface."³⁶ The method of interface "refers to the interaction of substances in a kind of mutual irritation. In art and poetry this is precisely the process of symbolism with its paratactic procedure of juxtaposing without connectives. It is the natural form of dialogue or conversation rather than written discourse."³⁷

McLuhan believes that by directing perception onto the interfaces of environmental processes, the gaps, as areas of friction and ferment, become prime sources of discovery.³⁸ The notion that the vacuum is all potent because all containing is a zen posture³⁹ of mind which stresses the involvement of the readers by forcing them to supply all the relations.⁴⁰

³⁵Marshall Mc Luhan, The Gutenberg Galaxy: The Making of Typographic Man. (Toronto: University of Toronto Press, 1962.), p. 31.

³⁶Reference to the work of Einstein, Heisenberg and Linus Pauling in Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout. (Don Mills, Ontario: Longman Canada, 1972), p. 86.

³⁷Harold Innis, The Bias of Communication, with an Introduction by Marshall McLuhan, (Toronto: University of Toronto Press, 1964), p. viii

³⁸Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout. (Don Mills, Ontario: Longman Canada, 1972), pp.3-4.

³⁹Marshall Mc Luhan, "The Brain and the Media: The "Western" Hemisphere," Journal of Communications (Autumn 1978) :57-8.

⁴⁰Marshall Mc Luhan, Understanding Media: The Extensions of Man. (New York: McGraw-Hill Book, 1964), p. viii.

The recurring reference of the importance of the gap between a wheel and its axle supports the idea that in an acoustic world "a fact cannot be connected without "seizing up." The interval or gap is necessary to any practical action.

The gap is where the action is.⁴¹

McLuhan contrasts the user of this method to the hurried journalist, the naive classifier, for whom a gap is merely empty:

... the interfaces among the components of any system perpetually create new and unexpected forms that do not match any existing system whatever. It is only for the hurried journalist that the fixed categories of capitalism, Communism, barbarism and civilization are the convenient means of throwing together his daily "copy". The mere demands of speed and repetition require that every writer have a handy supply of familiar labels. Perception of what is actually going on would eliminate such writers from "professional journalism" altogether. The artist, or man of perception, is inevitably the enemy of the conventionally wise.⁴²

They will seek the authors point of view instead of their probing of processes. Such readers will expect value judgments instead of understanding. With medieval dread they abhor vacuums.⁴³

Nature loves vacuums and plays the field while classifiers fill the spaces and spoil the sport.⁴⁴

4. Figure/ground.

For McLuhan figure and ground are not categories, they are tools for describing the parts of any situation in order to discover its structure and properties⁴⁵. This basic strategy in perception has the advantage of avoiding

⁴¹ Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout, (Don Mills, Ontario: Longman Canada, 1972), p. 81.

⁴² *ibid.*, p. 173.

⁴³ *ibid.*, pp. 3-4.

⁴⁴ *ibid.*, pp. 137.

⁴⁵ Marshall McLuhan with Kathryn Hutchon and Eric McLuhan, City As Classroom: Understanding Language and Media, (Agincourt, Ontario: Book Society of Canada, 1977), pp. 4, 31.

controversy about whether a particular thing is good or bad in itself, it also bypasses the limits of the issues of programs and content⁴⁶. Its origin can be traced to Edgar Rubin, a Danish psychologist, who first introduced the terms in 1915.

In McLuhan's writings the dynamics between figure and ground can be described as follows:

Every figure has its hidden ground or environment.⁴⁷ Because of the familiarity of the underlying structure or ground we usually stop paying any conscious attention to it⁴⁸, yet it subliminally shapes our perceptions and provides the conditions for experiencing the figure.⁴⁹

The figure/ground relation is not fixed, but constantly changes as figure and ground create each other⁵⁰. There is no logical connection between figure and ground⁵¹, but as in all resonant structural relationships, since they share a common outline, they are reciprocal. The moment a figure begins to exaggerate itself or to dominate the situation, the equilibrium between it and its ground is destroyed and the other figures might begin to recede and to form a ground for it

⁴⁶ Marshall McLuhan with Kathryn Hutchon and Eric McLuhan, "The Laws of the Media," English Journal, (November 1978) :93.

⁴⁷ Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout, (Don Mills, Ontario: Longman Canada, 1972), pp. 3-4.

⁴⁸ Marshall McLuhan with Kathryn Hutchon and Eric McLuhan, City As Classroom: Understanding Language and Media, (Agincourt, Ontario: Book Society of Canada, 1977), p. 19.

⁴⁹ ibid., p. 14.

⁵⁰ Barrington Nevitt, "Visible and Invisible Bias Via Media," Canadian Journal of Communication 7:3 (Nov. Dec. Jan. Feb., 1980-1) :18.

Marshall McLuhan with Kathryn Hutchon and Eric McLuhan, City As Classroom: Understanding Language and Media, (Agincourt, Ontario: Book Society of Canada, 1977), p. 10.

⁵¹ Marshall McLuhan with Kathryn Hutchon and Eric McLuhan, City As Classroom: Understanding Language and Media, (Agincourt, Ontario: Book Society of Canada, 1977), p. 21.

or it may become a new ground from which emerges new figures⁵². By exaggerating one feature of a situation's ground it can be transformed into a figure, this is the satirist's strategy.⁵³

Concepts tend to isolate figures, while percepts relate figures and grounds as interplay.⁵⁴

In Western culture the sense of sight usually acts as a figure and dominates the other senses that are its hidden ground.

Of course, there are lots of exceptions to situations where sight is figure to other senses: when you're on the telephone, or at a concert, or at a barbecue, for example, other senses become figure. Perhaps hearing runs close second to sight, but, for the most part, all senses but sight are ground. This means that what our other senses tell us about our everyday experiences, we usually suppress to a nearly subconscious level of awareness.⁵⁵

Meaning is a perpetually changing relationship, continuously created in the gap between a figure and its ground.⁵⁶ It exists only in relation to a context or environment. It is something we make in the ongoing encounter we have with the world that is making us.⁵⁷

The artist creates new symbols by deliberately placing familiar objects in unusual environments and establishing new relationships.⁵⁸

⁵²Ibid., p. 10.

⁵³Ibid., p. 19.

⁵⁴Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout. (Don Mills, Ontario: Longman Canada, 1972), p.,123.

⁵⁵Marshall McLuhan with Kathryn Hutchon and Eric McLuhan, City As Classroom: Understanding Language and Media. (Agincourt, Ontario: Book Society of Canada, 1977), p.,25.

⁵⁶Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout. (Don Mills, Ontario: Longman Canada, 1972), p. 95.

⁵⁷Ibid., pp. 3-4.

⁵⁸Barrington Nevitt, "Visible and Invisible Bias Via Media," Canadian Journal of Communication 7:3 (Nov. Dec. Jan. Feb., 1980-1) :18.

Knowledge, old or new, is always a figure that is undergoing perpetual change by "interface" with new environments.⁵⁹

The overwhelming effect of any technology reaches the public by means of the ground, not by the figure, program or content.⁶⁰

One procedure, by way of applying the figure-ground approach, is to take the instance of the motor car and to study the ground of services incidental to its existence as a figure in our world. It should be mentioned that what is referred to in the phrase, "the medium is the message" is not the car, but the complicated ground of services engendered by the car; for example, macadam highways and roads, traffic signals, auto insurance, and the entire world of oil and gasoline, mechanics and parts, and motor car manufacture in general.⁶¹

Today's hidden ground of electric information traveling at the speed of light has transformed the meaning of all figures created in previous environments.⁶²

Most of our training is directed toward keeping clear the distinction between figure and ground, perceiving the ongoing processes of change between them requires a certain amount of 'un-learning.'⁶³ The notion of figure/ground was introduced in Take Today to replace the idea of environment and counter-environment. McLuhan considers the following techniques as particularly useful in applying the figure/ground notion:

a. Double figure/ground

⁵⁹Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout. (Don Mills, Ontario: Longman Canada, 1972), p.86.

⁶⁰Marshall McLuhan with Kathryn Hutchon and Eric McLuhan, "The Laws of the Media," English Journal, (November 1978) :93.

⁶¹Ibid., p. 93.

⁶²Barrington Nevitt, "Visible and Invisible Bias Via Media," Canadian Journal of Communication 7:3 (Nov. Dec. Jan. Feb., 1980-1) :18.

⁶³Marshall McLuhan with Kathryn Hutchon and Eric McLuhan, City As Classroom: Understanding Language and Media. (Agincourt, Ontario: Book Society of Canada, 1977), p. 10.

Consists in replacing a figure's ground by an incongruous ground and creating a shifting figure/ground/figure relationship. This is the basic structure of much satire and metaphor, it is one of the most potent tools for creating insight and facilitating analysis.⁶⁴

b. Omission

One of the ways to study the effects of a particular product of technology on a culture is to imagine what the same culture would be like without it, this draws our attention to its hidden ground.⁶⁵

c. Reversal

One sure way to perceive the structure of any situation easily is to reverse its figure/ground relationship. If you do this even the most hidden grounds and relationships will come to light.⁶⁶

McLuhan associates figure/ground to the way the right hemisphere of the brain might seem to function.

The right hemisphere is the world of figure on the ground - what is called Gestalt, the wheel is called Gestalt, the wheel and the axle. That which made the wheel and the axle possible is the interval between them. The dominant factor is interval, not connection. So the wheel and the axle is a very powerful image of the Gestalt world of figure and ground. The rub. In dialogue between people there is figure-ground (no separation). There is encounter. There is interfacing. There is not necessarily logic in dialogue but there is involvement, there is experience.⁶⁷

⁶⁴Ibid., p. 49.

⁶⁵Ibid., p. 120.

⁶⁶Marshall McLuhan with Kathryn Hutchon and Eric McLuhan, City As Classroom: Understanding Language and Media. (Agincourt, Ontario: Book Society of Canada, 1977), p. 20.

⁶⁷Carl Scharfe, "Marshall McLuhan and Barrington Nevitt with students and guests: A Fireside Chat," The Innis Herald 10:4 (March 10 1977) :5-6.

5. Cliche and archetype

McLuhan's concern with the development of a theory of social consciousness can be related to the tradition of Jung and Freud. He distinguishes two types of awarenesses: cliches and archetypes.

Initially a cliche is a breakthrough into new experience⁶⁸, with time it becomes an outworn commonplace⁶⁹, an invisible and unscrutinized assumption⁷⁰, to be used as a probe. While not necessarily verbal, a cliche acts as a release of emotion and also performs other functions⁷¹.

An archetype is a retrieved awareness, a notion borrowed from Jung :

The primordial image or archetype is a figure, whether it be daemon, man or process, that repeats itself in the course of history wherever creative fantasy is fully manifested. Essentially, therefore, it is a mythological figure. If we subject these images to a closer investigation, we discover them to be the formulated resultants of countless typical experiences of our ancestors. They are, as it were the psychic residua of numberless experiences of the same type.⁷²

In contrast to Jung, McLuhan considers archetypes as human artifacts produced by much repetition.⁷³ Whereas Jung describes them as belonging to "the realm of activities of the instincts and in that they represent inherited forms of psychic behavior".⁷⁴ McLuhan situates the cohesiveness of archetypes at

⁶⁸Marshall Mc Luhan and Wilfred Watson, From Cliche to Archetype, (New York: The Viking Press, 1970), p. 58.

⁶⁹ibid., p. 54

⁷⁰Marshall Mc Luhan and Harley Parker, Through the Vanishing Point: Space in Poetry and Painting, (World Perspectives Series, edited by Ruth Nafda Anshen, Vol. 37. New York: Harper and Row, 1968), p. 3.

⁷¹Marshall Mc Luhan and Wilfred Watson, From Cliche to Archetype, (New York: The Viking Press, 1970), p. 54.

⁷²ibid., p. 19.

⁷³ibid., p. 118.

⁷⁴ibid., p. 23.

the source of the idea of the "rag and bone" shop or archetypal unconscious in Freud, Jung and others:

When we set out to retrieve one archetype we unconsciously retrieve others; and this retrieval recurs in infinite regress. In fact, whenever we "quote" one consciousness we also quote the archetypes we exclude.⁷⁵

McLuhan's expression from cliché to archetype describes the process by which a cliché envelops an older cliché and turns it into an archetype (or art form).⁷⁶

McLuhan situates social consciousness in contrast to private consciousness as a process evolving around the following symbolic activities⁷⁷:

a. Probing.

The creation of new awareness (refer to the section on probes)

b. Scrapping.

Once they reach a certain stage of use, clichés become obsolete and "are cast aside to become, "the rag and bone shop of the heart" that is, the world of archetype".⁷⁸ The cycle starts anew with the probing for a new cliché to be or the retrieval of an archetype.⁷⁹

When the bicycle ceases to be a vehicle, it becomes a toy, witness the new Mustang bikes as perfect example of "pastimes are past times".⁸⁰

⁷⁵ibid., pp. 21-2

⁷⁶ibid., p. 118.

⁷⁷Marshall Mc Luhan and Wilfred Watson, From Cliche to Archetype. (New York: The Viking Press, 1970), p. 152

⁷⁸ibid., p.,127.

⁷⁹ibid., p.,50.

⁸⁰ibid., p.,50

c. Retrieving.

The recall of old forms of awareness, archetypes, from the vast residues of our collective past.

Totally immersed in this new information environment, we desperately try to find our bearings in the experience of some previous age. We translate the new and unfamiliar into old and familiar metaphors (Greek metapherein: to carry across) that both help and hinder our thinking.⁸¹

In Oriental or primitive societies the cliché/archetype process seems to dominate the whole of society, McLuhan quotes Eliade as reference:

What does living mean for a man who belongs to a traditional culture? Above all it means living in accordance with extrahuman models, in conformity with archetypes. Hence it means living at the heart of the real since... there is nothing truly real except the archetypes. Living in conformity with the archetypes amounted to respecting the "law", since the law was only a primordial hierophany, the revelation in illo tempore of the norms of existence, a disclosure by a divinity or a mystical being. And if, through the repetition of paradigmatic gestures and by means of periodic ceremonies, archaic man succeeded, as we have seen, in annulling time, he none the less lived in harmony with the cosmic rhythms; we could even say that he entered into these rhythms (we need only remember how "real" night and day are to him, and the seasons, the cycles of moon, the solstices).⁸²

Western society in McLuhan's view seems to be returning to a generalized form of these processes:

In the electric age the mechanical world automatically becomes an art form, an art language of old clichés being transformed into new archetypes. The contemporary world experiences a transformation of the old machine and its consumer products into transcended images of art and archeology. The mechanical age had pushed man into the machine mold. The man who had been subdued into a mechanism by time/motion

⁸¹Barrington Nevitt, "Visible and Invisible Bias Via Media," Canadian Journal of Communication 7:3 (Nov. Dec. Jan. Feb., 1980-1) :18.

⁸²Marshall McLuhan and Wilfred Watson, From Cliche to Archetype. (New York: The Viking Press, 1970), pp. 120-1.

studies in the early twentieth century now rebels and flips into his integral primitive state of space-time once more ⁸³

Christian indifference to the pagan rituals of stability and renewal, as well as Christian contempt for the world as a wreck or middenheap, tended to reverse the pattern of cliché and archetype that characterized prehistoric man. This reversal stands out clearly today when we experience a return to the prehistoric attitudes to both cliché and archetype. Our technological breakthroughs are on a superior human scale, re-creating total new environments, greatly enlarging the Emperor's wardrobe, and making possible a reprogramming of the totality of existence on the planet. It is these developments that have restored cliché-as-probe and put invention in a position of dominance over archetype. ⁸⁴

6. Radial logic.

This approach can best be explained by comparing Western and Oriental manners of expression, for this McLuhan quotes Joseph Barrell, Shelley and the thought of his time:

The Greek way, which is Shelley's way and on the whole the Western way, is to take the reader, or listener, by the hand and lead him step by step from the old position to the new position. It seeks to explain and to demonstrate. Its logic might be described as linear and transitional... The Oriental way is different. Its logic might be described not as linear but as radial. The recurring statements do not progress, but return to their center as the spokes of the wheel to their hub. ⁸⁵

The Hebrew and Eastern mode of thought tackles problem and resolution at the outset of a discussion, in a way typical of oral societies in general. The entire message is then traced and retraced, again and again, on the rounds of a concentric spiral with seeming redundancy. One can stop anywhere after the first few sentences and have the full message, if one is prepared to "dig" it... It is a redundant form inevitable to the electric age, in which the concentric pattern is imposed by the instant quality, and overlay in depth of electric speed. But the concentric with its endless intersection of planes is necessary for insight. In fact it is

⁸³Marshall McLuhan, "Inside on the Outside, or the Spaced-Out American," Journal of Communication, (Autumn, 1976) :52.

⁸⁴Marshall Mc Luhan and Wilfred Watson, From Cliche to Archetype. (New York: The Viking Press, 1970), p.121.

⁸⁵Marshall McLuhan, The Interior Landscape: The Literary Criticism of Marshall McLuhan compiled by Eugene MacNarama, (New York: McGraw-Hill, 1969), p.117.

the technique of insight, and as such is necessary for media study, since no medium has its meaning or existence alone, but only in constant interplay with other media.⁸⁶

When I'm using a probe, I drill. You repeat naturally when you're drilling. But the levels are changing all the time.⁸⁷

The visual reassurance of the traditional Western approach is contrasted to what most people would consider the inhuman and austere demands of unflinching and unremitting intensity of contemplation and participation of the oral approach. This partially accounts for people sometimes having difficulty in reading and formulating their thoughts about McLuhan's work. McLuhan excites and provokes, he is not often reassuring or obviously logical.

7. Direct comparison and examination

Another kind of experiment involves comparing two things, or equivalent parts of two things: for example, you might compare two cake mixes or the engines in two cars. And sometimes you can find out more by looking at one thing in two ways than by looking at two things in one way.⁸⁸

8. Paradox

Paradox was the means by which early theological science made its discoveries. Paradox is the posture of the mind when, like a boxer balanced on two feet, it is feinting for an opening. Scientific discovery is

⁸⁶Marshall McLuhan, Understanding Media: The Extensions of Man. (New York: McGraw-Hill Book, 1964), p.39.

⁸⁷Marshall McLuhan, "Marshall McLuhan and Gerald E. Stearn: A Dialogue," McLuhan: Hot and Cool, ed. Gerald E. Stearn (New York: Dial Press, 1967), p. 53.

⁸⁸Marshall McLuhan with Kathryn Hutchon and Eric McLuhan, City As Classroom: Understanding Language and Media. (Agin-court, Ontario: Book Society of Canada, 1977), p. 66.

always attended by paradox. Newtonian science, with its "circumspect" experimental method, assumes that God is both rational and arbitrary.⁸⁹

A paradox is the result of a simultaneous grasp of several aspects of the same situation like the chiropondist who said to a colleague: "I've taken the corns off half the crowned heads of Europe." To reduce the paradoxes of daily perception, and of contemporary business and politics, to a rational point of view, is a nineteenth century formula for wits' end. A point of view is fixed and single and knows nothing of the fun and play necessary for truth and sanity.⁹⁰

9. Probes

...to probe is to cross boundaries of many kinds; to discover the patterns of new environments requires a rigorous study and inventory of sensuous effects.⁹¹

Probes are instruments of investigation, crowbars, that pry open situations of ignorance and gain insights into a better understanding of the environment. McLuhan identified facts and emotions as useful probes in the process of discovery:

a) Facts.

...my purpose is to employ facts as tentative probes, as means of insight, of pattern recognition, rather than use them in the traditional and sterile sense of classified data categories, containers.⁹²

McLuhan has been masterful in blending and popularizing much of the source material he has used from his academic background in English literature (ex: Joyce, Pound,...) and in other fields (ex. Gideon, Innis, Bergson ...). Some of

⁸⁹Marshall Mc Luhan and Wilfred Watson, From Cliche to Archetype, (New York: The Viking Press, 1970), p. 166.

⁹⁰Marshall McLuhan, "McLuhan's open earlids vs Barkway's bite," Financial Times (September 18, 1972), :11.

⁹¹Marshall McLuhan, "The Emperor's Old Clothes," cited in The Man-Made Object, ed. by Gyorgy Kepes (new York: George Braziller, 1966), p. 90.

⁹²Eric Norden, "Playboy Interview: Marshall Mc Luhan," Playboy 16:3 (March, 1969) :54

the originality of McLuhan's ideas originate from the context in which he uses much of his quoted material, these juxtapositions bring forth many new insights. Concepts are used creatively to yield new percepts. The quoted material he uses while not always well known supports his working hypotheses.

b) Emotions.

