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The Pedagogy of the Oppressed: North American Style

In his introduction to Paulo Freire's Pedagogy of the Oppressed, Richard Shaull says:

It is Freire's conviction (now supported by a wide background of experience) that every human being, no matter how "ignorant" or submerged in the "culture of silence" he may be, is capable of looking critically at his world in a dialogue encounter with others. Provided with the proper tools for such encounter, he can gradually perceive his personal and social reality as well as the contradictions in it. In this process, the old, paternalistic teacher-student relationship is overcome. A peasant can facilitate this process for his neighbor more effectively than a "teacher" brought in from the outside. "Men educate each other through the mediation of the world."

As this happens, the word takes on new power. It is no longer an abstraction or magic but a means by which man discovers himself and his potential as he gives names to things around him. As Freire puts it, each man wins back his right to say his own word, to name the world.*

This summary statement — and all of Freire's work — is very rich in material for those who would be "educators" — or revolutionaries — or even futurists. I am interested, however, in a very narrow part of it; what it might mean in a North American (rather than Freire's South American) context to refer to "a culture of silence," and "proper tools for a dialogical encounter," or to say, "men educate each other through the *mediation* of the world," "the word takes on new power," and especially, "each man wins back his right to say his own word, to name the world."

It is my contention, which I will develop in the pages that follow,

^{*}Paulo Freire, The Pedagogy of the Oppressed, New York: Seabury, 1970, p. 13.

that, if it is accurate (as I believe) that a system in support of illiteracy is a necessary part of exploitation and oppression in South American society then also can it truly be said that, in North America, most people are systematically oppressed as a consequence of their inability to "read" and "write" in the dominant mediation technologies around them, namely, television, cinema, radio, phonograph records, and computers (or what I will now often call, "the media").

Evidence of the dominance of such technologies is abundant: in North America, there are more television sets than telephones; more television sets than automobiles and trucks; more television sets than radios. There are far more television viewers than newspaper, magazine, or book purchasers. More people pay admission to movies than subscribe to newspapers. Most radio time on most stations is taken up in playing phonograph records. Modern government and business would be totally inoperable without computers.

At the same time, both mass (public opinion) and experimental studies show that, though our society spends vast sums ostensibly to teach people "the three R's," many people in our society are either absolutely or functionally illiterate. They either cannot or else do not read and/or write, not only not in English, but also not in any other language at all. As regards the third "R," a far larger number of North Americans are mathematically illiterate. They cannot balance their checkbooks, reckon percents, or divine the "best bargain" at the supermarket. Yet, many of these same illiterate people hold jobs successfully, rear non-delinquent juveniles, vote in elections, and live to ripe old ages as apparently successful members of society.

Many of the people who do not read, write or reckon certainly watch television. However, most schools almost totally ignore the electronic communications media which actually dominate the real environment around them. Hence, to the extent that people only learn what they are taught in school — almost all North Americans are media-illiterate, and hence "oppressed" in Freire's meaning.

This media illiteracy is only partly mitigated by courses in, for example, "movie appreciation" and the like, sometimes offered by a "far out" English teacher, or an elective part of an English curriculum. In this case, students are at best made media semi-illiterate. They are taught how to "read" but not how to "write" cinema. However, to the extent that you can never really "read" without "writing" (even in print), then such students are only marginally better off with such "appreciation" courses than without them. They may, however, in fact be severely damaged because the movies are usually "translated" into print, and analyzed as though they were print, by teachers who are themselves media semi-illiterates, in a system that tells

everyone involved that TV, movies, records and the like are "frills," and that only books are real.

I must point out that I am ignoring in this paper the question of whether anything which might support or revitalize the present school system should be attempted at all. The case might well be made — and I would make it — that every effort should be put towards encouraging our present school system to collapse. It is my belief, however, that it is not necessary to waste much time encouraging its collapse. A "deschooled" society is much closer than many of us might think. It is more difficult for me to imagine ways in which the present school system of North America might be sustained over the next thirty to fifty years than to envision ways in which it will collapse. Nonetheless, I put that prognosis aside for this paper and recommend media literacy be fostered through the school system.