All varieties of emotion can be considered as probes⁹³. With the use of cartoons, graphics, stories and other previously mentioned ploys McLuhan uses humor and pain to demonstrate his ideas and involve the reader in his books. Emotions because they are shared immediate experiences⁹⁴ are extremely fertile in recognizing changing perceptions and new patterns and processes at work in the environment.⁹⁵

As a shared experience the joke tends to bring the individual towards the group⁹⁶. It acts as a catharsis for grievances or irritations, when too severe though, they stop functioning.⁹⁷

Characters (ex: Chaplin, David Letterman etc...) tend toward satire, comedy, and the play of manners, they revive the tradition of the clown⁹⁸:

In rigid hierarchical societies only this licenced character dare exercise the probe of free speech. The clown is indispensable as audience-tester

⁹³Marshall Mc Luhan and Wilfred Watson, From Cliche to Archetype, (New York: The Viking Press, 1970), p. 73.

⁹⁴Marshall McLuhan and Quentin Fiore, The Medium Is the Massage: An Inventory of Effects, (New York: Bantam Books, 1968), p. 92.

⁹⁵Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout (Don Mills, Ontario: Longman Canada, 1972), p.13.

⁹⁶Marshall Mc Luhan and Wilfred Watson, From Cliche to Archetype, (New York: The Viking Press, 1970), p. 178.

⁹⁷ibid., pp. 132-3.

⁹⁸Marshall McLuhan, The Interior Landscape: The Literary Criticism of Marshall McLuhan compiled by Eugene MacNarama, (New York: McGraw-Hill, 1969), p. 188.

and as checker on the moods of the ruling figure. Again, without his clown, the emperor has no means of contact with the public.⁹⁹

With the use of puns, gestures and other strategies the comedian frees words and ideas from their conventional context and thus reveals their substantial character¹⁰⁰. By playing in the gap, at the crossroads of meaning, the clown acts as a probe :

...the clown attacks power. He tells us where the new boundaries are on the changing frontiers of the Establishment. The clown is merciless, without conscience, yet he gets our sympathy because he is a scapegoat.¹⁰¹

The importance of humor can be seen throughout McLuhan's works where the use of puns, cartoons and other satirical strategies exert a strong presence. His son, Dr. Eric McLuhan, in private conversation often referred to his father as a satirist. The context of humor as revelation is a good example of McLuhan's notion of the probe.

We think of humor as a mark of sanity for a good reason: in fun and play we recover the integral person, who in the workday world or in professional life can use only a small sector of his being.¹⁰²

Other emotions can also be used as probes. Pain as an indicator of environmental processes that alienate the individual can yield important insights :

Violent technical innovation creates alienation and the pain of isolation in any age. Sudden shifts of environmental stress - new sounds, greater mobility, new sensory involvement of touch as with TV - these are

⁹⁹Marshall Mc Luhan and Wilfred Watson, From Cliche to Archetype. (New York: The Viking Press, 1970), p. 133.

¹⁰⁰Marshall McLuhan, "James Joyce: Trivial and Quadrival." Thought, XXVIII (Summer, 1953) :93.

¹⁰¹Marshall McLuhan, Culture is our Business, (New York: Ballantine Books, 1970), p. 288.

¹⁰²Marshall Mc Luhan, Understanding Media: The Extensions of Man. (New York: McGraw-Hill Book, 1964), p. 207.

experiences of extreme but unlocalizable pain for a population that has grown up in earlier spaces.¹⁰³

10. The organization and sharing of ignorance.

The organization and sharing of ignorance are the first steps towards knowledge. Each new medium opens up vast areas of ignorance to be explored¹⁰⁴. Whereas the organization of knowledge stifles new approaches by the inundation of irrelevant data¹⁰⁵, the organization of ignorance yields many insights by imposing new percepts and freeing us from our own programs of thought.

The importance of sharing ignorance comes from McLuhan's belief that the main difficulty in resolving most problems comes from not asking the right questions, which is basically a perceptual obstacle. He supports these ideas by quoting Robert Oppenheimer :

There are kids playing in the street who could solve some of my toughest problems because they have sensory modes which I lost long ago.¹⁰⁶

What are very complex problems for some can appear very simple to others. McLuhan elaborates on this idea by suggesting the use of the media to involve mass audiences in the solution of major problems as illustrated in the following quote:

New unsolved problems from widely selected areas of the community of knowledge, having first been shown to the mass audience, could reach

¹⁰³Marshall Mc Luhan and Harley Parker, Through the Vanishing Point: Space in Poetry and Painting. (World Perspectives Series, edited by Ruth Nanda Anshen, Vol. 37. New York: Harper and Row, 1968), pp. 235-6.

¹⁰⁴Marshall McLuhan, "At the Flip Point of Time - The Point of More Return," Journal of Communication. (Autumn 1975) : 102.

¹⁰⁵ibid., p. 105.

¹⁰⁶ibid., p. 105.

much smaller publics by video cassettes. From smaller groups, the solutions to problems could move back to the searchers.¹⁰⁷

11. The importance of dialogue.

Asking the right question, finding the desired effect, etc... are all questions of insight and are based on percepts. It is through the process of dialogue, contrary to the process of argument, that these insights spring out.

The greatest inventions, the most valuable ideas can always be stated in a few words. The reason for this is basic. An idea is an oral thing because it is based on instant awareness of a total situation. Oral means "total" primarily, "spoken" accidentally.

American research labs and business spend billions on research yet notoriously produce no ideas or inventions at all. They do not permit themselves the oral totality of approach necessary to "intuition". Instead, they take ideas from solitary persons who exist outside all organizations, and give lineal, written processing or application to these. Technology is explicitness. Invention or creation is implicitness. Technology is written explicitation. Intuition and invention are oral, total, implicit, inclusive, simultaneous.¹⁰⁸

Most people explore things they already know. I can't be bothered to go back over things I already know. I can't even read what I have already written. It's too dull. I am an explorer, not an explainer.¹⁰⁹

12. Analogical method of analysis.

McLuhan believes that "the order of learning and insight is not the order of rational concatenation but of analogical perception."¹¹⁰

¹⁰⁷Ibid., p. 106.

¹⁰⁸Marshall McLuhan, Verbi-voco-visual Explorations, (New York: Something Else Press, 1967), p. 1.

¹⁰⁹David O'Neil, "Marshall Mc Luhan An Interview?" The Mike 22 (February, 1971) :3.

¹¹⁰Marshall McLuhan, The Interior Landscape: The Literary Criticism of Marshall McLuhan compiled by Eugene MacNarama, (New York: McGraw-Hill, 1969), p. 132.

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 consciousness itself. This analogical awareness is constituted of a perpetual play of ratios : A is to B what C is to D, which is to say that the ratio between A and B is proportioned to the ratio between C and D, there being a ratio between these ratios as well. This lively awareness of the most exquisite delicacy depends upon there being no connection whatever between the components.¹¹¹

McLuhan revives the centuries old tradition (Aristotle) of analogical analysis by proposing a perceptual probe to analyze the dynamics that govern human artifacts. The "Law of the Situation" is specifically adapted to dealing with the multiconsciousness of the electronic environment.¹¹² It presents itself as four questions (tetrad) to be developed about a specific situation¹¹³ :

a) What does this artifact amplify or enhance?

Man devises a new artifact or new word, in order to enhance some action or to expand awareness.¹¹⁴

Examples of this are: writing in the phonetic alphabet enhances private authorship and the individual ego¹¹⁵, money increases transactions, satellites enlarge the planet.¹¹⁶

¹¹¹ Marshall Mc Luhan and Harley Parker, Through the Vanishing Point: Space in Poetry and Painting, (World Perspectives Series, edited by Ruth Nanda Anshen, Vol. 37. New York: Harper and Row, 1968), p. 240.

¹¹² James Finley Striegel, "Marshall Mc Luhan on Media" (Ph.D. dissertation, Union Graduate School, Ohio, 1978), p.108.

¹¹³ Barrington Nevitt, "Visible and Invisible Bias Via Media," Canadian Journal of Communication 7:3 (Nov. Dec. Jan. Feb., 1980-1) :23.

¹¹⁴ Marshall McLuhan with Kathryn Hutcheon and Eric McLuhan, City As Classroom: Understanding Language and Media, (Agincourt, Ontario: Book Society of Canada, 1977), p. 166.

¹¹⁵ Barrington Nevitt, "Visible and Invisible Bias Via Media," Canadian Journal of Communication 7:3 (Nov. Dec. Jan. Feb., 1980-1) :23.

¹¹⁶ Henry Overduin, "McLuhan: 'Laws' because they represent an ordering of thought," The Gazette, (December, 20, 1975) :8.

b) What does this artifact replace or obsolesce?

Whenever one environment of services is transcended or enveloped by another, that complex environment of human transactions and services is cast into the nostalgic role of "art" form. We have recently seen TV envelop the movie world and turn the old entertainment into a dignified art. Gutenberg put a new service around the old oral and manuscript culture, turning manuscripts into collector's items and creating new antiquarian cults that persist today.

Gutenberg obsolesced handwriting; but obsolescence is not extinction. Quite the contrary. There is more handwritten communication now than ever before. The obsolete, however, is inevitably a sub-culture, never the dominant form of human transaction or interface. The obsolete continues as compost, the matrix of new growth and innovation.¹¹⁷

The following are some of the examples given: the writing in the phonetic alphabet reduces aural-oral memory¹¹⁸, money obsolesces barter, satellites obsolesce nature.¹¹⁹

c) What does this artifact revive or retrieve of similar nature, previously obsolesced?¹²⁰

In order to think, you have to forget most of what you are experiencing in order to relate it to earlier things that you knew, otherwise you can't infer anything from what you are seeing. So, at the speed of most information, on TV, radio, telephone and so on - at that speed the need to forget has become a form of nostalgia.¹²¹

¹¹⁷Marshall McLuhan, "McLuhan's open earlids vs Barkway's bite," Financial Times (September 18, 1972) :11.

¹¹⁸Barrington Nevitt, "Visible and Invisible Bias Via Media," Canadian Journal of Communication 7:3 (Nov. Dec. Jan. Feb., 1980-1) :23.

¹¹⁹Henry Overduin, "McLuhan: 'Laws' because they represent an ordering of thought," The Gazette (December, 20, 1975) :8.

¹²⁰ibid., p. 23.

¹²¹"Interview With Professor Marshall Mc Luhan," Macleans (March 7, 1977) :6.

The bicycle is an example that the dominant technologies of a past time become the pastimes of a later age.¹²² The following are some of the examples given: writing in the phonetic alphabet retrieves and revives secret inner life¹²³, money retrieves potlach (conspicuous consumption), satellites retrieve ecology.¹²⁴

d) What does it flip into when pushed to its maximum potential?

At electric speeds every type of human enterprise is pushed to its limits. At this point the return becomes a transformation or metamorphosis. We have already seen how war becomes education. No matter whether it be exposure of backward people to advanced weaponry and organization or whether it be the competitive endeavors of "advanced" peoples to overreach one another in weaponry, war in both instances hastens the spread of knowledge.¹²⁵

The following are some of the examples given to illustrate this part of the tetrad: writing in the phonetic alphabet flips into history as the corporate record of private life¹²⁶, money reverses or flips into credit¹²⁷, with satellites nature becomes an art form, retrieval of the globe as theater, the population goes from spectator to actor¹²⁸.

¹²²Marshall McLuhan and Wilfred Watson, From Cliche to Archetype, (New York: The Viking Press, 1970), pp.50, 99.

¹²³Barrington Nevitt, "Visible and Invisible Bias Via Media," Canadian Journal of Communication 7:3 (Nov. Dec. Jan. Feb., 1980-1) :23.

¹²⁴Henry Overduin, "McLuhan: 'Laws' because they represent an ordering of thought," The Gazette, (December, 20, 1975) :8.

¹²⁵Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout, (Don Mills, Ontario: Longman Canada, 1972), p. 176.

¹²⁶Barrington Nevitt, "Visible and Invisible Bias Via Media," Canadian Journal of Communication 7:3 (Nov. Dec. Jan. Feb., 1980-1) :23.

¹²⁷Henry Overduin, "McLuhan: 'Laws' because they represent an ordering of thought," The Gazette, (December, 20, 1975) :8.

¹²⁸ibid., p. 8.

Nothing has its meaning alone. Nothing is intelligible in isolation. Perception as such is a proportion among proportions apprehended in our sensory life. There is meaning in the sense ratios themselves.¹²⁹

B. The mosaic form

Mallarmé and Joyce refused to be distracted by the fashion-conscious sirens of content and subject matter and proceeded straight to the utilization of the universal forms of the artistic process itself... In art this brought about the transformation of the artist from "bohemian" to culture "hero".¹³⁰

McLuhan's experimentation in finding a writing style that would be a suitable formal demonstrative embodiment for his theoretical preoccupations ("the proof is in the pudding") led him to develop the mosaic approach. The main difficulty being that the print medium with its characteristics of noninvolvement and visual detachment was the antithesis of McLuhan's ideas of total participation of the senses by the use of auditory/tactile structures. This problem forced McLuhan to experiment with a writing style that would in some ways mimic other media. Besides the emphasis on layout, typography, montage and other visual means of transforming the book in a more resonant medium as can be seen in his collaborations with Harley Parker and Quentin Fiore (Counterblast, The Medium is the Message, War and Peace in the Global Village), the key influences to the solution came from Mallarmé's aesthetic analysis of the newspaper¹³¹, Joyce's plastic feeling for words as things in a ballet, a pantomime, in a static landscape where many aspects of community

¹²⁹ Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout. (Don Mills, Ontario: Longman Canada, 1972), p.137

¹³⁰ Marshall McLuhan, The Mechanical Bride: Folklore of Industrial Man. (New York: Vanguard Press, 1951), p. 75.

¹³¹ Marshall McLuhan, The Interior Landscape: The Literary Criticism of Marshall McLuhan compiled by Eugene MacNarama, (New York: McGraw-Hill, 1969), p. 158.

life could be perceived as co-existing¹³² and Eisenstein's theory of film montage.¹³³

The mosaic approach is not only "much easier" in the study of the simultaneous which is the auditory field; it is the only relevant approach. For the "two-dimensional" mosaic or painting is the mode in which there is muting of the visual as such, in order that there may be maximal interplay among all the senses. Such was the painterly strategy "since Cézanne," to paint as if you held, rather than as if you saw, objects.¹³⁴

The mosaic can be seen as dancing can, but is not structured visually; nor is it an extension of the visual power. For the mosaic is not uniform, continuous, or repetitive. It is discontinuous, skew, and nonlineal, like the tactual image. To the sense of touch, all things are sudden, counter, original, spare, strange... The nonvisual mosaic structures of modern art, like those of modern physics and electric-information patterns, permit little detachment. The mosaic form of the TV image demands participation and involvement in depth of the whole being, as does the sense of touch.¹³⁵

The mosaic approach resembles the newspaper format where many different fragments are juxtaposed and at the same time united by the dateline of the page. By creating a simultaneous field where different ideas can interact the author avoids the single point of view with its linear order and monotony¹³⁶. This approach allows one to present the discontinuous variety and incongruity of corporate life events and lets the reader make sense out of it.¹³⁷ The unity of the work comes from the reader's insights. The reader becomes co-creator and co-producer of the work.

¹³²Ibid., pp.20-1,158.

¹³³Ibid., pp.20-1

¹³⁴Marshall Mc Luhan, The Gutenberg Galaxy: The Making of Typographic Man. (Toronto: University of Toronto Press, 1962.), p. 42.

¹³⁵Marshall Mc Luhan, Understanding Media: The Extensions of Man. (New York: McGraw-Hill Book, 1964), p. 291.

¹³⁶Ibid., pp.185-6.

¹³⁷Marshall McLuhan, "Notes on Burroughs" The Nation, CIC (December 28, 1964) : 517.

The importance of the technique of discontinuous juxtaposition in McLuhan's work is associated with the appearance of the notion of discontinuity in the 1900. In science the notion of continuity in matter was changed by Max Planck and quantum mechanics, in medicine, Freud restored the mythic and discontinuous world of dreams, in fine arts, it reappeared in modern art. Discontinuity in art existed in oral societies and had also existed at other moments, McLuhan identifies the following examples¹³⁸:

The art of Fielding, like Scott and Dickens, is strictly "picturesque" in achieving social inclusiveness by means of discontinuous perspective. Social panoramas, if they are to include more than one level of society, must exploit techniques of juxtaposition or discontinuity... For Gothic architecture, sculpture, and painting achieved their peculiar encyclopedic inclusiveness by means of the same discontinuous juxtaposition that were reintroduced in the later eighteenth century (by the picturesque poets and artists)¹³⁹

The 20th century discoveries marked the beginning of the electronic age, connections were being pulled out, visually connected, homogeneous and static space and time was dissolving and the idea of a simultaneous world reappeared. People have left the age of the continuum¹⁴⁰. The experience of that break was and still is traumatic, since it undermines the fundamental basis of our culture:

... visual space was strong enough in the early period of Greek literacy to create the cult of representational art, what E. H. Gombrich in *Art and Illusion* calls the art of "matching" and of "realism" as opposed to the art of "making" which demands a large degree of participation from the audience via iconic and sculptural form.

The quality of matching the inner and outer had been the criterion of "truth" in Aristotle and Aquinas. As the visual component intensified in the

¹³⁸ Marshall McLuhan, "Inside on the Outside, or the Spaced-Out American," *Journal of Communication*, (Autumn, 1976) :52.

¹³⁹ Marshall McLuhan, *The Interior Landscape: The Literary Criticism of Marshall McLuhan* compiled by Eugene MacNarama, (New York: McGraw-Hill, 1969), p. 159.

¹⁴⁰ Marshall Mc Luhan, "Education in the Electronic Age," *Interchange* 1 (1970) :2.

later Middle Ages, leading to the extreme forms of lineality of Gutenberg and typography, there was an irresistible drive toward private perspective in the arts and in literature.¹⁴¹

But to a culture in an extreme reach of typographic conditioning, the juxtaposition must be one of uniform and connected characters and qualities. There must be no leaps from the unique space of the kitten or the boot. If such objects appear, they must be leveled off by some narrative, or be "contained" in some uniform pictorial space. All that Salvador Dali had to do to create a furor was to allow the chest of drawers or the grand piano to exist in its own space against some Sahara or Alpine backdrop. Merely by releasing objects from the uniform continuous space of typography we got modern art and poetry.¹⁴²

These changes led to the demise of some of our most respected conventions, narrative continuity yielded to thematic variations, perspective and representational art were put aside.

This situates the origin and context of these techniques, what is important to mention is McLuhan's aim in using them to dislocate the readers' mind into awareness by forcing them to "make" sense.

Individual consciousness is achieved by strategic ignorance and suppression. Man's right to his own ignorance might be said to be his principal means of private identity.¹⁴³

The following techniques are aimed at subliminally provoking the reader into a new posture of mind. In the context of this thesis, they are important because they reveal the principles that guide McLuhan's artistic expression and use of the media.

1. Symbols.

¹⁴¹ Marshall McLuhan, "Extracts from statements", Place and Function of Art in Contemporary Life: Report of an International Symposium organized by Unesco, (September, 1976) :18-9.

¹⁴² Marshall Mc Luhan, Understanding Media: The Extensions of Man, (New York: McGraw-Hill Book, 1964), p.253.

¹⁴³ Marshall Mc Luhan and Wilfred Watson, From Cliche to Archetype, (New York: The Viking Press, 1970), p. 63.

The original meaning of symbol is the relation or juxtaposition of two things.

Originally, parties to a contract broke a stick and each took a half. Upon completion of the relationship the parties juxtaposed the two sticks, creating the "symbol". It is from *symballein*, Greek for "throwing together"... Things in isolation are not symbols. ¹⁴⁴

Because symbols are associated with emotions they play an important role in organizing affect¹⁴⁵. In art symbolism stands for the breaking of connections. The use of symbolic art techniques to catch the reader's attention is widespread in McLuhan's writings.

2. Metaphors.

Metaphors act as media in transmitting and transforming one form of experience into another.¹⁴⁶

Metaphor is analogy of inequalities, an exact juxtaposing in a state of tension of two situations and requiring high intelligence to bring it off. Each situation usually included a great multiplicity and diversity of existence... an attempt to reduce a metaphor situation to some single view or proposition is the rationalist short-circuit which long ago destroyed the charge and intellectual excitement of poetry for most educated people.¹⁴⁷

From the "Book of Nature" to the "quantum leap", dominant technologies that act as communication media have always been a rich source of metaphors, capturing the preoccupations of each period.¹⁴⁸

¹⁴⁴ *ibid.*, p. 36.

¹⁴⁵ A.R. Luria, The Nature of Human Conflicts, or Emotion, Conflict and Will, translated and edited by W. Horsley Gantt (New York: Liverlight, 1932), pp. 422-3

¹⁴⁶ Marshall McLuhan, Understanding Media: The Extensions of Man, (New York: McGraw-Hill Book, 1964), p. 66.

¹⁴⁷ Marshall McLuhan, "Mr. Eliot's Historical Decorum" Renascence, II (Autumn, 1949) :9-15.

¹⁴⁸ Barrington Nevitt, "Visible and Invisible Bias Via Media," Canadian Journal of Communication 7:3 (Nov. Dec. Jan. Feb., 1980-1) :17-8.

3. Aphorisms

McLuhan's choice of technique is also determined by pedagogical concerns, he quotes from Francis Bacon's *The Advancement of Learning* on the scholastic advantages of the technique of aphorisms:

But the writing in aphorisms hath many excellent virtues, whereto the writing in Method doth not approach. For first, it trieth the writer, whether he be superficial or solid; for Aphorisms, except they should be ridiculous, cannot be made but of the pith and heart of sciences; for discourse of illustration is cut off: recitals of examples are cut off; discourse of connection and order is cut off; descriptions of practice are cut off. So there remaineth nothing to fill the Aphorisms but some good quantity of observation: and therefore no man can suffice, nor in reason will attempt to write Aphorisms, but he that is sound and grounded. But in Methods,

Tantum series juncturaque pollet,

Tantum de medio sumptis accedit honoris; as man shall make a great shew of an art, which, if it were disjointed, would come to little. Secondly, methods are more fit to win consent or belief, but less fit to point to action; for they carry a kind of demonstration in orb or circle, one part illuminating another, and therefore satisfy; but particulars, being dispersed, do best agree with dispersed directions. And lastly, Aphorisms, representing a knowledge broken, do invite men to inquire farther; whereas Methods, carrying the show of a total, do secure men, as if they were at farthest.¹⁴⁹

Aphorisms of proverbs deal with the fundamental stuff of life, they seem to touch our essence without the need for exposition.¹⁵⁰ McLuhan's use of them has sometimes been criticized because they render his work too opaque¹⁵¹ by demanding a creative effort from the reader.

¹⁴⁹ Marshall McLuhan, *The Gutenberg Galaxy: The Making of Typographic Man*. (Toronto: University of Toronto Press, 1962.), pp.102-3.

¹⁵⁰ Toby Golberg, "An Examination, Critique and Evaluation of the Mass Communications Theories of Marshall McLuhan" (Ph.D. dissertation, University of Wisconsin, 1971), pp.211-13.

¹⁵¹ George Elliot, "The Message of Marshall McLuhan," *Newsweek* (March 6, 1967) p.53 cited in Gerard Charles Penta, "Marshall McLuhan and Educational Theory: An Inquiry into the Epistemological and Aesthetic Foundations of Learning Style," (Ph.D. dissertation, Michigan State University, 1974) p.17.

4. The doublet: comparison and contrast

McLuhan's use of the doublet, one of Shakespeare's favorite figures¹⁵², to compare and contrast two different sides to a coin is found in practically all of his major probes (hot and cool, visual and audile/tactile, cliché and archetype etc...). The juxtaposition of two differing aspects of a problem draws our attention and sharpens our perception of the issues.¹⁵³

The popular use of the form can be noted in Freud and Jung, Gilbert and Sullivan, Wordsworth and Colridge, Barnum and Bailey, Plato and Aristotle, art and life, sweetness and light, etc...¹⁵⁴

5. Omission and exaggeration

"The incomplete building like the semi-demolished one, holds the attention more than the complete form..."¹⁵⁵

McLuhan's use of omission as a strategy to get the passive visual reader into participant oral action¹⁵⁶ is constant throughout his work. The reader never really has the feeling of having totally grasped what McLuhan is talking about. This voluntary effect is produced by omitting something and never being really explicit about the confines of one statement or another. Everything seems to be going everywhere.

¹⁵² Marshall McLuhan and Wilfred Watson, From Cliche to Archetype, (New York: The Viking Press, 1970), p. 108.

¹⁵³ Marshall McLuhan and Harley Parker, Through the Vanishing Point: Space in Poetry and Painting, (World Perspectives Series, edited by Ruth Nanda Anshen, Vol. 37. New York: Harper and Row, 1968), p. 238.

¹⁵⁴ Marshall McLuhan and Wilfred Watson, From Cliche to Archetype, (New York: The Viking Press, 1970), p. 108.

¹⁵⁵ Ibid., p. 83.

¹⁵⁶ Marshall McLuhan, "James Joyce: Trivial and Quadrival." Thought, XXVIII (Summer, 1953) :83.

This artistic discovery for achieving rich implication by withholding the syntactical connection is slated as a principle of modern physics by A.N. Whitehead in *Science and the Modern World*.

In being aware of the bodily experience, we must thereby be aware of aspects of the whole spatio-temporal world as mirrored within the bodily life... my theory involves the entire abandonment of the notion that simple location is the primary way in which things are involved in space-time. Which is to say, among other things, that there can be symbolic unity among the most diverse and externally unconnected facts or situations.¹⁵⁷

The exaggeration of one aspect of an issue and the omission of the others is often used to yield a new understanding of a situation. McLuhan is much more preoccupied with generating ideas than establishing their credibility.

You have to push any idea to an extreme, you have to probe. Exaggeration, in the sense of hyperbole, is a major artistic device in all modes of art. No painter, no musician ever did anything without extreme exaggeration of a form or mode, until he had exaggerated those qualities that interested him. Wyndham Lewis said: "Art is the expression of a colossal preference for certain forms of rhythm, color, pigmentation, and structure." The artist exaggerates fiercely in order to register this preference in some material...¹⁵⁸

6. Parallel action

Much of the sense of excitement in reading McLuhan's work comes from parataxis -- many things going on in parallel at the same time.

The poet W.B. Yeats once explained how the artist creates "The Emotion of multitude," or the sense of universality, by playing two actions side by side, without links or connections. The parallel actions of Lear and his daughters and Gloucester and his sons enable the audience to feel that

¹⁵⁷ Marshall McLuhan, *The Mechanical Bride: Folklore of Industrial Man*. (New York: Vanguard Press, 1951), p.80.

¹⁵⁸ Marshall McLuhan, "Marshall McLuhan and Gerald E. Stearn: A Dialogue," *McLuhan: Hot and Cool*, ed. Gerald E. Stearn (New York: Dial Press, 1967), p. 285.

these unfillial and ungrateful persons reveal the human condition itself.¹⁵⁹

Most of these techniques overlap in sharing the common goal of involving the reader and, even though they don't limit themselves to the printed page, transforming that visual medium into a more resonant form. Their relation to this thesis lie in the insight they give us into the fundamentals of McLuhan's own expression. These notions are particularly useful when discussing McLuhan's notion of the role of art and artists in chapter four.

C. McLuhan and the scientific method,

Prompted by the non-response of the scientific community to the suggestion there might be human-made causes for drug addiction in our time, McLuhan criticizes Western science for ignoring causation and only showing interest in the description and measurement of effects.¹⁶⁰ Thus neglecting, the more profound issues, as if they could disappear in the unconscious.¹⁶¹

McLuhan's notion of causality is more closely associated with patterns or configurations than with linear or sequential events. He refers to Sir Edmund Wittaker's book *Space and Spirit* in explaining the contemporary view of causality :

At this point we escape from the order of the Newtonian cosmos.... In the argument as usually presented the language used is appropriate to the case when each effect has only one cause, and each cause has only one effect, so that all chains of causation are simple linear sequences. If we

¹⁵⁹ Marshall McLuhan, "Trudeau and Nixon in the Television Vortex," Saturday Night, (December, 1972) :17.

¹⁶⁰ Marshall Mc Luhan, "Education in the Electronic Age," Interchange 1 (1970) :12

¹⁶¹ Marshall Mc Luhan, The Gutenberg Galaxy: The Making of Typographic Man, (Toronto: University of Toronto Press, 1962), p.252.

now take into account the fact that an effect may be produced by the joint action of several distinct causes, and also that a cause may give rise to more than one effect, the chains of causation may be branched, and also may have junctions with one another; but since the rule still holds, that the cause always precedes the effect in time, it is evident that the proof is not essentially affected. Moreover, the argument does not require that all chains of causation, when traced backward, should terminate on the same ultimate point: in other words, it does not lead necessarily to the conclusion that the universe acquired its entire stock-in-trade in a single consignment at the Creation, and that it has received nothing since. Thus it does not warrant the view, so common among the deistic Newtonians of the eighteenth century, that the system of the world is absolutely closed and has developed according to purely mechanical laws, so that all the events of history must have been implicit in its specification at the primeval instant. On the contrary the recent trend of physical thought (as will be evident from what has been said about the principle of causality) is in favor of the view that in the physical domain, there is a continual succession of intrusions or new creations. The universe is very far from being a mere mathematical consequence of the disposition of the particles at the Creation, and is a much more interesting and eventful place than any determinist imagines.¹⁶²

McLuhan's interest does not limit itself to outer causes, he is interested in inner causes, in understanding itself. He gives us a glimpse of his insights when making the distinction between literate and non-literate views of causality:

Literate people think of cause and effect as sequential, as if one thing pushed another along by physical force. Nonliterate people register very little interest in this kind of "efficient" cause and effect, but are fascinated by hidden forms that produce magical results. Inner rather than outer, causes interest the nonliterate and nonvisual cultures. And that is why the literate West sees the rest of the world as caught in the seamless web of superstition.¹⁶³

In our electronic environment, at instant speed, effects and causes merge¹⁶⁴ and people become aware of the cause of things more than in

¹⁶²Sir Edmund Wittaker, Space and Spirit (Hinsdale, Ill.: Henry Regnery, 1948) p.121 cited in Marshall Mc Luhan, The Gutenberg Galaxy: The Making of Typographic Man, (Toronto: University of Toronto Press, 1962.), pp. 251-2.

¹⁶³Marshall Mc Luhan, Understanding Media: The Extensions of Man, (New York: McGraw-Hill Book, 1964), pp. 250-1.

¹⁶⁴Marshall McLuhan and Barrington Nevitt, Take Today: The Executive As Dropout, (Don Mills, Ontario: Longman Canada, 1972), p.6.

sequential and concatenated environment of print¹⁶⁵. This simultaneity forces people to anticipate effects and causes before they happen. "Feedback yields to feedforward".¹⁶⁶ Old experience is obsolete and new knowledge on the recognition of patterns and the programming of our environment is required.

McLuhan recognizes the value of the traditional scientific experiment in media study and describes it in his own terms as an experiment "that can be repeated anytime, anywhere, and always produces the same result. The test is carried out as a figure minus a particular ground, so that no matter what the ground in time or place, the result is uniform. This strangely enough, establishes one kind of truth based on abstracting figure from its ground."¹⁶⁷ This sceptical definition is reinforced by McLuhan's critique that this method is only useful in measuring, classifying and describing effects never in causes.¹⁶⁸

The very separation of science from faith from ethics, and from art, which is so characteristic of our times, is at the roots of the industrialized world in which we live ... Such a position has led to the admission as true of only what is verifiable in tangible and in measurable terms, or in terms of mathematical demonstrations which start from proposition artificially divorced from the actual experience of living. Since it is impossible to offer the same kind of tangible proof and to get the same kind of assent in matters of faith, or morals and of beauty, the truth of religion, moral philosophy and art have come to be treated as subjects of private opinion rather than public knowledge.¹⁶⁹

¹⁶⁵ Marshall Mc Luhan, Understanding Media: The Extensions of Man. (New York: McGraw-Hill Book, 1964), p. 27.

¹⁶⁶ Marshall Mc Luhan, Culture Is Our Business. (New York: Ballantine Books, 1970), p. 80.

¹⁶⁷ Marshall McLuhan with Kathryn Hutchon and Eric McLuhan, City As Classroom: Understanding Language and Media. (Agincourt, Ontario: Book Society of Canada, 1977), p. 66.

¹⁶⁸ David O'Neil, "Marshall Mc Luhan An Interview?" The Mike 22 (February, 1971) :3.

¹⁶⁹ John U. Nef, Cultural Foundations of Industrial Civilization (Cambridge: Cambridge University Press, 1958) p. 181-2, cited in Marshall Mc Luhan, The Gutenberg Galaxy: The Making of Typographic Man. (Toronto: University of Toronto Press, 1962.), p. 167.

Conclusion

Some of McLuhan's ideas on methodology have been integrated into a practical exploration guide for school children entitled City As Classroom: Understanding Language and Media.¹⁷⁰ This guide is a good example of how art educators could adapt McLuhan's ideas to a classroom situation. Even though it does not specifically address the issue of art education it uses some of McLuhan's investigative techniques to train perception and study the properties and effects of media. I believe that McLuhan's ideas, even though they can be of interest to younger students, would seem to be more relevant to practicing artists/students at the university level. I believe that most artists working with media will find McLuhan's ideas to be quite enlightening. Whereas some of his insights might with time become less relevant I believe that his methodology will continue to offer interesting insights.

McLuhan's mind expanding technologies need to be experimented with to evaluate their applicability in the art education environment. McLuhan thought small children were ideal candidates for these methods as children had fresh percepts and were not contaminated by preconceived ideas. I see his approach as a philosophical context to be used at the undergraduate or postgraduate levels for practicing artists. I have applied some of these methods in a series of research seminars which were conducted at The School of Industrial Design at Carleton University. One of them on The Intelligent Object was particularly successful. Students were introduced to many of McLuhan's ideas and then asked to concentrate on the "problem" of designing new objects incorporating micro-electronic components making these objects "intelligent".

¹⁷⁰ Marshall McLuhan with Kathryn Hutchon and Eric McLuhan, City as Classroom: Understanding Language and Media (Agincourt, Ontario : Book Society of Canada, 1977)

The issue of media, the translation of human faculties into technology, the imagination and direction given to these new prototypes, and how they would act in changing the existing context were all issues that gained directly by the application of McLuhan's methods and insights.

The relevance of McLuhan's work to art education should not be based on a scientific critique of his theories since he did not intend to produce empirical theories. The relevance of his work for art education should be based on its utility in schools. Does it stimulate the creative behavior of students, encourage curiosity, and create greater awareness of our environment? I believe it would.

A comparison of McLuhan's approach to theory construction with that of scientific theory will show by contrast that McLuhan's work situates itself more in the artistic or philosophical traditions. The theory building characteristics of McLuhan's methodology explain why his work was not easily transformed into a school of thought. It is in many ways the antithesis of much of the academic tradition which focusses on what McLuhan would call literate values, the capacity to fit in an established format, to have a visually integrated and connected body of work.

In his book A Primer in Theory Construction, Paul Davidson Reynolds describes the expectation one usually has in terms of a scientific theory:

Most people would probably want scientific knowledge to provide:

- (1) A method of organizing and categorizing "things," a typology;
- (2) Predictions of future events;
- (3) Explanations of past events;
- (4) A sense of understanding about what causes events.

And occasionally mentioned as well is:

- (5) The potential for control of events.¹⁷¹

¹⁷¹Paul Davidson Reynolds, A Primer in Theory Construction (Indianapolis: Bobbs-Merrill, 1971) p.4

In terms of this description of what a scientific model is McLuhan can be said to have the following profile:

(1) A method of organizing and categorizing "things," a typology;

McLuhan has developed, as this thesis demonstrates, many different typologies to describe the interactions of media, the role of the artist, the notion of mind, education but he does not satisfy scientific expectations in that his typologies are neither exhaustive nor mutually exclusive.

(2) Predictions of future events and (3) explanations of past events;

Much of McLuhan's interest focussed on the possibility of anticipating change and explaining the historical development of media. His predictions about future events are based on the contextual notion of change. These predictions and explanations I believe yield important insights but their applicability is limited by the scientific shortcomings of the previously mentioned typologies. I believe that McLuhan thought that people made their future and that the creative process of inventing the future was based on intuition, on the metaphor that transforms itself into reality. We are what we think. People can transcend their fate through awareness and invention.

(4) A sense of understanding about what causes events.

McLuhan says that effects arise before causes, by that he means explanations occur after effects. In other words the potential of the situation is perceptible before its causality can be conceptualized and explained. In an electronic environment the speed of information does not allow us the time to deal with everchanging things. In a slow visual manner, we have to anticipate effects. Much as in our everyday life we must use our intuition and make decisions based on our common sense. To overly emphasize conceptual knowledge gives us a false sense of security. This stifles our sense of discovery and impedes the perceptual flexibility so necessary for our survival. In view of this it

is not surprising that McLuhan's ideas do not follow Reynold's description of what understanding means:

...a sense of understanding is provided only when the causal mechanisms that link changes in one or more concepts (the independent variables) have been fully described. If a person feels ambiguous or uncertain about an explanation, it is because some part of the causal linkage has been omitted from the description.¹⁷²

5) The potential for control of events.

Awareness is McLuhan's tool for control. McLuhan believed that humanity can control its environment through understanding.

McLuhan was not interested in our need for conceptual security as demonstrated by his methods (ex: omission) he wanted to disturb, to awaken us from narcissistic stupor and provoke us into using our perceptual faculties. McLuhan's symbolic action is intended to reestablish an equilibrium between our senses, between perceptual and conceptual activities. Making sense by using all of our senses. In concrete terms this means creating contexts that favor human development, that are open to many different types of experience; that encourage curiosity and individual and group exploration. Understanding is neither purely objective nor purely subjective but comprehensive as the individual through personal experience transforms themselves and their environment. McLuhan does not reduce the number of possible variables, instead he acknowledges a multitude of variables and even leaves room for future discoveries. McLuhan offers us an open context and a methodology to let our minds probe and avoid the limited ideological straight jacket that usually puts us to sleep. Dealing with percepts is sloppy and ambiguous. Too great an effort to logically package McLuhan takes away his significance as a probe. The resonant space between the wheel and the axle is essential for change .

¹⁷²ibid., p.7.

CONCLUSION

A synthesis of McLuhan's ideas on art education.

Art education is influenced by art theory which is often ruled by a philosophical or psychological construct. How one perceives the art object/event determines to a great part how one will approach art education. The purpose of this conclusion is to demonstrate that McLuhan's perception of art offers the necessary elements to make up the basis of an innovative approach to art education. Abrams ¹ in analysing different approaches to art theory concludes that almost all theories incorporate ideas on four key areas.

1. the work of art itself
2. the artist as the work's creator
3. the audience to whom the work is addressed; and
4. the universe represented in the work, e.i. what the work is about.

Besides satisfying these conditions, as demonstrated in the previous chapters, McLuhan also provides some interesting ideas on education.

The following is a synthesis of these ideas with references to the the key word structure used in the thesis. McLuhan presents most of his ideas in doublet [DOUBLET: COMPARISON AND CONTRAST] form to compare and contrast

¹Meyer D. Abrams, The Mirror and the Lamp, (Oxford University Press, 1953) p.3-29

two opposites. In the following synthesis these doublets and references appear in capital subscript.

The objective of art education.

McLuhan considers the objective of both art and education to be the seeking of awareness. He describes awareness as the active and creative [MAKING VS MATCHING] PROCESS [FIGURE / GROUND] of interplay (perception) and replay (recognition) of the responses and inputs from all of our senses [ALL SENSES VS ONLY ONE, COOL VS HOT, MARCONI VS GUTENBERG VS TRIBAL, LIGHT THROUGH, VS LIGHT ON]. Awareness is based on percepts [PERCEPTS VS CONCEPTS, RIGHT HEMISPHERE VS LEFT HEMISPHERE] which combine experience and meaning.

The purpose of awareness [AWARENESS VS NARCISSISTIC NARCOSIS, SOMNAMBULISM, AMPUTATION, REAR-VIEW MIRROR] is to make us conscious of the ongoing processes in us and our environment so as to free us from the servitude of our technologies.

The present context of art education

McLuhan's ideas on art education are directly related to the electronic technological environment in which we live [THE MARCONI CONSTELLATION / THE GLOBAL VILLAGE]. He identifies this period through an analysis of the effects of media on humans and their environment. This model offers a general view of our historical development and at the same time is particularly useful in providing insights into art media.

Media are active metaphors that extend and translate the human body and senses. Each new technology forces humans to regasp their environment in a new way [NEW MEDIA]. New media re-position older media [MEDIA

INTERACTIONS]. Once a medium has released all its energy it reverses itself [MEDIA REVERSAL]. The message of a medium [MEDIUM IS THE MESSAGE] lies in the way it shapes and controls the form of human association and action by altering sense ratios or patterns of perception. Each culture reacts differently to a medium.

Time and space are cultural artifacts. The electronic acceleration of information tends to abolish time and space [IMPLOSION VS EXPLOSION]. Everything is here, there is nowhere to go. Art, science and nature converge [WORLD AS A WORK OF ART]. When everything causes everything, when action and reaction occur almost at the same time, resonance [FIGURE / GROUND] returns as the physical basis of being. At electronic speed humans are discarnate [DISCARNATE HUMANS], their private consciousness [VIOLENCE AND IDENTITY] dissolves and they are projected in a collective form of consciousness. The fear and anxiety created by this loss provokes violence. By recycling the past [REAR VIEW MIRROR], humans have the false hope of finding the lost thread and reestablishing their personas.

Electronic technology favors dialogue [INNER VS OUTER TRIP], and immediate involvement. Thought and feeling are reunited and concern with effect replaces concern with meaning. Humans make and feel responsible for their world. They identify with the corporate world and as a consequence develops reactionary attitudes.