Similarly, I am also assuming in this paper that it is somehow better to make a "course" out of something vital than not to do so. I have argued before that often when schools make something a "course" they render it impotent and trivial; that if it is an important subject, for an individual or society, it should be kept out of the school system, and made an object of personal, underground search and struggle. I have, for example, made this contention regarding futures studies — or human sexuality. Nonetheless, because I feel that knowledge of one's sexual nature (as well as future potentialities) is so vital, I succumb to arguments that they should be taught formally in the schools. I also capitulate as regards media literacy.

why media instruction is de-emphasized in schools

Basically, I believe there are two reasons why our schools generally exclude media and media literacy from their classes. One is an intentional exclusion and the other unintentional.

Intentional Exclusion. Because many of the present controllers of the media want to remain in control, they may wish to see that most people do not learn how to "talk back" to their television sets, radios, or motion picture screens.

There is a very genuine and deep fear on the part of many television, movie, and radio owners and producers that their "audiences" will somehow gain access to the media's "modes of production" and use them to tell their side of the story instead of Lucy's or that of the family on Walton's Mountain (or more importantly, that of General Motors or Proctor and Gamble). They should, perhaps, take comfort from the fact that many people choose not to read or write, even though they seem to know how to do so. However, it must be ad-

mitted that widespread literacy and official efforts towards widespread literacy do make for a different type of political society from one based on a conscious policy of illiteracy — whether verbal or visual.

As a group, the present controllers of the media are elitist, paternalistic and/or propagandistic, egotistical, authoritarian (frequently that means "artistic"), and unrepresentative not only of the public, but also of the print-controllers in age, education, ideology, and epistemology (that is, they tend to be "intuitive" rather than either "scientific" or bureaucratic/conventional). In North America, they also are capitalistic, and this may be the main reason they desire to control the media: they wish to continue making money; they want consumers and laborers, not competitors.

Unintentional Exclusion. While we should not overlook the importance of intentional exclusion, I believe the major cause for media illiteracy lies in our culture's domination by writing (and to a much lesser extent, by mathematics). Almost no one "at the top" of North American society, being wholly print-oriented and media illiterate him/herself, can really imagine what media illiteracy is or why it is important, intellectually as well as politically, to end it.

Let me see if I can indicate how this present situation might have come about.

1. Speech as an Invention. At the very start, it is necessary to recognize that human speech is not "natural," i.e., an a priori human "trait." Rather, language is an invention, perhaps as much an invention as, for example, the printing press. That is to say, it seems that there was a period when the predecessors of present-day humans did not speak; there was a period when our ancestors learned to speak while other contemporary (and now extinct) hominids did not; and, on an appropriate time scale, it might still be possible to understand how human speech communication in this mode is still in the process of physical evolution.

In fact, some anthropologists are coming to believe that it was speech that led to the evolutionary victory of emergent homo sapiens over other competitors, such as Neanderthal 45,000 years ago. Some scholars say that it seems likely that Neanderthal could not utter the vowels [a], [i], and [u], and could not speak as rapidly as, or with the complexity of, some other hominid contemporaries. Though Neanderthal and homo sapiens were about equal in brains, hands, and external technology, they differed physiologically in their jaw and larynx. Homo sapiens had better vocalization and diction possibilities than did Neanderthal. Present-day humans, thus, may owe their existence (and Neanderthal's non-existence) to those (mutant)

hominids who chanced to have the physiology (as well as the brains) which could transform grunts and cries into phonemes.

By combining brain, larynx, and thumb appropriately with external technology, humans evolved rapidly towards that transformation of transformations itself: the evolution of human culture, focused on speech.