Electricity unifies mechanical fragments into a kind of organic interdependence. Since all activities must be orchestrated, there can only be one conductor. The more necessary the conductor the more he or she is expendable.² In response to the electronic translation of the unconscious as

²Possible analogy to Sigmund Freud's ideas in Totem et Tabou (Paris; Payot), 1947

environment we react by the technological simulation of consciousness, the possibility of a form of global telepathy.

McLuhan characterizes three technological periods³:

The tribal world based on speech [ACOUSTIC SPACE/TRIBAL SOCIETY].

The Gutenberg Galaxy based on the phonetic alphabet and print [VISUAL SPACE/LITERATE PEOPLE].

The Marconi constellation based on electronic technology [THE GLOBAL VILLAGE].

The process of art.

Preliterate and postliterate art is the art of being in the world [PRIMITIVE ART]. The artist is a person in any field [EVERYBODY IS ENCOURAGED TO BE AN ARTIST] who is aware of the effects of his or her actions and knowledge. Artists participate in the making [MAKING VS MATCHING] of their time. They are intrigued by the world but not overwhelmed by it. They exult in the novelties of perception afforded by innovation in the discovery of new boundaries and territories for the human spirit. Eventhough the creative act is one of intense activity, the artists are at leisure because their energy is not fragmented, all their faculties are involved in what they are doing.

In contrast to scientists [ARTIST VS SCIENTIST] who use concepts [PERCEPTS VS CONCEPTS] to logically connect and classify artists use percepts to relate things analogically [METHOD OF EXPLORATION VS METHOD OF EXPOSITION]. They use the method of creative analysis, they start with the desired effect and learn to create its cause with their chosen medium and audience. The artist and

³Barrington Nevitt, one of McLuhan's closest associates, gives a detailed description of the differences between acoustic and visual space in Visible and Invisible Blas via Media, Journal of Communication 1980-1, 7:3, p.29

audience participate [MAKING VS MATCHING] in the process [FIGURE / GROUND] of remaking from old components [CLICHÉ / ARCHETYPES] a new pattern that only the artist may have perceived [PATTERN RECOGNITION].

Artists relinquish outer matching (realism) [MAKING VS MATCHING] and self-expression [REVELATION VS SELF-EXPRESSION] and become prophetic as they discover and reveal social and psychic events ahead of their time [ANTICIPATION]. Artists have the capacity to read the outer world [PATTERN RECOGNITION] and relate it to the inner world. As reality unfolds they reveal new and unexpected forms that escape conventional wisdom. By studying the dream in our folklore [RETRIEVAL, CLICHÉ AND ARCHETYPE], the artist tries to retrace the wish that created our present psychic environment and provide the necessary adjustment. Artistic creation is the playback of ordinary experience. [ROLE OF ART] By an impersonal poetry of suggestion and implication the artist releases the life in things and makes existence speak for itself. The artist acts as a catalyst to create in the audience a feeling of immediate association with corporate power. Artists are subversive [ARTIST IS SUBVERSIVE] in that they often reveal what people don't want to know. With the growth of collective art forms, teamwork succeeds private effort.

Art is a teaching machine for the training of perception [TRAINING IN PERCEPTION VS INSTRUCTION] and judgment. Art as the antennae of new awareness and discovery and as a storehouse of achieved values plays a crucial role in avoiding technological determinism and in helping to share human experience. Humans can control their environment if they are made aware of it. McLuhan sees the computer as the medium capable of orchestrating [PROGRAMMING] the world as a work of art [ART AS NATURE].

Art in the electronic environment aspires to the structure of music and rediscovers nonvisual, multisensuous spaces. Technology acts as art when it

disrupts established and yet hidden assumptions and creates new awareness. When any medium becomes the content of another, that which is contained becomes an art form [ART FORMS].

Art whether genuine [GENUINE ART] or fake is psychically valuable only when it is new [NEW ART] and capable of dislocating our perception [ANTIENVIRONMENT VS ENVIRONMENT] into a inexperienced posture of awareness, thus remaking the world eternally fresh. Art may be able to provide immunity from technological change by providing advance knowledge [ANTICIPATION] on how to cope with the psychic dimensions of new experience. New art as it saturates perception it loses its capacity to awaken. When art becomes a consumer commodity [PACKAGE VS PROBE] instead of a means of training perception it loses its navigational purposes. Good taste [GOOD TASTE] is an anesthetic.

The artist and the audience [FIGURE/GROUND] make [MAKING VS MATCHING] each other. The effect of a sensation is what the viewer brings to art in the form of a subconscious afterimage. It is through the artistic process that awareness of these images is brought forth by the artist who has the capacity to perceive [TRAINING OF PERCEPTION] these effects and manipulate the necessary forms to communicate them to the viewer. The viewer is the co-creator [MAKING VS MATCHING] of the work since the effect of the work depends on the capacity to respond [PUT ON]. Artists must have enough familiarity with their audience to be able to get close enough to provoke [MOSAIC FORM] and change perceptual habits.

Popular arts [POPULAR ART, SLANG, GAMES, ADVERTISING] by incantation and repetition create brands and totems that generate power and energy based on collective emotion. Eventhough they might sometimes freeze perception, and sterilize judgment [PACKAGE VS PROBE] they are unconsciously expressive

of the inner life of the community. By occupying and exploiting [CLEANSING AND RENEWAL] the banality [VULGARITY AND BANALITY] of popular expression the artist can transform it.

Education

Energy and production in the electronic environment [GLOBAL VILLAGE] tend to fuse [IMPLOSION VS. EXPLOSION] with information and learning. Investigative techniques [METHOD OF EXPLORATION] become essential as people's business and survival depends on their capacity to gather information [LEARNING A LIVING] and generate ideas.

As the outside information environment [ENVIRONMENT AS TEACHING MACHINE] becomes richer than the school environment, the educator must respond by assuming a larger role [JOB VS ROLE] and emphasizing knowledge by dialogue.

As we seek to be somebody [ROLE] by merging through deep involvement and participation with the life of our time we lose our capacity for detachment. [JOB VS ROLE, GOALS VS INVOLVEMENT] and the values of our previous mechanical world. Image making [MAKING VS MATCHING] succeeds goal matching. We shift from the single job to the concept of the Renaissance people with a multiplicity of jobs [ROLE] for their life time.

There is a chaotic conflict between the right hemisphere [RIGHT HEMISPHERE VS LEFT HEMISPHERE] orientation of our society's art and entertainment and the left hemisphere dominance in our society's institutions [LIVING IN TWO WORLDS]. Concern in education about basics, efficiency and know-how is a concern about a decline in left hemisphere skills. We live in an age of transition, our literate ways are obsolete and new patterns have not yet clearly emerged. People's only recourse is to understand the on going processes

[UNDERSTANDING MEDIA] and in doing so to gain control over them. The educational system should ease the transition from one mode to another. It should bridge the gap between both cultures [MARCONI VS GUTENBERG] by coming up with a new synthesis of oral and visual education and avoid being an instrument of cultural aggression.

Students are alienated [DROP OUT] by being asked to put aside their own impulses and ideas to adapt to an environment created for children a hundred years ago. Students drop out because they cannot relate [INVOLVEMENT] to an environment which demands that they study the same things at the same time as anybody else. Institutions should not suppress all the natural direct experience of youth, who respond with untaught delight to the environment of popular culture [POPULAR ARTS]. It could be their door to all past achievement if studied [UNDERSTANDING MEDIA] as an active force.

In the Age of implosion where the divisions and functions of knowledge break down and the notion of subjects disappears the emphasis in education should be on the structural study of the making and learning process itself [UNDERSTANDING MEDIA]. Instead of merging the individual into patterns of total environment [PROFESSIONAL VS AMATEUR] education should seek the development of the total awareness of the individual and the critical awareness [COMPREHENSIVE AWARENESS] of the ground rules of society.

Higher education by encouraging specialization, standardization and competition produces close resemblance among individuals which does not allow individuals to differentiate themselves and become powerful minds with independent character.

As all subjects become interrelated, intense and constant dialogue and interweaving between all disciplines is necessary. Education like art must shift from matching or instruction [MAKING VS MATCHING, PROBE VS PACKAGE], to

making, from the rubber stamping of minds to the exploration of the new languages of form that are shaping our environment. Education as replication and repetition must be changed for discovery through investigation [CONSUMING VS PRODUCING, ACQUISITION VS INVOLVEMENT]. Comprehension is never mere classification [PROBE VS PACKAGE], it means making sense by using all of our senses [COMPREHENSIVE AWARENESS].

Bibliography

Abrams, Meyer D. The Mirror and the Lamp. Oxford University Press, 1953.

Alland, A. The Artistic Animal. New York: Doubleday, 1977.

Allport, G. Personality. A Psychological Interpretation. New York: Henry Holt and Company, 1937.

Allison, Brian. Art education and teaching about the art of Asia, Africa and Latin America. London: Voluntary Committee on Overseas Aid and Development Education Unit, 1972.

Bateson, G. Steps to an Ecology of Mind. New York: Ballantine Books, 1972.

Baudrillard, J. Le Système des objets. Paris: Gonthier, 1968.

Becker, F.D. Environmental Messages: Housing as Non-Verbal Communication. Unpublished manuscript. Cornell University, 1975.

Bertalanffy, L.U. General Systems Theory. New York: George Braziller, 1973

Bertolt Brecht. Petit organon pour le théâtre. (Paris: L'Arche, (1948), 1963)

Bruner, Jerome S. The Relevance of Education. New York: Norton and Company, 1973.

Chalmers, Graeme F. "A Cultural Foundation for Education in the Arts." Art Education, 27 (1) (1974) : 24.

1
Chaney, R P. "Scientific Inquiry and Models of Socio-Cultural Data Patterning: An Epilogue." In Clarke, David L. (ed.), Models in Archeology. London: Methuen and Company, 1972.

Chichura, Diane B. "Sight and Sound." Art Education, 23 (3) (1970) : 28.

Collins, Earl. "Art Education and the Rapidly Changing World." Art Education, 24 (8) (1971) : 7

Costigan, James "Communication Theory In The Works of Marshall McLuhan." Ph.D. Dissertation. Southern Illinois University, 1969.

Cross, Jack. For Art's Sake. Allen Unwin, 1977.

Eliot, T.S. Hamlet. In Selected Essays. New York: Harcourt, Brace, 1932.

Ellul, Jacques. Propaganda: The Foundation of Man's Attitudes. New York: Albert Knopf, 1965.

Engel, J.F., Blackwelland R.D. and Kollat, D.T. Consumer Behavior. 3rd ed. Hinsdale, Illinois: Dryden Press, 1978.

Favre J.-P. Color Sells your Package. Zurich: A.B.C., 1969.

Fekete, John. "Marshall McLuhan; A Study in the Determinist Fetichism of Technology." Master's Thesis. McGill University, 1969.

Feldman, Edmund Burke. Becoming Human Through Art. Englewood Cliffs, New Jersey: Prentice-Hall, 1970.

Finkelstein, Sidney ed. Sense and Nonsense of McLuhan. New York: International, 1968.

Freud, Sigmund. Totem et Tabou. Paris: Payot, 1947

Giedeion, Siegfried. Mechanization Takes Command. New York: W.W. Norton, 1948.

Goldberg, Tolby "An Examination, Critique and Evaluation of the Mass Communications Theories of Marshall McLuhan", Ph.D. Dissertation, University of Wisconsin, 1971.

Gregory, R.L. Eye and Brain. New York: McGraw-Hill, 1973.

Hall, E.T. The Silent Language. New York: Fawcett, 1959.

Hanson, N.R. Perception and Discovery: An Introduction to Scientific Inquiry. San Francisco: Freeman Cooper and Company, 1969.

Hanks, Nancy, "Education Through Art: A Gateway," Art Education (v.24 n.7)

Harry H., and Bond, George R., eds. The McLuhan Explosion. New York: American Book Company, 1968.

Havelock, Eric A. Preface to Plato. Oxford, Great Britain: Harvard University Press, 1963.

Humes, Dennis M. "Art as Antienvironment." Art Education 26 (9) 1973.

Hurwitz, Al. "Experiment in Intermedia." Art Education 23 (3) 1970.

Innis, Harold. Empire and Communication. Toronto: University of Toronto Press, 1972 [1950].

Innis, Harold. The Bias of Communication. Toronto: University of Toronto Press, 1964.

Janik, A. and Toulmin, S. Wittgenstein's Vienna. New York: Simon and Shuster, 1973.

Julesz, B. "Texture and Visual Perception." In Image, Object and Illusion: Readings from Scientific American. San Francisco: W. H. Freeman and Company, 1974.

Kaufman, I. "Limitations of Research in Teaching Art." In G. Pappas ed., Concepts in Art and Education. Toronto: Macmillan 1970.

Kepes, G. Education of Vision. New York: George Braziller, 1965.

Kilpatrick, William. "McLuhan: An Inquiry Into His Retribalization Theory." Ph.D. Dissertation, Purdue University, 1970.

Krugman, Herbert E. "Electro-encephalographic Aspects of Low Involvement: Implications for the McLuhan Hypotheses." Meeting the American Association of Public Opinion Research, Lake George New York: May 21-23, 1970.

Langer, Susan. Philosophy in a New Key. New York: Mentor, 1951.

Laszlo, E. Introduction to Systems Philosophy. New York: Harper and Row, 1972.

Linderman, Earl W. Teaching Secondary School Art: Discovering Art Objectives, Art Skills, Art History, Art Ideas. Dubuque Iowa: Wm. C. Brown, 1980.

Luria, A.R. The Nature of Human Conflicts, or Emotion, Conflict and Will. translated and edited by W. Horsley Gantt. New York: Liverlight, 1932.

McLuhan, Marshall. The Mechanical Bride: Folklore of Industrial Man. New York: Vanguard Press, 1951.

McLuhan, Marshall. "James Joyce: Trivial and Quadrivial." Thought, XXVIII Summer, 1953.

McLuhan, Marshall. "The Age of Advertising." Commonweal, LVIII September 11, 1953 :555.

McLuhan, Marshall and Carpenter, Edmund. Explorations in Communication. Boston: Beacon Press, 1960.

McLuhan, Marshall. Report on Project Understanding New Media. Washington, D.C.: National Association of Educational Broadcasters, Department of Education, 1960.

McLuhan, Marshall. The Gutenberg Galaxy: The Making of Typographic Man. Toronto: University of Toronto Press, 1962.

McLuhan, Marshall. Understanding Media: The Extensions of Man. New York: McGraw-Hill Book, 1964.

McLuhan, Marshall. "The Emperor's Old Clothes." cited in The Man-Made Object. ed. by Gyorgy Kepes New York: George Braziller, 1966 :90.

McLuhan, Marshall, Parker Harley and Barzun, Jacques Exploration of the Ways, Means and Values of Museum Communication with the Viewing Public. A Seminar. New York: Museum of the City of New York, 1966.

McLuhan, Marshall and Leonard, George B. "The Class of 1989." Look, (Feb. 21, 1967) :24.

McLuhan, Marshall. "Marshall McLuhan and Gerald E. Stearn: A Dialogue," McLuhan: Hot and Cool. ed. Gerald E. Stearn New York: Dial Press, 1967.

McLuhan, Marshall. "The Password is involvement." Monday Morning (September 1967) :20.

McLuhan, Marshall. Verbi-voco-visual Explorations: New York: Something Else Press, 1967.

McLuhan, Marshall "Television in a new light" in Stanley T. Donner, The Meaning of Commercial Television. Austin, Texas: University of Texas Press, 1967, : 88

McLuhan, Marshall and Fiore, Quentin The Medium is the Message. 1967.

McLuhan, Marshall "All of The Candidates are asleep." Saturday Evening Post (August 10, 1968) : 36.

McLuhan, Marshall. "Environment as Programmed Happening," in Knowledge and the Future of Man: An International Symposium, ed by Walter J. Ong, S.J. New York: Holt, Rinehart and Winston, 1968.

McLuhan, Marshall and Parker, Harley. Through the Vanishing Point: Space in Poetry and Painting. World Perspectives Series, edited by Ruth Nanda Anshen, Vol. 37. New York: Harper and Row, 1968.

McLuhan, Marshall and Fiore, Quentin. War and peace in the Global Village. New York: Bantam Books, Inc., 1968.

Marshall McLuhan. "The Relation of Environment to Anti-Environment." in Innovations, ed. by Bernard Bergonzi, London: Macmillan, 1968.

McLuhan, Marshall. Counterblast. Toronto: McClelland and Stewart, 1969.

McLuhan, Marshall. Culture Is Our Business. New York: Ballantine Books, 1970.

Marshall McLuhan, "Education in the Electronic Age." Interchange 1970.

McLuhan, Marshall and Watson, Wilfred. From Cliché to Archetype. New York: The Viking Press, 1970.

McLuhan, Marshall "McLuhan's open earlids vs Barkway's bite." Financial Times (September 18, 1972) :11.

McLuhan, Marshall and Barrington Nevitt, Take Today: The Executive As Dropout. Don Mills, Ontario: Longman Canada, 1972.

McLuhan, Marshall "At the moment of Sputnik the planet became a global theater in which there are no spectators but only actors." Journal of Communication (Winter, 1974).

McLuhan, Marshall and Nevitt, Barrington. Medium Meaning Message. Communication, Vol. 1, 1974 : 30

McLuhan, Marshall. "English Literature as Control Tower Communication Study." The English Quarterly University of Waterloo, Volume 7,#1, Spring, 1974 : 6.

McLuhan, Marshall, "At the Flip Point of Time - The Point of More Return," Journal of Communication, (Autumn 1975) :103.

McLuhan, Marshall "Extracts from statements." Place and Function of Art in Contemporary Life: Report of an International Symposium organized by Unesco, September, 1976 : 18.

McLuhan, Marshall. "Inside on the Outside, or the Spaced-Out American." Journal of Communication, (Autumn, 1976) : 51-2.

McLuhan, Marshall. The Violence of the Media. The Canadian Forum (September 1976, vol. LVI No. 664) :9.

• "Interview With Professor Marshall McLuhan." Macleans March 7, 1977 .

Marshall McLuhan. "The Rise and Fall of Nature." Journal of Communication 1977, p.80

McLuhan, Marshall. The writings of Marshall McLuhan and what has been written about him, 1934-1977 A bibliography. Fort Lauderdale, Florida: Wake-Brook House, 1977.

McLuhan, Marshall and Nevitt, Barrington. "Cultures in the Electronic World: Can the Bottom Line Hold Quebec." Perception (November/December 1977) :68.

McLuhan, Marshall, Hutchon, Kathryn and McLuhan, Eric. City as Classroom: Understanding Language and Media. Agincourt, Ontario : Book Society of Canada, 1977.

McLuhan, Marshall with Hutchon, Kathryn and McLuhan. "The Laws of the Media." English Journal, (November 1978) : 92-3.

McLuhan, Marshall. "The Brain and the Media: The "Western" Hemisphere." Journal of Communications Autumn 1978 : 55.

McLuhan, Marshall. "The Relation of Environment to Anti-environment." In R. Kestelanez (ed.), Esthetic Contemporary. Buffalo N.Y.: Prometheus Books, 1978 : 91-2.

McLuhan, Marshall. "The Future of Art." Ethos 1 1983,1:10.

Merleau-Ponty, M. Phenomenology of Perception. New York: Humanities Press, 1962, originally published, 1945.

Morris, C.W. Signs, Language and Behavior. New York: Prentice-Hall, 1946,

Neisser, Ulrich. Cognitive Psychology. New York: Appleton-Century-Crofts, 1967.

Nevitt, Barrington. "Visible and Invisible Bias Via Media," Canadian Journal of Communication 7:3 (Nov. Dec. Jan. Feb., 1980-1) :16.

Nevitt, Barrington. Communication and Design. In W. Gilles and G. Singer (eds.), Industrial Design and Aesthetics. Ottawa, Canada: Carleton University, 1978.

Norden, Eric. "Playboy Interview: Marshall McLuhan." Playboy 16:3 (March, 1969) :53-158.

O'Neil, David. "Marshall McLuhan An Interview ." The Mike 22 (February, 1971) :4.

Reich, Charles A. The Greening of America. New York: Random House, 1970.

Reynolds, Paul Davidson. A Primer in Theory Construction. Indianapolis: Bobbs-Merrill, 1971.

Rosenberg, Howard. "Philosophy in a Pop Key." McLuhan: Hot and Cool, ed. Gerald E. Stearn. New York: Dial Press, 1967, :196

Rosenthal, R., ed. McLuhan, Pro and Con, New York: Pelican Books/Penguin Books, 1968

Rossey, William A. "Toasting Marshmallows over a pot Bellied Stove." Art Education, 1970, 23 (8), 12

Ruesh J. and Kees, W. Non Verbal Communication. Berkeley: University of California Press, 1956.

Scharfe, Carl. "Marshall McLuhan and Barrington Nevitt with students and guests: A Fireside Chat." The Innis Herald 10:4 (March 10 1977) :6.

Segall, M.H., Campbell, D.T. and Herskovits, M.J. The Influence of Culture on Visual Perception. Bobbs-Merrill, 1966.

"Understanding Marshall McLuhan: or Will T.V. Put a Zombie in Your Future." Senior Scholastic, XC (April 28, 1967), p.13.

Sommer, Robert. Tight Spaces: Hard Architecture and How to Humanize it. Englewood Cliffs, N.J. Prentice-Hall, 1974.

Stearns, G.E. ed. McLuhan Hot and Cool. Penguin, 1968.

Stone, Blair Francis. "Marshall McLuhan and the Humanist Tradition: Media Theory and Encyclopedic Learning." Ph.D. Dissertation, University of Massachusetts, 1974.

Striegel, James Finley. "Marshall McLuhan on Media." Ph.D. dissertation, Union Graduate School, Ohio, 1978.

Sullivan, H.S. The Interpersonal Theory of Psychiatry. New York: Norton, 1953.

Theall, Donald F. "The Role of Aesthetic Theory in (Mass) Communication Theory." Montreal, Canada: International Communication Association. ERIC Document Reproduction Service No. ED 077 047, 1973 . Descriptor Resources in Education (ERIC).

Thompson, W.E. Inquiries into the Epistemology of Visual Learning. Doctoral dissertation, University of Oregon, 1976. Dissertation Abstracts International, 1977, (University Microfilms No. 77-13, 215)

Toffler, Alvin. Future Shock. New York: Random House, 1970.

Trotter, R.J. "The Other Hemisphere." Science News 109, April 3, 1976.

R. Warren. "The Ecological Nature of Perceptual Systems." In E.C. Carterette and M.P. Friedman (eds.), Handbook of Perception Perceptual Ecology. New York: Academic Press, 1978.

Wygant, Foster. "Stasis Amidst Change: A prediction about the Art." Studies in Art Education, 14 (2), 1972-73

Youngblood, Gene. Expanded Media. New York: E.P. Dutton, 1970.

Youngblood, Michael S. "The Hemisphericity Wagon Leaves Laterality Station at 12:45 for Art Superiority Land." Studies in Art Education 21:1.

APPENDICES - ART EDUCATOR'S PERCEPTION OF MCLUHAN'S IDEAS

Appendix 1: Survey of Journals in Art Education

Survey of Art Education and Studies in Art Education from 1960-1986.

Marshall McLuhan's work appeared in many bibliographies; he was specifically referred to in the following fifteen articles:

Roy Behrens, "Creative Invention in Science and Art," Art Education, 26 (4) (1973) :2-4.

Roy Behrens, "Perception in the Visual Arts," Art Education, 22 (3) (1969) : 12-15.

Graeme F. Chalmers, "A Cultural Foundation for Education in the Arts," Art Education, 27 (1) (1974) : 21-5.

Diané B. Chichura, "Sight and Sound," Art Education, 23 (3) (1970) :27-28.

Earl Collins, "Art Education and the Rapidly Changing World," Art Education, 24 (8) (1971) : 7-11.

Vernon D. Dame, "Art, Artist and Environmental Awareness," Art Education, 23 (7)(1970) : 53-4.

Rex E. Dorethy, "Relevancy of College Art Education programs," Art Education, 25 (6) (1972) : 2-4.

D.M. Fuller, "The Junk Environment project," Art Education, 23 (9) (1970):16-33.

Bill Heyduck, "Media Mania," Art Education, 28 (1) (1975) : 24-6.

Dean Howell, "The Sensuous Self - An Undercover Struggle in Making of Art," Art Education, 30 (6) (1977) : 21-9. 41

Dennis M. Humes "Art as Antienvironment," Art Education, 26 (9) (1973) : 205.

Al Hurwitz, "Experiment in Intermedia," Art Education, 23 (3) (1970) : 10-16.

Max Knee, "Instruction in Art for Classroom Teachers," Art Education, 23 (4) (1970) : 30-32.

William A. Rossey, "Toasting Marshmallows Over a pot Bellied Stove," Art Education, 23 (8) (1970) : 12-17.

Foster Wygant, "Stasis Amidst Change: A prediction about the Arts," Studies in Art Education, 14 (2) 1972-73.

Of these fifteen articles, only one dealt exclusively with McLuhan's approach to art education¹. The others recognized McLuhan's contribution and associated his ideas to a specific topic of concern in art education. Only one indirect criticism of McLuhan appeared². Only one article³ was found in Studies in Art Education; all the others came from Art Education.

Roy Behrens, "Creative Invention in Science and Art," Art Education, 26 (4) (1973) : 2-4.

1) Intelligence and invention:

In sum; intelligence is the ability to relate one thing to another in a way that is consistent with conventional categories, expectations, and postulates. Invention is the breaking down of these conventional similarities and the making of new and unforeseen connections.

Invention is the finding of new postulates; intelligence is the predictable growth of those postulates.⁴

2) Only relationships are observable:

¹Dennis M. Humes, "Art as Antienvironment," Art Education, 26 (9) (1973) : 205.

²Foster Wygant, "Stasis Amidst Change: A prediction about the Arts," Studies in Art Education, 14 (2) (19..) :

³Foster Wygant, "Stasis Amidst Change: A prediction about the Arts," Studies in Art Education, 14 (2) (19..) :

⁴Roy Behrens, "Creative Invention in Science and Art," Art Education, 26 (4) (1973) : 3

The distinction between creation and invention must be recognized if we are to point out the foremost character of human invention, which is the combinatory relationship between the old elements, not the elements within themselves.

Things themselves are not observable. Only the relationships between things are observable. Marshall McLuhan, *Hot and Cool*.

Whatever their differences, the making of relationships is common to both intelligence and invention.⁵

Relationships make the world "intelligible, and, without them, we could not distinguish the buzzing from the booming in the "big, booming, buzzing confusion described by William James.⁶

Relationships are formed according to the degree of similarity between elements. The element of the boom is perceived as a separate element because it can be distinguished from its surroundings. Likewise, a buzz is what it is because it is similar to other buzzes or, at least, not very similar to a boom. All this is the same kind of figure-ground grouping that has been considered by the Gestalt theories of visual organization, and it is the same ability which allows us to see an object as being a separate "thing from its surroundings.⁷

3) Metaphor:

The poet is like the child because poetry is metaphor and metaphor is contradiction. It is not simply a comparison of similarities, but rather a transformation in which A becomes equal to and the same as B.

The difficulties in discussing poetic metaphor are the same as in the analysis of nearly all non-discursive inventions - the connections and transformations take place at a level that is largely affective rather than conceptual. We do not think them; we feel them.⁸

4) Art education:

⁵ibid., p.2.

⁶ibid., p.3.

⁷ibid., p.3.

⁸ibid., p.4.

It is axiomatic that the child's vision is dulled as he is schooled to the regimented responses which will be expected and required of him in an adult world. The childlike and intuitive "plasticity of vision" necessary to creativity on the adult level involves a paradox: it is childlike, but it is also the childlike transposed, informed by an adult sense of responsibility and purposiveness.⁹

Roy Behrens, "Perception in the Visual Arts," Art Education, 22 (3) (1969) : 12-15.

1) A human/environment interaction model for arts:

Each original artist has an element of the explorer in him: the poet does not "manipulate words" as Watson thought, he explores the emotive and descriptive potentialities of languages; the painter is engaged, throughout his life, in learning to see.¹⁰

The effects of technology do not occur at the level of opinion or concepts, but alter sense ratios or patterns of perception steadily and without any resistance. The serious artist is the only person able to encounter technology with impunity, just because he is an expert aware of the changes in sense perception.¹¹

When we speak of perception, we usually mean those physical and mental processes through which we come to know "what is" Using this knowledge, we can learn to interact with other people, and with the objects and events of our environment. We can also say that if input is relevant to output, then as our ability to perceive is improved, so might our ability to interact be improved.¹²

If perception enables us to interact with other people, and with the events and objects of our environment; if output (interaction with "what is" is relevant to and determined by input (knowledge and experience obtained through our perception), then the making of a work of visual art is governed by the same biases and the same principles which govern the organization of a visual percept. In short, we can say that because the same organizational factors which determine our seeing also determine

⁹William J.J. Gordon. Synectics, The Development of Creative Capacity. New York: Collier Books, 1968.

¹⁰Arthur Koestler, The Act of Creation. New York : Dell Publishing-Co., Inc., 1967.

¹¹Marshall McLuhan, Understanding Media. New York: McGraw-Hill, 1964.

¹²Roy Behrens, "Perception in the Visual Arts," Art Education, 22 (3) (1969): 12

our making, then a work of visual art is a 'conscientia record of the perceptual principles of one man - the artist.¹³

Furthermore, if we agree that a work of art is that, and if the knowledge and the experience of the artist are determined by the culture within which he lives, then the history of works of visual art is the history of the principles of perceptual organization which were predominate to the culture within which those works were made. What we know and believe, determines what we perceive; what we perceive, determines what we make. Egyptian art is a record of the perceptual principles of Greek culture - especially Euclidean proportion - which "remained as indelibly printed on European art as the categories of Aristotle on European philosophy."

If the history of the visual arts is the history of the perceptual principles of past cultures, then it is possible that exposure to and study of the visual arts may enable us to discover new ways of seeing other than our own, and to know what our own perception does not presently allow us to know. If a work of visual art within our own culture is a record of the perceptual principles of our culture (including our visual syntax), then it is possible that the making and the study of works of visual art in our own culture may enable us to better understand and to better employ that perception in our perceptual input and, to follow, in our output, that is, our interactions with other people and the objects and events of our environment.¹⁴

Graeme F. Chalmers, "A Cultural Foundation for Education in the Arts," Art Education, 27 (1) (1974) : 21-5.

1) More attention should be given to social values:

In this respect, June K. McFee, Bernard Forman, Eugene Griksby, and Vincent Lanier are among the few who have publicly admitted the shortcomings of much current art education. The major cultural shortcoming identified by these writers is that the social values inherent in the art experience are largely overlooked.¹⁵

If art education involves cultural understanding, then a case can be made for the integration of art with social studies in the public school curriculum. By isolating art, or any "subject" from life, we can make it

¹³ibid., p.12.

¹⁴ibid., p.15.

¹⁵Graeme F. Chalmers, "A Cultural Foundation for Education in the Arts," Art Education, 27 (1) (1974) : 21

sterile. This is not to deny that at times we may isolate art knowingly and for a purpose as long as we recognize that such isolation is conceptual and not "real" but is done in order to obtain answers to specific questions.¹⁶

2) Need to work with newer media:

I have already implied that students should be working with newer media - and I now need to emphasize that any study of contemporary society should concern itself with the popular arts as typified by the motion picture, television, poster, and other mass media.¹⁷

3) Need to understand mass media:

...it seems reasonable to demand that our schools educate our young people to "deal" with the mass media. Grace Graham¹⁸ sees the ideal role of education as an umbrella that stops mass media pressure groups using the mass media from influencing freedom of thought.¹⁹

4) Need to examine the relationship between art and science:

preparing students for the future is impossible without involving them in the present. As Marshall McLuhan²⁰ states "What could be more absurd than to go from an electric, integral world into a disintegrated, fragmented, mechanical world of the old nineteenth-century technology which we call our school system." Some art educators have stated that the art teacher, if he is not to be superfluous, must examine the relationships that exist between art and science. Western education has

¹⁶ibid.

¹⁷ibid., p.24

¹⁸Grace Graham, The Public School in the new Society. New York: Harper and Row, 1969, p.2.

¹⁹Graeme F. Chalmers, "A Cultural Foundation for Education in the Arts," Art Education, 27 (1) (1974) : 24

²⁰Marshall McLuhan, "Television in a new light" in Stanley T. Donner, The Meaning of Commercial Television. Austin, Texas: University of Texas Press, 1967, p.88

failed to help rising generations of non-scientists to understand "science"
21

Diane B. Chichura, "Sight and Sound," Art Education, 23 (3) (1970) : 27-28.

1) Humanities in Art Education:

Marshall McLuhan in The Medium is the Message, states: "Our "Age of Anxiety" is, in great part, the result of trying to do today's job with yesterday's tools - with yesterday's concepts."²² Because this generation exists in a rapidly changing world and because it is different from the past, we must re-examine our goals and direction, to assure that we are meeting our students' needs.²³

Humanities, more than many subjects, offers the opportunity to change what has been. It is a means of showing students how to become involved and learn for themselves.²⁴

2) The educational environment:

Humanities in 1970 could mean creating a dynamic environment which provides for the real involvement of students: investigating, questioning, and evaluating for themselves. According to McLuhan: "Youth instinctively understands the present environment - the electric drama."²⁵

... As educator we must be concerned with creating an environment for making learning exciting and meaningful. Students today, more than ever, are deeply concerned with their world and desperately want to contribute.²⁶

²¹Graeme F. Chalmers, "A Cultural Foundation for Education in the Arts," Art Education, 27 (1) (1974) : 24 .

²²Marshall McLuhan and Quentin Fiore, The Medium is the Message, 1967, p.2

²³Diane B. Chichura, "Sight and Sound," Art Education, 23 (3) (1970) : 28.

²⁴Ibid.

²⁵Marshall McLuhan and Quentin Fiore, The Medium is the Message, 1967, p.2

²⁶Diane B. Chichura, "Sight and Sound," Art Education, 23 (3) (1970) : 28.

Earl Collins, "Art Education and the Rapidly Changing World," Art Education, 24 (8) (1971) : 7-11.

1) Changing nature of our society and need to reexamine our practices:

... There is a need to examine the practices of art education as they relate to its generally stated goals and the changing nature of our society.²⁷

... Tomorrow is here before yesterday is finished. Critics such as Alvin Toffler in Future Shock²⁸ and Charles Reich in The Greening of America²⁹ and Marshall McLuhan in Understanding Media³⁰ deal with the issue of educational relevancy as it relates to a continually changing world. Marshall McLuhan has accused education of "marching backward into the future" and suggests that "children interrupt their education to attend school." Most attempts at relevancy are superficial due to a failure to analyze the needs of the learner, who is confronted with constant and rapidly accelerating change throughout the world.³¹

2) Need for media literacy:

Western man has been dominated by the concept of literacy being of a written or oral mode of expression based upon the alphabet. This narrow understanding of literacy related to communication has caused a lack of understanding regarding the many modes of expression found in the arts and the area of mass media based upon electric technology and graphic reproduction. A literate, feeling human being is one who understands that there are many modes of formal and informal symbolics which provide information and cues of both a knowing and feeling nature. The lack of literacy in this area has provided the opportunity for people to be manipulated and to be offered generally inferior and distasteful forms of artistic expression.³²

²⁷Earl Collins, "Art Education and the Rapidly Changing World," Art Education, 24 (8) (1971) : 9

²⁸Alvin Toffler, Future Shock. New York: Random House, 1970.

²⁹Charles A. Reich, The Greening of America. New York: Random House, 1970.

³⁰Marshall McLuhan, Understanding Media. New York: McGraw-Hill, 1964.

³¹Earl Collins, "Art Education and the Rapidly Changing World," Art Education, 24 (8) (1971) : 7

³²*ibid.*, p.8.

3) Holistic approach (Humanities):

"If education's goal is to provide the opportunity for the development of human beings who can act on these and other major issues in a knowing and feeling way, these issues should then become the basis for organizing the content of instruction in all subject areas. None of these issues can be dealt with effectively in a fragmented, isolated manner by people who are aware of only one aspect of the issue. In order to understand them, it is necessary to provide holistic educational experiences.³³

Vernon D. Dame, "Art, Artist and Environmental Awareness," Art Education, 23 (7) (1970) : 53-4.

1) Environmental role of the artist:

Marshall McLuhan identified an environmental role for the artist when in his introduction to the second edition of Understanding Media he wrote: As our proliferating technologies have created a whole series of new environments, men have become aware of the arts as "anti-environments" or "counter-environments" that provide us with the means of perceiving the environment itself ... Art as anti-environment becomes more than ever a means of learning perception and judgment. Art offered as a consumer commodity rather than as a means of training perception is as ludicrous and snobbish as always.³⁴

McLuhan was calling for artists to follow the scientist and step into the public arena - to purposely use their art to communicate to the public an appreciation for and perceptive understanding of the world around them.³⁵

... The real problem is an ethical one. It has to do with morality and emotions. It will not be solved by restrictive laws or by improved technology but by the awakening in individuals of a personal awareness,

³³ibid.

³⁴Marshall McLuhan, Understanding Media. New York: McGraw-Hill, 1964.

³⁵Vernon D. Dame, "Art, Artist and Environmental Awareness," Art Education, 23 (7) (1970) : 53

sensitivity, and appreciation for the problems facing mankind - exactly those attributes the artist is most capable of communicating.³⁶

2) Artist's effect on society:

Art, regardless of the media, is in the final analysis a commentary by its creator on the state of the environment of which the artist is a product. It is in this light that the artist must perceive his effect on his society.³⁷

Rex E. Dorethy , "Relevancy of College Art Education program," Art Education, 25 (6) (1972) : 2-4.

1) Future oriented:

... The key emphasis, however, is that program development should be future oriented, concerned mainly with what will be, and then with what is or was, in that order.³⁸ (3)

2) Involvement and new point of view:

... A recent conference guest on the Illinois State University campus, John Jarolinek, spoke at some length on the subject of openmindedness and the need for "getting out of the business of giving answers and becoming more aware of getting youngsters involved."³⁹ He was speaking of elementary 50 age children, but he was speaking to university students and faculty.⁴⁰

What is at stake here is nothing less than the survival of art education as a viable portion of the curriculum a survival that does not seem likely if we approach the social drama, the environment, with a fixed and

³⁶ibid.,p.54.

³⁷ibid.

³⁸Rex E. Dorethy , "Relevancy of College Art Education program," Art Education, 25 (6) (1972) : 3

³⁹John Jarolinek, "Residuals of a Decade of Reform", address at the Fourth Annual Elementary Education Conference, Illinois State University, 1970.

⁴⁰ibid.,p.3

unchangeable point of view, "the witness repetitive response to the unperceived."⁴¹

3) Change:

Marshall McLuhan states that where students once learned more from within the school than from without, the opposite situation may now exist. Following McLuhan's own hypothesis of instantaneous electric information retrieval, I would like to suggest that McLuhan is also now obsolete. Change knows no favorites.⁴²

D.M. Fuller, "The Junk Environment project," Art Education, 23 (9) (1970) : 16-33.

1) McLuhan's theories as the basis of an experiment in Art Education:

The experimental results as described, reflect two basic behavioral patterns in what the students said. There were opposite reactions on many of the categories. I consider the students themselves participant observers. It's these two elements that determined the dynamic and direction of the project. Let me deal with the two behavioral patterns first, the tuned-out and the turned-on. These electronic terms are accurate descriptions, not superficial attempts at relevance. It is not inaccurate to say that McLuhan's view of television as an electronic extension of man's central nervous system and the human attempts to survive the psychological bombast of his environment, are the same.⁴³

The message of the medium has developed a species that can turn on or tune out intrusions of the psychological environment. The response in the main is dependent upon recognizing control of medium as necessary for psychological survival of the species. Do you turn it off to control this extended mind or tune in to gain control of the environment by becoming

⁴¹ Marshall McLuhan and Quentin Fiore, The Medium is the Message, New York: Bantam Books, 1967.

⁴² Marshall McLuhan, This is Marshall McLuhan: The Medium is the Message. Film produced by McGraw-Hill. 1967.

⁴³ D.M. Fuller, "The Junk Environment project," Art Education, 23 (9) (1970) : 33.

an integral part of the whole, "Totally involved", manipulating and manipulated?⁴⁴

In MEDIUM AS MESSAGE it's electronics, in WAR AND PEACE IN THE GLOBAL VILLAGE it's war tactics. But it's the cause that concerns me. What causes the preference for the enduring tactic or the turned off response over aggression and tuning in?⁴⁵

Bill Heyduck, "Media Mania," Art Education, 28 (1) (1975) : 24-6.

1) Understanding Media:

I am concerned, and I search my mind for someone or something to blame other than myself and others like me. Can I blame McLuhan, or was he really warning us as to what a really potent force media is? Were the demands by a permissive general public ;or a painless education a reason for our taking this route? Or did the teaching profession get so caught up in the technological surge that they, too, saw only the perfection of the end product and not the true impact of the means to get there?⁴⁶

2) Technology and education:

Education is a way of infusing a way of life into a population. It is the responsibility of the educators to protect the way of life they value if it is to survive.⁴⁷

One of the first things that needs to be protected are small classes with the person to person contact. Media used in the classroom should be used to help clarify or show something that can't be better shown by the human instructor. Teaching machines should be used to add more background for the student interested in the subject, but should be used in his free time and not as a substitute for the human teacher.⁴⁸

⁴⁴ibid.

⁴⁵ibid.

⁴⁶Bill Heyduck, "Media Mania," Art Education, 28 (1) (1975) : 26.

⁴⁷ibid.

⁴⁸ibid.

The human body and the human mind must never be used by the machine or by those controlling the machine, lest they, too, become merely an extension of that machine. May humanity always remain human, faults and all.⁴⁹

Dean Howell, "The Sensuous Self - An Undercover Struggle in Making of Art," Art Education, 30 (6) (1977) : 21-9.

1) Sensual Self:

... So when we reflect introspectively about ourselves, we ought to be conscious of our sensual feelings and able to let the sensational side of ourselves emerge without special consideration. Such is not the case, however. For the sensual self, there is a struggle.⁵⁰

2) Body as medium:

The transmission of sensual information through our living body in this way creates an interdependent relationship among the receptors, transmitters, and the receivers of the body. In this sense, one's total body is, in itself, a source, a medium and object through which the meaning of life is created and expressed.⁵¹

Denis M. Humes, "Art as Antienvironment," Art Education 26 (9) 1973 : 3-5

1) Art as Antienvironment

OVERVIEW

Due to the advent of electric circuitry, we are undergoing a technological acceleration which has literally thrown us forward into an environment for which our present education systems are unable to prepare us. More than ever before, we need a system of education system which will

⁴⁹ibid.

⁵⁰Dean Howell, "The Sensuous Self - An Undercover Struggle in Making of Art," Art Education, 30 (6) (1977) : 21.

⁵¹Marshall McLuhan, "Report of project in Understanding New Media" National Association of Educational Broadcasters, pursuant to a contract with the Office of Education, U.S. Dept. of H.E.W., June 1960, p. 18.

provide for a host of survival measures, the most important of which is the fostering of the individual in terms of his becoming, perceiving, and behaving as a fully functioning individual. A fully functioning human beings is one who, according to Carl Rogers, is "sensitively open to all of his experience, sensitive to what is going on in his environment, sensitive to other individuals with whom he is in relationship, and sensitive perhaps most of all to the feelings, reactions, and emergent meanings which he discovers in himself."⁵²

To accomplish such a task, the school (ideally), or at least the art education area, must become an open system of education and a citadel for the launching of criticism directed at the existing society. Such an open system would set the stage for education to play a critical role in promoting a society which is capable of "ever-renewing" itself. We must, to use a time-worn, over-used phrase, tell it like it is", or perhaps, more important, learn to see it as it is. Seeing it as it is, however, is much more difficult than one would imagine. Our environment, as Marshall McLuhan points out, has the insidious nature of accelerating itself to the point where man falls prey to the "electric circuitry" of the age. This environment once familiar to man, has now been restructured into incomprehensively complex systems.

The salvation from such an anxiety-provoking state of affairs can come about by creation of a "counter environment". An "antienvironment", as McLuhan calls it is designed to bring about perception of our environment. The schools, Robert Weiner thinks, should be given this task: to educate individuals to read the instruments of the counter environment. The instruments, of course will be people, sensitive to the environment and its effects. McLuhan thinks such people are the artists of a society, who because of their unique social status, refuse to conform to their environment and maintain the peculiar ability to be part of it, as well as apart from it.

It is in regard to the requirement that a society be capable of "ever-renewing" itself by way of creating an antienvironment that I propose art education, or rather education about artists and art, address itself. The importance of the artist and his language cannot be underestimated in their potential contributions to mankind's new survival measures founded upon increased perceptual awareness.

-Al Hurwitz, "Experiment in Intermedia," Art Education, 23 (3) (1970) :10-16.

1) Media Arts:

⁵²Arthur W. Combs, chairman and editor, Perceiving, Behaving, Becoming, 1962 Yearbook, Association for Supervision and Curriculum Development, A department of the NEA, Washington D.C., p.31

By the end of the third week we found we were working in three somewhat distinct domains:

1) The media area, which may be described as those activities which evolve out of such communications "hardware" as cameras, tape recorders, theatrical lighting, and projected images. It is difficult to state the case for the use of media as art without noting the role of Marshall McLuhan in the construction of theoretical basis for its use. In an address to the International Center for the Communication in Arts and Sciences, McLuhan stated⁵³ (among other things): "... sensory levels have already changed drastically since TV. The visual component in our lives has dropped dramatically, and the visceral, kinetic, and auditory modes of responses have risen to compensate." In short, the desire of young people to explore the technology of their age as a means of expression may be viewed as an inevitable sensory shift, capable of altering not only the artist's expression but the public views of entertainment as well.⁵⁴

Max Knee, "Instruction in Art for Classroom Teachers," Art Education, 23 (4) (1970) : 30-32.

1) Rear View Mirror:

I wish to examine one problem which I consider crucial to the task ahead: the art training of the elementary classroom teacher.⁵⁵

One cannot logically question the need for attempts to examine and evaluate our past endeavors. There also have appeared during this period various efforts to establish new philosophical and curricular groundrules for the years ahead.

Yet, despite these efforts, I somehow suspect that a decade hence we may look back and possibly find that, as McLuhan suggests, we viewed the present through a rear-view mirror and marched backwards into the future.⁵⁶

Rossey, William A. Toasting Marshmallows over a pot Bellied Stove. Art Education, 1970, 23 (8), 12-17.

⁵³Vision '68 Conference, Southern Illinois University.

⁵⁴Al Hurwitz, "Experiment in Intermedia," Art Education, 23 (3) (1970) :15

⁵⁵Max Knee, "Instruction in Art for Classroom Teachers," Art Education, 23 (4) (1970) : 30

⁵⁶Marshall McLuhan and Quentin Fiore, The Medium is the Message (New York: Bantam Books, Inc., 1967), p. 75.

1) The future lies in the hands of artists:

As an art educator reflecting upon the recent E-week, I begin to see Marshall McLuhan's prophecy⁵⁷ that the future lies in the hands of artists coming to haunt us. It swelled our corporate pride to have the "prophet of the new age" turn to artists. He possibly reasoned that the solutions to our (eco-logical) problems would flow from (a) the more highly developed sensory equipment of the artist, or (b) the prophetic nature of art, i.e. making us more aware through the artists' rejection of the "rearview mirror" outlook, or (c) an awakening of social responsibilities on the part of the artistic world - bringing us us out of our-ivory lofts.⁵⁸

2) Everyone is an artist (often quoted by McLuhan):

The artistic concept capsulated in the Balinese slogan, "We have no artists: everyone is an artist" foreshadowed the "recta ratio factibilium" of the Middle Ages (formulated by Maritain and Gilson⁵⁹) that "art is anything well made. That everyone is a special kind of artist runs contrary to current educational time-clock-punching; appreciation for the habit of making well cannot be mass produced on a semester course basis. Our art schools have allowed the mania for mediocrity and the buying power of a college degree to replace sensitivity to the needs of life.⁶⁰ The Chinese appreciated handmade teacups and ceremonial;⁶¹ the Africans used masks (mirroring our contemporary need for costumed game-playing - witness Mardi Gras and sensitivity session role-exchange); the Essenes saw no need for real estate boundary lines; Oceanic people frequently exchanged roles to satisfy needs - Examples could be multiplied of the Third World's awakening to the interchangeability of

⁵⁷ Marshall McLuhan and Quentin Fiore, War and peace in the Global Village. New York: Bantam Books, Inc., 1968.

⁵⁸ Rossey, William A. Toasting Marshmallows over a pot Bellied Stove. Art Education, 1970, 23 (8), 12

⁵⁹ Jacques Maritain, Art and Scholasticism (New York: Charles Scribner's and Sons, 1954) Etienne Gilson, Painting and Reality (New York: pantheon Books, 1955)

⁶⁰ Harold Taylor, Art and the Future. Art Ed., Blauvelt, N.Y. 1969, p.36.

⁶¹ Ruskin's Arts and Crafts Movement is beginning to look like a contemporary solution.

roles life's mysteries demand,⁶² rather than the up-tight belief that by contract the military-industrial-technological complex will determine identities through budgetary priorities.⁶³

3) Contemplation:

The artist needs time for the habit of contemplation. Creativity happens when the spirit is ready. The remote preparation demanded by the creative process means the day is not divisible into an employer's and employee's time. Inspiration comes anywhere, anytime. It demands almost an Eastern passivity to receive "vibes."⁶⁴

Foster Wygant, "Stasis Amidst Change: A prediction About the Arts," Studies in Art Education, 14 (2) (19..)

1) Critique of McLuhan's point of view:

Whether harried or exhilarated by the champions of change, art educators might have welcomed the conservative analyses in Leonard B. Meyer's *Music, the Arts, and Ideas* when it appeared in 1867.⁶⁵

... But the major study begins with Chapter V, "The End of the Renaissance," in which Meyer considers the arts generally, and introduces his controlling concern: the possibility that the entire post-medieval humanist-rationalist tradition in Western art may be terminated by the contemporary anti-formalist, phenomenalist-sensationalist movement.⁶⁶

To establish the plausability of stasis, in the face of all current claims that change is our only certainty, Meyer has to challenge several well established assumptions as to the inevitability of change in the arts, in such a way as to set up the claim of continuing vitality for earlier styles: a

⁶²Theodore Roszak, The Making of a Counter Culture. Garden City, N.Y.: Anchor Books, 1969, Chapters 1 and 7.

⁶³Rossey, William A. Toasting Marshmallows over a pot Bellied Stove. Art Education, 1970, 23 (8), 14

⁶⁴ibid.

⁶⁵Foster Wygant, "Stasis Amidst Change: A prediction About the Arts," Studies in Art Education, 14 (2) (19..) p.47

⁶⁶ibid.

formalist eclecticism must appear as a valid component of late twentieth century culture.⁶⁷

... predictions of change, then, are meaningless without specification of type and scale of change. We are cautioned against over-reaction: the magnitude of innovations should be assessed from a broad viewpoint, with a sense of history.⁶⁸

... Conversely, any change tendency which is generated technically within one medium will be constrained by its other technical factors (not by the "culture"), including, for example, difficulties for performers and for the audience who must unlearn and relearn appropriate modes of response to the particular "language" of that medium.⁶⁹

Despite McLuhan, there is little reason to believe that technological changes soon will transform human interests and experience to the extent that traditional modes and masterpieces will lose all appeal. If reality becomes more mediated, and conceptual, the significance of the ordinary will remain urgent, the thingness of the aesthetic object will be valued. Yet even though new science does not supplant old art, our world concept will change, and new art will emerge. But, as Meyer points out, most of us already belong to several audiences; we can welcome the enrichments of new experience without surrendering older insights and achievements. However uncertain, Meyer's flexible projection will guide the observer - and the art teacher - more usefully than announcements of imminent esthetic revolution.⁷⁰

⁶⁷Ibid., p.48.

⁶⁸Ibid.

⁶⁹Ibid.

⁷⁰Ibid., p.48-50.

Appendix 2 : Survey of Journals in Education

Survey of ERIC - Current Index to Journals in Education 1969-82,
Education Index 1951-82, Canadian Education Index 1966-1980.

Twenty articles written by Marshall McLuhan and sixty-five articles in reference to McLuhan's work, were found. Few articles dealt specifically with art education, but as a whole they do give a broad perspective on how McLuhan was perceived by educators in different fields.

D. Allen, "And everyone quoted McLuhan a lot: an autobiographical retrospective on the media studies movement," Media and Methods, 17 (1) (1980) : 22-28 .

A.J. Barry, "Who's afraid of Marshall McLuhan?" Delta Kappa Gamma Bulletin, 39 (1979) : 26-33.

B. Battle, "Gone with McLuhan," The Record, 69 (1967) : 281-3.

Pauline Beaudry, "Livre et les mass media: une rencontre, deux cultures," La Revue Scolaire, 26 (5) (1976) :14-15.

Robert W. Blake, "The New English: Hot Stuff or Cool Man, Cool?" English Journal, 60 (6) (1971) : 728-734.

F. Branscombe, "Marshall McLuhan Mediated," A.V. Instruction, 14 (6) (1969) : 76-7.

D.B. Bronson, "Reading, writing and McLuhan," English Journal, 57 (1968) : 1151-5.

James W. Carey, " McLuhan and Mumford: The Roots of Modern Media Analysis," Journal of Communication, 31 (3) (1981) :162-178.

W.R. Comstock, " Marshall McLuhan's Theory of Sensory Form: A Theological Reflection," Sound, 51 (1968) :166-83.

C. Cookson, "McLuhan culture centre closes but his work goes on," The Times Higher Education Supplement, (401, July 1980) : 5.

Thomas W. Cooper, "McLuhan and Innis: The Canadian Theme of Boundless Exploration," Journal of Communication, 31 (3) (1981) :153-161.

P. Crow, "Cool hand McLuhan," The Texas Outlook, 52 (1968) : 52-3, .
(Kentucky School Journal, 1969, 47, 20+.)

Culkin, J.M. "Churchman's guide to Marshall McLuhan," Religious Education, 63 (6) (1968) : 457-62.

James M. Curtis, "McLuhan: The Aesthete as Historial," Journal of Communication, 31 (3) (1981) :144-152.

H. Danziger, "Music for the children of Marshall McLuhan," Music Educator's Journal, 57 (1970) : 20-4.

George H. Douglas', The Hot and Cold Media principle: Theory or Rhetoric," E.T.C. Review of General Semantics, 27 (3)(1970) : 339-44.

Douglas Ehninger, "Marshall McLuhan: His Significance for the Field of Speech Communication," Speech Journal, 17-24 (1969) : 6

David English, "On one way or another (Understanding Marshall McLuhan and Frank Watts)," English in Australia, 12 (1970) : 41-9.

Sing-Nan Fen, "Marshall McLuhan "Understanding Media"," Journal of Educational Thought, 3 (1) (1969) :161-80.

A.W. Foshay, "The Importance of Marshall McLuhan Review of the Gutenberg Galaxy," Educational Leadership, 21 (1963) : 35.

J. Fowles, "McLuhan: The medium was his message," Media and Methods, 17 (9) (1981) : 8-9.

Sister Mary Frederick, "Messages, McLuhan and Moran," N.C.E.A. Bulletin 64 (3) (1968) : 34-9

M. Gill and others, " McLuhan, where are you now that we need you?" Arbos, 6 (2) :10-15.

R.J. Goba, " Marshall McLuhan and Sir patrick Sperrs," English Journal, 60 (1971) : 62-4.

Bruce E. Gronbeck, "McLuhan as rhetorical theorist," Journal of Communication, 31 (3) (1981) : 117-128.

W.J Gushue, "Marshall McLuhan: educational implications," McGill Journal of Education, 4 (1) (1969) : 3-22.

Brian Hollingworth, "Marshall McLuhan and the Apocalypse," English in Education, 8 (1) (1974) : 3-12.

Lynn Holmes, "Notes on McLuhan and the teaching of English," Monday Morning, 6 (1) (1971) : 13.

Michael G. Hydak, "Marshall McLuhan and the second language teacher," Alberta Modern Language Journal, 15 (2) (1977) : 6-10.

W.K Kilpatrick, "McLuhan: Implications for adolescence," Adolescence, 6 (22) (1971) : 235-58.

M. Lacroix, "McLuhan and the grammar of media," Alberta English, 12 (1972) : 18-21.

Paul Levinson, "McLuhan and Rationality," Journal of Communication, 31 (3) (1981) : 179-188.

Paul Levinson, G.N. Gordon, "McLuhan and McLuhanism: Two views," Educational Technology, 22 (1)(1982) : 39-46.

E. Lueders, "McLuhan Thesis: its limits and its appeal," English Journal, 57 (1968) : 565-7.

J. Magnasco, "Communication Theory and Marshall McLuhan," International Journal of Instructional Media, 8 (2) (1980-81) : 137-42.

Curtis McCray, "Before the message: The social ancestry of McLuhan's thought," Media Ecology Review, 2 (7) (1973) : 7-8.

Marshall McLuhan, "Adopt a college," This Magazine is About Schools, 2 (4) (1968) : 50-5.

Marshall McLuhan, R.K. Logan, "Alphabet Mother of invention," E.T.C. A Review of General Semantics, 34 (4) (1977) : 373-83.

Marshall McLuhan, "At the flippoint of time: The point of more return?" Journal of Communication, 25 (1975) : 102-6.

Marshall McLuhan, "At the moment of Sputnik the planet became a global theatre in which there are no spectators but only actors," Journal of Communication, 24 (1) (1974) : 48-58.

Marshall McLuhan, "The Brain and the Media: The "Western" Hemisphere," Journal of Communication, 28 (4) (1978) : 54-60.

Marshall McLuhan, "Crack in the rear-view mirror (New environments created by new technologies)," McGill Journal of Education, 1 (1) (1966) :31-4.

Marshall McLuhan, "Education in the electronic age," Interchange, 1 (4) (1970) : 1-12.

Marshall McLuhan, "Electronics and the psychic drop-out," This Magazine is About Schools, 1 (1) (1966) : 37-42.

Marshall McLuhan, Bruce Powers, "Electronic Banking and the Death of privacy," Journal of Communication, 31 (1) (1981) :164-69.

Marshall McLuhan, "English Literature as Control Tower in Community Study," English Quarterly, 7 (1) (1974) : 3-6.

Marshall McLuhan, "Euclidean space to outer space: An informal discussion of the effects of acoustic and visual space in communications," ETC. A Review of General Semantics, 37 (3) (1980) : 224-37.

Marshall McLuhan, "Inside on the outside or the spaced out American," Journal of Communication, 26 (4) (1976) : 46-53.

Marshall McLuhan, and others, "The Laws of the Media: Multi Media," English Journal, 67 (8) (1978) : 92-94.

Marshall McLuhan and Bruce Powers, "Ma Bell Minus the Nantucket Gam: or the impact of high-speed data transmission," Journal of Communication, 31 (3) (1981) : 191-99.

Marshall McLuhan, "McLuhan's center awaits the message," The Times Higher Education Supplement, (392, April 25, 1970) : 5.

Marshall McLuhan, Barrington Nevitt, "Medium Meaning Message," Communication, 1 (1) (1974) : 27-33.

Marshall McLuhan, "Password is involvement," Monday Morning, 2 (1) (1967) :18-21.

Marshall McLuhan, "The Rise and Fall of Nature," Journal of Communication, 27 (4) (1977) : 80-81.

Marshall McLuhan, "Two Aspects of the Communications Revolution," Canadian Communications, 2,(1962) : 7-9.

Marshall McLuhan, "University and the City," University of Toronto Graduate, 3 (1970) : 75-80.

Milton J. McMenamin, "Was McLuhan Right? Educational and Industrial Television, 1 (10) (1975) : 42-47.

J. Melvin, "McLuhan the Medium," Phi Delta Kappan, 48 (1967) : 488-91.

Sam Neill, "Books and Marshall McLuhan," Library Quarterly, 41 (4) (1971) : 311-319.

S.D. Neill, "McLuhan's Media Charts Related to the process of Communication," AV Communication Review, 21 (1973) : 277-97.

L. Nulman, "McLuhanism: a Jewish educator's response," Religious Education, 65 (1970) : 503-7.

David R. Olson, "McLuhan: preface to Literacy," Journal of Communication, 31 (3) (1981) :136-143.

Walter J. Ong, "McLuhan as Teacher: The future is a thing of the past," Journal of Communication, 31 (3) (1981) : 129-135.

T. Palmer, "Gadfly and the dinosaur," English Journal, 58 (1969) : 69-74.

Bruce Powers, "Final thoughts: A collaborator on Marshall's Methods and Meanings," Journal of Communication, 31 (3) (1981) :189-90.

A. Rabil, "Future as history and history as the end: An interpretation of Marshall McLuhan," Sound, 51 (1968) : 80-100.

K.H. Rabin, "McLuhan, Media unrest," College and University Journal, 12 (5) (1973) : 26-9.

P. Radcliffe, (Ed.) "School is often an interruption of a child's education," Times Education Supplement, (2886, September 11, 1970) : 30.

Michael G. Ryan, "Ancestry of McLuhan's Theories," Media Probe, 2 (2) (1975) : 2-6.

Fernande Saint-Martin, "La Galaxie de Gutenberg ou le point de vue de Sirius sur l'occident," Liberté, (septembre 1967) : 21-37.

D.H. Schewe, "McLuhan's rhetorical devices in understanding media. Aesthetic Education, 5 (1971) :159-68.

R.T. Sidwell, "Cooling down the classroom: Some educational implications of the McLuhan thesis." The Educational Forum, 32 (3) (1968) : 351-8.

H.B. Siegel, "McLuhan, mass media and education," Journal of Experimental Education, 41 (3) (1973) : 68-70.

J.H. Sloan, "Understanding McLuhan: Some implications for the speech teacher and critic," The Speech Teacher, 17 (1) (1968) :140-4.

H.R. Smith, "Linear teacher and non-linear McLuhan," The Clearing House, 45 (1970) : 126-8.

H.R. Smith, "Media men arise: what if McLuhan is right," Educational Screen A.V. Guide, 47 (1968) : 18-19.

R. Sylvester, "McLuhan: plug into the twentieth century," The Instructor, 78 (3) (1968) : 53.

D.F. Theall, "Role of aesthetic theory in (mass) communication," Quarterly Journal of Speech, 61 (1975) : 271-8.

A. M. Thomas, "New World of Marshall McLuhan," Convergence, 1 (2) (1968) : 74-7.

Francis T. Villemain, "Aesthetic education in social perspective," Journal of Aesthetic Education, 4 (2) (1970) : 19.

E.C. Wallenfeldt, "Student personnel work in the electric age," Naspa Journal, 9 (1971) : 111-18.

Pere P. Warren, "Marshall McLuhan: le maitre a penser de l'age electronique." Relations, 318 (1967) : 194-6.

Jay W. Wilkey, "Marshall McLuhan and meaning in music," Music Education Journal, 56 (1) (1969) : 54-58.

E.E. Willis, "McLuhanism. Television and politics," Quarterly Journal of Speech, 54 (1968) : 404-9.

K. Whittingham, "U. of T. may close center," Chronicle of Higher Education, 20 (1980) : 18.

Appendix 3: Resources in Education (ERIC)

Survey of Educational Resources Information Center (ERIC); Resources in Education, Two documents written by Marshall McLuhan and nineteen documents in reference to McLuhan's writings were found:

Pierre Babin, (Ed.) "The Audio Visual Man," Dayton, Ohio: George A. Pflaum, ERIC Document Reproduction Service No. ED 065 998, 1970.

Breen, Myles P. A Technological Determinism Viewpoint of Stanton-Staggers Conflict Over "The Selling of the Pentagon: Print Man Versus Electronic Man." Chicago, Illinois: Speech Communication Association, ERIC Document Reproduction Service No. ED 075 887, 1972.

Thomas R. Donohue, "Getting Off the Back of the B.B.C.: Or How to Stop Sponging Off Rich Relatives," Washington, D.C.: National Association of Educational Broadcasters, ERIC Document Reproduction Service No. ED 116 655, 1975.

Douglas Ehninger, "Marshall McLuhan: His Significance for the Field of Speech Communication," New Haven, Connecticut: Southern Connecticut State College, ERIC Document Reproduction Service No. ED 075 870, 1969.

Thomas R. Giblin (Ed.) "Popular Media and the Teaching of English," Pacific Palisades, California: Goodyear Publishing, ERIC Document Reproduction Service No. ED 084 539, 1972.

Bruce E. Gronbeck, "On Taking Marshall McLuhan Seriously," Newport Beach, California: Western Speech Communication Association, ERIC Document Reproduction Service No. ED 099 921, 1974.

Alan Hancock, "Communication," New York N.Y.: Humanities Press, ERIC Document Reproduction Service No. ED 064 856, 1971.

Thomas E. Harris, "Understanding McLuhan: An Extension of Rhetoric," Minneapolis, Minnesota: International Communication Association, ERIC Document Reproduction Service No. ED 093 030, 1970.

Michael G. Hydak, "Marshall McLuhan and the Second - Language Teacher," Edmonton, Alberta: Alberta Teachers Association, ERIC Document Reproduction Service No. ED 150 875, 1977.

Richard, Katula, "A Selected Bibliography of Herbert Marshall McLuhan (1911-1973)," ERIC Document Reproduction Service No. ED 093 022, 1973.

Joseph Fletcher, Littell (Ed.), "Coping with the Mass Media," Evanston, Illinois: McDougal, Littell and Company, ERIC Document Reproduction Service No. ED 061 754, 1972.

Joseph Fletcher, Littell, (Ed.), "The Language of Man," Book 5. Evanston, Illinois: McDougal, Littell and Company, ERIC Document Reproduction Service No. ED 061 759, 1972.

Estelle C. Mannis, (Ed.) and Others. "Conference in Rhetorical Criticism, Address of the Conference and Commended Papers (1973-74)," Hayward, California: California State University, ERIC Document Reproduction Service No. ED 108 271, 1974.

Marshall McLuhan, "New Media and the New Education," ERIC Document Reproduction Service No. ED 002 729.

Marshall McLuhan, "Report on Understanding New Media," ERIC Document Reproduction Service No. ED 017 166, 1960.

Lewis Miller, "Partly Through the Rear-View Mirror," Washington, D.C.: National Association of Educational Broadcasters, ERIC Document Reproduction Service No. ED 115 300, 1975.

John Phelan, (Ed.), "Communications Control: Readings in the Motives and Structures of Censorship," New York, N.Y.: Sheed and Ward, ERIC Document Reproduction Service No. ED 038 407, 1969.

Howard Pierson, "Teaching Writing," Englewood Cliffs, New Jersey: Prentice Hall, ERIC Document Reproduction Service No. ED 064 709, 1972.

Michael G. Ryan, "The Social Ancestry of Marshall McLuhan's Theories," Chicago, Illinois: Speech Communication Association, ERIC Document Reproduction Service No. ED 089 386, 1972.

Donald F. Theall, "The Role of Aesthetic Theory in (Mass) Communication Theory," Montreal, Canada: International Communication Association, ERIC Document Reproduction Service No. ED 077 047, 1973.

Rebecca, West, "McLuhan and the Future of Literature," England: English Association, ERIC Document Reproduction Service No. ED 035 623, 1969.

Areas covered

Number of documents

Aesthetics

1

Language education	6
Mass communication	8
McLuhan (by or on)	4
Religious education	1
Speech communication	1

None of these documents deal specifically with McLuhan and Art Education. The document by Theall⁷¹ though quite general in nature does refer to McLuhan's ideas on art and the environment⁷². Some of the earlier writings of McLuhan are important since they precede his main work "Understanding Media"⁷³.

⁷¹Donald F. Theall, "The Role of Aesthetic Theory in (Mass) Communication Theory." Montreal, Canada: International Communication Association, ERIC Document Reproduction Service No. ED 077 047, 1973 .

⁷²Descriptor Resources in Education (ERIC):

This study in human communications ranges widely over scholarly work by Barthes, Bateson, Dewey, Richards, Peckman, Burke, and especially McLuhan, as well as art works by Warhol, Joyce, and various video, tape and film makers. In surveying the developments in art and advertising, the author finds that the arts (1) are now a kind of laboratory for an experimental world (McLuhan's conception), (2) are engaged in a process of disturbing the existing order (Peckman), (3) are thus future directed, and (4) are, as sources of aesthetic theory, powerful guideposts for communication theorists and scholars (Burke). Thus a study of the world's arts, examined systematically as communication, will yield a recognition that the "futuristic symbolic language of the arts provides a proper ... tool of comparison with the general communication system of the here and now."

⁷³Marshall McLuhan, Understanding Media. New York: McGraw-Hill, 1964.

Appendix 4: Survey of Books on Art Education

Survey of Books in Print 1960-83 and card catalogues at McGill and Concordia University libraries; 521 books in Art Education published after 1960 were found, 225 of these books⁷⁴ were surveyed and the following 17 contained bibliographical references to Marshall McLuhan's work:

Allison, Brian. Art education and teaching about the art of Asia, Africa and Latin America. London: Voluntary Committee on Overseas Aid and Development Education Unit, 1972.

A. Churchill, "Art for Preadolescents." New York: McGraw-Hill, 1971.

Howard Conant and Arne Randall, "Art in Education," Peoria, Illinois: Chas. A. Bennett, 1959.

Jack, Cros, For Art's Sake. Allen Unwin, 1977.

Edmund B. Feldman, Protections: Hopes and Fears. In Edmund B. Feldman (Ed.), "Art in American Higher Institutions." Washington: National Art Education Association, 1970.

Edmund Burke, Feldman, "Becoming Human Through Art." Englewood Cliffs, New Jersey: Prentice-Hall, 1970.

Charles D. Gaitskell, & Al Hurwitz, "Children & Their Art: Methods for the Elementary School." New York: Harcourt Brace, 1970.

⁷⁴The list of these books is listed in Appendix 1.

Calvin Harlan, "Vision and Invention: A Course in Art Fundamentals," New York: Prentice Hall, 1970.

Jerome, Hauseman, "Education of Art Professionals: The Teacher," in E.B. Feldman (Ed.), "Art in American Higher Institutions," (Washington, National Art Education Association, 1970.

Kaufman Irving Art and Education in Contemporary Culture. New York: Macmillan, 1966.

Earl W. Linderman, " Teaching Secondary School Art: Discovering Art Objectives, Art Skills, Art History, Art Ideas," Dubuque, Iowa: Wm. C. Brown, 1980.

Marlene Linderman, . Art in the Elementary School: Drawing, Painting & Creating for the Classroom. Dubuque, Iowa: Wm. C. Brown, 1979.

Mark Luca, and Robert Kent, Art Education: Strategies of Teaching. Englewood Cliffs, N.J.: Prentice-Hall, 1968.

National Art Education Association. Art Education: Middle/Junior High School. Washington: Author, 1972.

National Art Education Association. Uses of Newer Media in Art Education Project. Washington: Author, 1966.

Gordon S Plummer, . Children's Art Judgement: A Curriculum for Elementary Art Appreciation. (Trends in Art Education Ser). New York: Wm. C. Brown, 1974.

Fred R. Schwartz Structure and Potential in Art Education. Waltham, Massachusetts: Ginn-Blaisdell, 1970.

Excerpts:

Allison, Brian. Art education and teaching about the art of Asia, Africa and Latin America. "London: Voluntary Committee on Overseas Aid and Development Education Unit, 1972.

1) Literacy and Art:

Perhaps one of the most undeserved misnomers of the twentieth century has been the term "primitive art". Whilst the people of much of the Third World can be considered primitive in that they lack the sophistication of technology and organisation so highly prized in western civilizations, by using a different value system much of their art forms can be seen to possess a high level of sophistication with a deeply profound relationship to their patterns of life which is anything but primitive. By comparison, European art, except to a very small minority, appears remote and removed from the life of the people, and is one of the consequences, as Marshall McLuhan pointed out, of the western dependence on verbal literacy.⁷⁵

A. Churchill, "Art for Preadolescents," New York: McGraw-Hill, 1971.

1) The generation gap:

New Roles and Responsibilities.

How can one liberate instructors, novice or experienced, to use the new, more informal methods that have already been well substantiated in many child-centered schools. One of the first steps is to make it clear how unrealistic it is for today's teachers to set themselves up as infallible dispensers of knowledge. Culkin has an interesting story about McLuhan's startling a few hundred teachers at a lecture by denying the whole concept of the generation gap. According to Culkin, McLuhan meant that "because of the information that is available through the media for the first time in history both the kids and their parents and their teachers are living in exactly the same information world the kids are no longer in the dark, to be programmed and brought along step by step according to the dictates of the adult culture, and that has created a new situation"⁷⁶

2) Collage:

It has survived because both the methods and results of the collage process are symptomatic of many ideas and issues that artists and

⁷⁵Allison, Brian. Art education and teaching about the art of Asia, Africa and Latin America. London: Voluntary Committee on Overseas Aid and Development Education Unit, 1972. p.5.

⁷⁶A. Churchill, "Art for Preadolescents," New York: McGraw-Hill, 1971. p.399

philosophers of this century have believed to be important. Today all the arts employ the technique, including theater, dance and music, in what Kahler calls "the triumph of incoherence"⁷⁷. He finds the tendency to create multisensory mixtures and simultaneous aesthetic events "a very frightening mode and degree of disintegration." Marshall McLuhan, on the other hand, finds the new art of heightened total experiences a sharpening of consciousness that will aid man in his survival.⁷⁸

3) Humor:

...The lighthearted, capricious caricature is considered journalism by devotees of the "fine" arts, yet many superb fifteenth-century Dutch and Flemish woodcuts similarly caricatured the life of the times. We are perhaps in another area in which the artist is moved to caricature (and thus satirize) aspects of the society which he seriously distrusts and wants to destroy by means of his art. Marshall McLuhan writes: "Humor as a system of communications and as a probe of our environment of what's really going on - affords us our most appealing anti-environment tool. It does not deal in theory, but in immediate experience, and is often the best guide to our changing perceptions."⁷⁹

4) Power of the artist:

Through discussion, children can be made aware of the social and prophetic power of the artist. The ideas expressed in the following quote from McLuhan can be transferred into language they understand: To prevent undue wreckage in society, the artist tends now to move from the ivory tower to the control tower of society. Just as higher education is no longer a frill or luxury but a stark need of production and operational design in the electric age, so the artist is indispensable in the shaping and analysis and understanding of the life forms and structures created by electric technology in the past century it has come to be generally acknowledged, in the words of Wyndham Lewis, that "the artist is always engaged in writing a detailed history of the future because he is the only

⁷⁷Roberta Capers and Jerrold Maddox, *Images and Imagination*, The Ronald Press Company, New York, 1965. p.49.

^{78A}: Churchill, *"Art for Preadolescents."* New York: McGraw-Hill, 1971. p.317.

⁷⁹Ibid., p.171.

person aware of the nature of the present." Knowledge of this simple fact is now needed for human survival.⁸⁰

Howard Conant and Arne Randall, "Art in Education," Peoria, Illinois: Chas. A. Bennett, 1959.

1) Environment:

Various elements of our environment make contributions to our art education. However, these contributions may be positive or negative, as indicated below:

ELEMENTS OF ENVIRONMENT WHICH FOSTER ONE'S ART EDUCATION

Functionally designed contemporary home.

Home is designed as an artistic unit around the family's needs.

Significant paintings and peices of sculpture in original or reproduced form are included as part of interior design.

Family members and friends are selective in dress and grooming.

ELEMENTS OF ENVIRONMENT WHICH HINDER ONE'S ART EDUCATION

Poorly designed, unimaginative home.

A clutter of poorly designed pieces of fumiture, drapes, and rugs.

Goudy pictures, bric-a-brac, carnival statuettes, some antiques, and souvenirs decorate walls, shelves, and table tops.

Some family members and friends show little aesthetic judgment in selection of clothing and personal grooming.⁸¹

Reasons for the many aesthetically undesirable elements in tosay's environment might be suggested,⁸² yet those who read this book are likely to be more concerned with, "What can we do about them?"⁸³

⁸⁰Marshall McLuhan, Understanding Media, Signet Books, New American Library of World Literature, Inc., New York, (1964) 70-1

⁸¹Howard Conant and Arne Randall, "Art in Education," Peoria, Illinois: Chas. A. Bennett, 1959. p.312.

⁸²Those interested in these reasons and in the improvement of cultural conditions will wish to read Lewis Mumford's The Culture of Our Cities and The Brown Decades, Marshall McLuhan's The Mechanical Bride, and Mass Culture, edited by Rosenberg and White.

⁸³Howard Conant and Arne Randall, "Art in Education," Peoria, Illinois: Chas. A. Bennett, 1959. p.313.

Cross Jack For Art's Sake. Allen Unwin, 1977.

1) Electronic Environment:

There are many ways of identifying and describing educational objectives. Art specialists are no different from most of their colleagues in being too busy, too involved, too set in their ways perhaps, to ask themselves the primary questions very often. A pragmatic posture often appears the most appropriate, but most of us have felt threatened in recent years by the apparent rejection by large numbers of our pupils of the values and systems we have taken for granted all our lives. The questions are now, perforce, being asked. We may feel that the greatest pressures come from within the school system--comprehensive reorganisation, ROSLA, and so on. Others sense that the motive force for change comes from outside, from shifts and cracks in the social structure itself. As Marshall McLuhan wrote (in a kind of vers libre):⁸⁴

Today in our cities.

Most learning occurs outside the classroom.

The sheer quantity of information conveyed by The press-mags, films, TV., radio far exceeds

The quantity of information conveyed by school instruction and texts.

This challenge has destroyed

The monopoly of the book as a teaching aid and cracked the very walls of the classroom so suddenly,

we're confused, baffled.^{85#1}

Edmund B. Feldman, " Protections: Hopes and Fears," In Edmund B. Feldman (Ed.), " Art in American Higher Institutions," Washington: National Art Education Association, 1970.

1) Discursive Language:

Perhaps very small colleges, whose students have benefitted from good quality art education programs in grade and high school, can profitably undertake a studio approach to art appreciation. In general; however, and despite the effusions of Marshall McLuhan, we are obliged to use discursive language in our teaching because the right words spoken in

⁸⁴Jack Cross For Art's Sake. Allen Unwin, 1977. p.12.

⁸⁵From G.E. Stearns (ed.), McLuhan Hot and Cool (Penguin, 1968). p. 12

the right order still constitute our most efficient mode of communicating complex ideas to large numbers of people at the same time.⁸⁶

Edmund Burke, Feldman, "Becoming Human Through Art." Englewood Cliffs, New Jersey: Prentice-Hall, 1970.

1) Advertising and visual communication:

Perhaps Marshall McLuhan is the most perceptive analyst of the communications media in our time. Surely his "probes" and insights constitute highly suggestive hypotheses for explaining not only the media but also vast areas of popular perception and feeling. With respect to advertising, McLuhan feels that its trend "is to manifest the product as an integral part of large social purposes and processes." This is accomplished, he believes, because "any expensive ad is as carefully built on the tested foundations of public stereotypes, or "sets" of established attitudes, as any skyscraper is built on bedrock." He asserts, in addition, "It is obvious that any acceptable ad is a vigorous dramatization of communal experience. No group of sociologists can approximate the ad teams in the gathering and processing of exploitable social data.⁸⁷ Here McLuhan pays tribute to the highly competent social and psychological researchers engaged by the advertising and communications industries to ensure the acceptability and effectiveness of their messages. They identify and "dramatize" communal experiences. He seems to believe that group norms have a prior existence which it is the business of social research to discover and exploit in the interest of effective communication and control.⁸⁸

In other words, advertisers first find out what people's desires are and then claim that their products are the most satisfactory answers to those desires. But it could be maintained that industry first decides what it can make and then employs marketing and advertising experts who conduct social research to discover the best ways of persuading people to want what industry has to sell. McLuhan has been misled, I believe, by the spectacle of social science in the employ of market research into reversing the order of priority in production, market research, and

⁸⁶Edmund B. Feldman, "Protections: Hopes and Fears," In Edmund B. Feldman (Ed.), "Art in American Higher Institutions." Washington: National Art Education Association, 1970. p.108.

⁸⁷Marshall McLuhan, Understanding Media: The Extensions of Man. McGraw-Hill, 1964; paperback edition, Signet, 1964, pp. 201-3

⁸⁸Edmund Burke, Feldman, "Becoming Human Through Art." Englewood Cliffs, New Jersey: Prentice-Hall, 1970. p.58.

advertising. The media do not follow; rather they lead public taste and aspiration.

What is the relation of production and marketing strategies to art? It is simply that the creation of an ad, as McLuhan and others have pointed out, is a highly elaborate art form. And its verbal material, as we have been aware at least since 1912, when Picasso began to create newspaper collages, is converted into sensory data rather than cognitive or semantic meanings. In other words, Picasso taught us to view an area form from Le Journal as a texture - gratifying because of its visual arrangement rather than its verbal import. As a visual art form, the ad possesses certain creative or innovative properties: It is not merely the reflection of public desires; it is also an anticipation of what the public will want. This is because visual art is effective by virtue of its magical relation to the viewer's tested needs. Art compels assent; it does not merely ratify an already existing agreement between buyer and seller.⁸⁹

2) Alterations in the way we see:

Certainly the attention given to the utterances of H. Marshall McLuhan these past several years suggests a somewhat vaguely defined but nevertheless very widespread consciousness of fundamental alterations in the way we see⁹⁰.

The physiology of perception has not changed, however. It is rooted in relatively fixed biological habits. But a changed "mode" of perception refers to a different way of attending to one's percepts. It is a different way of "processing" sensations, of managing the interaction of one's percepts and ideas. People can choose or will to see as they do because of very persuasive influences in their culture.⁹¹

3) Aesthetic form and psychic distance:

The Evidence of Aesthetic Form.

Perhaps the most obvious feature of aesthetic form today is the reduction of psychic distance - the steady elimination of the gap between art and life. Children and adults look at popular art and elite art forms without

⁸⁹ibid., p.59.

⁹⁰ibid., p.165.

⁹¹ibid.

performing the mental operations that distinguish them from reality. In other words, we deliberately see art as reality and reality as art. It is for this reason that so many youngsters are masters of the put-on. They can behave seriously or unseriously toward any experience almost at the same time, perplexing those adults who are accustomed to fairly rigid distinctions between the real and the artificial, subjectivity and objectivity, the false and the genuine.⁹²

Nonobjective art, which seems so fantastic and remote from everyday life to older adults, appears to be entirely real to children and adolescents. They have no difficulty in accepting geometric abstraction as existing in a perfectly credible world--the same world they themselves occupy.⁹³ Theatrical performances that spill out of the proscenium, in which actors mingle with the audience, in which "spectators" carry on dialog with the "performers" as integral parts of the drama--such performances clearly reflect the viewer's changed perception of himself and of the artistic events he is looking at. Happenings and environments represent the evolution of painting and sculpture away from the detached observation of fixed three-dimensional objects and painted simulacra: Art forms increasingly invite participation. As we know from Gestalt psychology, the law of closure always implicates viewers in the completion of an experience initiated by the organization of the art object. The more incomplete or unstable the formal organization of the art object, the more effort and participation will be required of the viewer to achieve closure. Contemporary art favors formal instability because contemporary viewers favor greater personal participation in perception. McLuhan attributes this to the "low definition" of such "cool" media as television, jazz, the telephone, and so on. Rather than being annoyed or disturbed by seemingly unrelated, distorted, vague, indistinct, highly abstract, unbalanced, asymmetrical, turbulent, and anonymous visual forms, contemporary viewers prefer them. Instead, they are put off by precision, explicitness, balance, naturalism, predictability, and regularity in art.⁹⁴

4) Media study in Art Education:

⁹²Ibid., p.166.

⁹³This point is well made by Milton Kriksky: "A generation, born since World War II, for whom science fiction has become science, can hold no truths to be self-evident, no speculations too far out." Quotation from "McLuhan's Message or: Which Way Did the Second Coming Went?" New American Review, no. 2; New American Library, 1968..

⁹⁴Edmund Burke, Feldman, "Becoming Human Through Art." Englewood Cliffs, New Jersey: Prentice-Hall, 1970. p.167.

There is a theoretical unity among the several visual arts, and this unity is stressed when we study the language of art. At the same time, there are distinctive features of each art form considered independently. For example, the elements of form may be common to painting and architecture, but these elements appear as oil paint in one case and brick or concrete in the other. The elements of form need to be embodied in specific materials, or media, before we can become aware of them. But a medium is not just a particular material, it is also a way of using that material. The way in which materials are used affect what is expressed through them. Consequently, media study is really the study of the interaction of medium and meaning.⁹⁵

Among specialists in communications arts, media study involves not only content analysis but also the examination of form/content relationships. Certainly McLuhan has based most of his inferences and insights on the social and psychological consequences of the communications media as forms of meaning in themselves rather than as neutral vehicles of meaning. These insights, which have often been received by the public as startling new revelations, constitute in many cases the daily discoveries of children in art classes. This is said, not to detract from McLuhan's important contributions to media study, but to point out the rich educational opportunities that often remain uncelebrated in art education. It should also be added that media/meaning relationships are accessible to children notwithstanding the fact that they are first pointed out by university professors. Existing theories of art education do not especially notice the role of deliberately examining media/meaning relationships. Clearly, this type of learning should be high on the agenda of any modern educational theory. Furthermore, art education seems uniquely situated to conduct media study within our elementary and secondary schools.⁹⁶

The extraordinary proliferation of non-verbal modes of communication during the past quarter-century threatens much of the curriculum with obsolescence unless it reconstitutes itself as linguistic and media study. So far as art education is concerned, we must look at the several visual art forms as instances of form taking possession of meaning. This is the large implication of the media revolution of our time, and educators ignore it at their peril.⁹⁷

5) Synaesthesia:

⁹⁵See Edmund Burke, Feldman, Art as Image and Idea, Chapters 11, 12, and 13.

⁹⁶Edmund Burke, Feldman, "Becoming Human Through Art." Englewood Cliffs, New Jersey: Prentice-Hall, 1970. p.184-5.

⁹⁷ibid., p.185.

McLuhan is surely an apostle of synaesthesia; he encourages the "process of getting at one thing through another, of handling and sensing many facets at a time through more than one sense at a time...The "common sense" was for many centuries held to be the peculiar human power of translating one kind of experience of one sense into all the senses, and presenting the result continuously as a unified image to the mind."⁹⁸

The isolation and fragmentation of sensory experiences has no place in elementary education. Teaching practices that place a heavy premium on visual performance, isolated from performance in other languages a child can command, represent an invasion downward from the specialized culture of adults into the generalized and synaesthetic culture of children. Children's creative presentations should allow them the opportunity to move fluently among a variety of expressive media. If this idea takes hold, we may look forward to some healthy influence from children's culture as it reaches upward into the frequently arid stretches of adult creativity.⁹⁹

Charles D. Gaitskell, & Al Hurwitz, "Children & Their Art: Methods for the Elementary School." New York: Harcourt Brace, 1970.

1) Definition of Art:

What is Art?

Certainly art cannot be defined, as Marshall McLuhan somewhat frivolously stated it, as "anything you can get away with." Educators and laymen are growing weary of generalizations and desire answers that are comprehensible and clearly stated.¹⁰⁰

Calvin Harlan, "Vision and Invention: A Course in Art Fundamentals," New York: Prentice Hall, 1970.

1) Jobs instead of roles:

⁹⁸Marshall McLuhan, Understanding Media: The Extensions of Man. McGraw-Hill, 1964; paperback edition, Signet, 1964, p.67.

⁹⁹ibid., p.202.

¹⁰⁰Charles D. Gaitskell, & Al Hurwitz, "Children & Their Art: Methods for the Elementary School." New York: Harcourt Brace, 1970. pp.10-11

(This comment disappeared in the 1982 edition.)

What is Art? Educators and laymen are growing weary of generalizations and desire answers that are comprehensible and clearly stated. (p. 12).

Theoretical, literate education is assumed to be more important than esthetic education. Our teachers, with few exceptions, are required to be more conversant in the language of abstraction than in the language of experience, despite the multiplication of vast impersonal powers in the "Organized Society" Paul Goodman describes in Growing Up Absurd.¹⁰¹ Ours is a society that places training above education, that assigns jobs instead of roles;¹⁰² therefore, it can come as no surprise that the unique qualities of many individuals fail to survive adolescence.¹⁰³ The education of both feeling and perception is neglected.¹⁰⁴

2) Pattern and Process:

We are reminded that all creative activity of the highest order takes place at the "height" of particular historical periods, and that, although modern art and science may have separate aims, there is no reason to believe that the most perceptive artists and scientists are as opposed in attitude and spirit as some would like to suggest.¹⁰⁵ In our most vital and characteristic art and science, for instance, reality is understood not as forms existing independently in a vacuum, but in terms of pattern and process, organism-environment transaction,¹⁰⁶ and according to the way we, as human beings, apprehend and interpret experience.¹⁰⁷

3) Phonetic alphabet:

¹⁰¹Paul Goodman, Growing Up Absurd, New York: Vintage, 1956.

¹⁰²Marshall McLuhan, Understanding Media: The Extensions of Man (New York: McGraw-Hill Book Company, 1965), p. 17

¹⁰³Wylie Sypher, Loss of the Self - In Modern Literature and Art (New York: Random House, 1962).

¹⁰⁴See "The Biological Significance of Art," in Sir Herbert Read, The Origins of Form in Art (New York: Horizon Press, 1965).

¹⁰⁵"A fundamental revision of man's attitude towards life is apt to find its first expression in artistic creation and scientific theory." José Ortega y Gasset, The Dehumanisation of Art (Garden City, N.Y. Anchor Books, Doubleday, 1956 p.39.

¹⁰⁶Environments are not passive wrappings but active processes." Marshall McLuhan, Understanding Media: The Extensions of Man New York: McGraw-Hill, 1965, p.vi.

¹⁰⁷Calvin Harlan, "Vision and Invention: A Course in Art Fundamentals," New York: Prentice Hall, 1970. p. 7.

The discipline of brush and ink in both China and Japan applies to writing and painting alike; a Chinese poet is, in a sense, both writer and artist, and an ineffable part of his poetry resides in the nature of his own brushwork.¹⁰⁸ This could hardly be said of the work of any poet of our culture, no matter how beautiful or "expressive" his handwriting may be. In phonetic and alphabetic writing, words stand for sounds before they stand for objects, ideas, or conditions. Neither they nor the letters by which they are formed bear any resemblance to objects anymore.¹⁰⁹

4) Electronic involvement:

The "immense journey" of life and the unimaginable size and age of the universe now exist in our consciousness as components of a vast scale that includes the tiniest particles and patterns from which the miracle of life itself springs. With all this--and much more that pertains uniquely to life in the twentieth century, including the "new scene of electronic involvement"¹¹⁰ (instantaneous worldwide communication)--there exists the need for yet another kind of unity, centered (it would seem inevitably) upon scientific inquiry, but extending to the realm of lived experience. A true unity or transformation, whether based upon science, theology, or metaphysics, will manifest itself in all dimensions of human life.¹¹¹

Jerome Huseman, "Education of Art Professionals: The Teacher," in E.B. Feldman (Ed.), "Art in American Higher Institutions." (Washington, National Art Education Association, 1970.

¹⁰⁸Read Marshall McLuhan's account of the profound social, psychological, and cultural effects the invention of a phonetic alphabet has had and continues to have, even in the twentieth century, in certain parts of the world. Marshall McLuhan, Understanding Media: The Extension of Man (New York: McGraw-Hill Book Company, 1965), Part 9: The Written Word--An Eye for an Ear; or see Sir Gerald Barry et al., The Doubleday Pictorial Library of Communication and Language: Networks of Thought and Action (Garden City, N.Y.: Doubleday & Company, Inc., 1965).

¹⁰⁹Calvin Harlan, "Vision and Invention: A Course in Art Fundamentals," New York: Prentice Hall, 1970. p. 34.

¹¹⁰Marshall McLuhan, Understanding Media: The Extensions of Man (New York: McGraw-Hill Book Company, 1965), p. x.

¹¹¹Calvin Harlan, "Vision and Invention: A Course in Art Fundamentals," New York: Prentice Hall, 1970. p. 170.

1) Electric technology:

III. Differing Media for Art and Communications

"The medium, or process, of our time-electric technology is reshaping and restructuring patterns of social interdependence and every aspect of our personal life. It is forcing us to reconsider and reevaluate practically every thought, every action."¹¹² Today's artists have available to them a great range of media and means for shaping these media; of greater importance, there has been a radical shift in definitions of art to encompass new forms and concepts.¹¹³

Kaufman Irving Art and Education in Contemporary Culture. New York: Macmillan, 1966.

1) Technological culture:

... The effects of a mechanical technology are obvious and close to being complete in the large areas of public living and the ramifications have strongly impressed our individual lives as well. The visual symbol, acting in the mass mind as the surrogate of art, if not its actual condition, merely becomes another tool in a socio-economic and programmed blueprint for adaptive action and the standardization of values. At the same time, to repeat what Marshall McLuhan points out, Nobody yet knows the language inherent in the new technological culture, we are all deaf-blind mutes in terms of the new situation. Our most impressive words and thoughts betray us by referring to the previously existent, not to the present."¹¹⁴

Earl W. Linderman, "Teaching Secondary School Art: Discovering Art Objectives, Art Skills, Art History, Art Ideas," Dubuque, Iowa: Wm. C. Brown, 1980.

1) Art and the electric age:

¹¹²Marshall McLuhan and Quentin Fiore. "The Medium is the Message," New York: Bantam Books, 1967, 160 pp.

¹¹³Jerome, Hauseman, "Education of Art Professionals: The Teacher," in E.B. Feldman (Ed.), "Art in American Higher Institutions," (Washington, National Art Education Association, 1970. p.72.

¹¹⁴Marshall McLuhan and Carpenter, eds., "Five Sovereign Fingers Taxed the Breath," Explorations in Communication (Boston: Beacon Press, 1960), p. 208.

Some Personal Statements Regarding Art and Creativeness

For in the electric age there is no longer any sense in talking about the artist's being ahead of his time. Our technology is, also, ahead of its time, if we reckon by the ability to recognize it for what it is. To prevent undue wreckage in society, the artist tends now to move from the ivory tower to the control tower of society. Just as higher education is no longer a frill or luxury but a stark need of production and operational design in the electric age, so the artist is indispensable in the shaping and analysis and understanding of the life forms, and structures created by electric technology.¹¹⁵

2) Environments as active processes:

Knowledgeability in art does not exist as information handling alone, taken from the context of contemporary society. Good teachers understand and encourage the grasp of humanistic relationships as they relate to the discovery of art in its multivarious forms. To paraphrase McLuhan, perceptive teachers in the profession are aware of the fact that environments are not passive wrappings but active processes.¹¹⁶

Marlene Linderman, Art in the Elementary School: Drawing, Painting & Creating for the Classroom, Dubuque, Iowa: Wm. C. Brown, 1979.

1) Environments as active processes:

Questions Teachers Ask Regarding Elementary Art

Environments are not passive wrappings, but are, rather, active processes which are invisible-Marshall McLuhan, Quentin Fiore, The Medium is the Message, Bantam Books, 1967

Teacher Strategy Questions: How is the Classroom Environment Important?

¹¹⁵ Marshall McLuhan, Understanding Media: The Extensions of Man, New York: McGraw-Hill Book Company, 1965, p. 65

¹¹⁶ Earl W. Linderman, Teaching Secondary School Art: Discovering Art Objectives, Art Skills, Art History, Art Ideas, Dubuque, Iowa: Wm. C. Brown, 1980, p.32

Mark Luca, and Robert Kent, Art Education: Strategies of Teaching. Englewood Cliffs, N.J.: Prentice-Hall, 1968.

1) Technology and design:

There are strong and creative voices like Marshall McLuhan and Buckminster Fuller, who, though not directly involved in the field of art education, say that we must understand our technology and learn to design it for man's good. Art education also says this. Design, a word that is often used in art, is widely used in the broader society. To design is to compose - to suit to a purpose. A basic aim in the teaching of art is to develop within students the capacity to understand the purposes and products of design in society and design as they practice it in an art laboratory. Design, whether intuitive or analytical, is a basic element of art and is also fundamental to art education.¹¹⁷

2) Structuring of subject matter:

The method of learning by doing has never become completely outmoded. In recent years art education has been influenced by the research in art education, done primarily by people in psychology. The emphasis is usually on individual differences and the general nature of learning. The implication often is that the reader should prepare a custom-made educational package hoping to hit the individual mark. To structure subject matter into a more consumable form, as suggested by Bruner's and McLuhan's writings, could be a good influence if the aims of art education are not violated. A new wave of writings by art educators, rather than psychologists, has been a provocative influence. Each one of these influences should eventually result in an effective and more unified art program.¹¹⁸

National Art Education Association. Art Education: Middle/Junior High School. Washington: Author, 1972.

1) Natural direct experience:

¹¹⁷Mark Luca, and Robert Kent, Art Education: Strategies of Teaching. Englewood Cliffs, N.J.: Prentice-Hall, 1968. p.36.

¹¹⁸Ibid., p.87

Art provides a unique situation in which instruction can suit individual needs, ideas, and responses. There are many real problems in the world which threaten the individual with their urgency and apparent lack of solution. Through art expression, the student can experience success which may strengthen his confidence in coping with the practical world.¹¹⁹

Marshall McLuhan suggests in *The Medium is the Message*, that:

Many of our institutions suppress all the natural direct experience of youth, who respond with untaught delight to the poetry and the beauty of the new technological environment, the environment of popular culture. It could be their door to all past achievement if studied as an active (and not necessarily benign) force.¹²⁰

National Art Education Association. Uses of Newer Media in Art Education Project. Washington: Author, 1966.

1) Film and television:

The educational differences between the sound motion picture and television are those related to the method of image display, the control that can be exercised by the teacher in using them, and the system of distribution of the images. From the standpoint of the teaching function, they appear to be the same. (However, Marshall McLuhan would disagree, claiming that television is a different medium with different instructional characteristics just because of such features as degraded image and difference in display.) Research with programmed instruction indicates that factual information may be efficiently taught with teaching machines or programmed textbooks, but not necessarily more so than with other instructional methods.¹²¹

2) Print and the new visual world:

Never before has the world been made so visible. Man has always been a great "looker" but never has he spent so much time just looking as he

¹¹⁹National Art Education Association. *Art Education: Middle/Junior High School*, Washington: Author, 1972. p.18.

¹²⁰Marshall McLuhan, *The Medium is the Message*. New York, Bantam Books, 1967, p. 100

¹²¹National Art Education Association. Uses of Newer Media in Art Education Project. Washington: Author, 1966. p.19

does now. Instead of a sketch pad, modern man has his camera; instead of a book he has his television set. This is probably not quite accurate, because many who have television wouldn't have been readers in the past. But there is enough truth, here, to prompt the observation that we live in a period of "retreat from the word". Despite the fact that more books are printed and sold than ever before, there seems to be a growing number of observers who note, and frequently regret, that we live in what McLuhan has called a "post-lingual" age. Is it really that in this writer's opinion, McLuhan's statement is provocative but typically extravagant. The word is far from dead, despite Steiner, McLuhan, and others who write so many words explaining why words no longer really matter. What is more to the issue is that we are living in a "new age of the visible". The point is not that words no longer matter, but that the visual image does.¹²²

Gordon S Plummer, . Children's Art Judgment: A Curriculum for Elementary Art Appreciation. (Trends in Art Education Ser). New York: Wm. C. Brown, 1974.

1) Definition of art:

Recent issues of the journals of art education have publicized an increasing number of opinions on the aesthetic component of education. Art-teaching in this country has moved from learning by doing, through the self-expressive and therapeutic, through the development of training as consumers, to concern for our surroundings. These humanitarian concerns all demand a critical appraisal of what art and the artist are all about. McLuhan's statement, "Art is anything you can get away with," has the corollary that it would be beneficial to all of us if we understood what the artist is "getting away with."¹²³

Fred R. Schwartz Structure and Potential in Art Education. Waltham, Massachusetts: Ginn-Blaisdell, 1970.

1) Print:

¹²²National Art Education Association. Uses of Newer Media in Art Education Project. Washington: Author, 1966. p.29.

¹²³Gordon S Plummer, . Children's Art Judgment: A Curriculum for Elementary Art Appreciation. (Trends in Art Education Ser). New York: Wm. C. Brown, 1974, p.109.

Gutenberg (c. 1450) leapfrogged over the relatively static nature of the whole carved block substituting movable metal type cast from molds, reducing labor and imparting explosive impetus to the development of books and printed sheets.¹²⁴

The open society is open by virtue of a uniform typographic educational processing that permits indefinite expansion of any group by additive means. The printed book based on typographic uniformity and repeatability in the visual order was the first teaching machine.¹²⁵

2) Television:

Perhaps the visual excitements emanating from the television set have something to do with optical and perceptual stimuli that refresh the eye with higher levels and intensities of light and images than normally experienced in the daily diet of perceived visualizations.¹²⁶

The mode of the TV image has nothing common with film or photo, except that it offers also a non-verbal gestalt or posture of forms. With TV, the viewer is the screen. He is bombarded with light impulses that James called the "Charge of the Light Brigade" that imbue his "soulskin with subconscious [sic] inklings." The TV image is visually low in data. The TV image is not a still shot. It is not photo in any sense, but a ceaselessly forming contour of things limned by the scanning finger. The resulting plastic contour appears by light through, not light on, and the image so formed has the quality of sculpture and icon, rather than of picture. TV image offers some three million dots per second to the receiver. From these he accepts only a few each instant, from which to make an image.¹²⁷

Teaching efforts may become concentrated and more formal, but variability of instructional requirements will permit both the individualized student relationships as well as projection to larger groups of students

¹²⁴Fred R. Schwartz Structure and Potential in Art Education. Waltham, Massachusetts: Ginn-Blaisdell, 1970, p.219

¹²⁵Marshall McLuhan, Understanding Media: The Extensions of Man (New York: McGraw-Hill Signet Books, 1964), p.159.

¹²⁶Fred R. Schwartz Structure and Potential in Art Education. Waltham, Massachusetts: Ginn-Blaisdell, 1970; p.371-2

¹²⁷Marshall McLuhan, Understanding Media: The Extensions of Man (New York: McGraw-Hill, 1964), pp. 272-273

via the medium of television, which adds to the dimension and impact of experience.¹²⁸

It is not hard to explain this sensuous revolution to painters and sculptors, for they have been striving, ever since Cézanne abandoned perspective illusion in favor of structure in painting, to bring about the very change that TV has now effected on a fantastic scale.¹²⁹

3) Teachers on T.V.:

Even teachers on TV seem to be endowed by the student audiences with a charismatic or mystic character that much exceeds the feelings developed in the classroom or lecture hall. In the course of many studies of audience reactions to TV teaching, there recurs this puzzling fact. The viewers feel that the teacher has a dimension almost of sacredness. This feeling does not have its basis in concepts or ideas, but seems to creep in uninvited and unexplained. It baffles both the students and the analysts of their reactions.¹³⁰

¹²⁸Fred R. Schwartz Structure and Potential in Art Education. Waltham, Massachusetts: Ginn-Blaisdell, 1970, p.377-8.

¹²⁹Marshall McLuhan, Understanding Media: The Extensions of Man (New York: McGraw-Hill, 1964), p. 280.

¹³⁰Marshall McLuhan, Understanding Media: The Extensions of Man (New York: The McGraw-Hill Book Company, 1964), p. 293.