It may be that before the invention of speech, humans lived in groups of about twelve to fifteen members each. This would seem to be the "limits to growth" of any community which had to rely on touch, cry, gesture, and a common gene pool for its communication system. With the invention of speech, however, humans were enabled to join together into much larger bands of several hundred, or several thousand, members (the size of most primitive language-specific tribes). But here, once again, they hit a "limit" beyond which they could not grow and retain effective internal unity and control.

Much, much later, then, came writing — only a few thousand years ago — without which "civilization" is impossible. A few hundred years ago, the printing press made industrial societies possible. We are presently in the maturing stages of electronic communications, and in the beginning stages of bio-chemical/electronic communication technologies, the future impact of which we can only barely imagine. However, it is likely that in each instance, not only are we able to "say what we mean" to more people over longer distances in time and space, but the new capabilities also alter what we "mean" and how we "say."

That is, "meaning," at one level is an "internal" electrochemical event in the brain and central nervous system of an individual human. Thus, whether we speak, or write, or make a movie, or transmit an ESP message, we are attempting to reproduce the electrochemical event occurring in our central nervous system in that of another organism.

Speaking is thus not "truer" to meaning than is gesturing or movie-making. Yet, each mode of communication — each communication hardware, if you will — has its own software, its own rules for use. Because speech has been around for so long, and some hundreds of years ago had its generative rules ossified into writing, speech-based meanings often seem to be more "real" than any others. I believe they actually are not.

2. The Whorfian Hypothesis. Yet the importance of speech should not be unduly minimized because what we "mean to say" is strongly dependent upon the medium we use to express it. In accordance with the "Whorfian Hypothesis," the language one speaks almost

totally determines the world one perceives. One experiences the world almost wholly through language — which names it and organizes it. One communicates experience of the world through language alone. For most people, what one means to say, and the language one uses to say it, are the same. Yet, because different people in the world speak different languages, members of different cultures may in effect live in essentially different worlds.

The recognition of this fact is obscured to many of us either because (1) the Whorfian hypothesis is wrong (as some linguists believe) or (2) because most of us know only one language or (3) even when we do know more than one language, we tend to be over-influenced by our "mother tongue" — we speak the other languages "with an accent" through the epistemology of the first, and not their own epistemologies; and (4) very few of us know radically different languages (i.e., we may know English and French, which are not significantly different at this level, but not know Hopi and English, which are).

3. Mathematical Modelling. In addition to spoken language, other modes of modelling and communicating information, such as mathematics, also have rules which shape our perception of the world. One of the reasons for the so-called "behavioral revolution" in the social sciences in North America after the Second World War was that a generation of students at some schools learned how to construct models of human behavior based on mathematics rather than on words. They discovered there was considerably more precision and power in mathematical models than in verbal models. Most persons are scared to death of mathematics and assume that, if you can phrase a formula, you somehow have near-magical powers over the referent being thus formulated.

Now, "saying what we mean," and having that be influenced by the mode of saying extends, I believe, not only to different languages and to mathematics, but also to the difference between printing and electronics. In each instance, the world has different "meanings." This is partly because we can make distinctions and connections in the world which we could not make before. This, in turn, is a consequence of attempting to model the world with different symbols that are linked by different rules and mediated through different technologies.

4. The Written Word. Because the written word dominates our culture and its official purveyors of knowledge, this interrelationship of meaning and mode of communication is greatly obscured. Yet

we should not fail to realize how recent, evolutionarily speaking, the domination by writing is, and what a price has been paid for this "advance." Without writing, empires were impossible. But with writing, it became possible to colonize time and space for the first time.

Time could be colonized by freezing in written symbols decisions, victories, or thoughts from the past, thus making the past binding on the present more powerfully than ever before. While such imprisonment by the past eventually made "science" possible, it first made "law" possible, and is coincident with its rise. The essence of written law is "precedence" — the dictatorship of the past over the present, of past victories over present political struggles.

As students of oral cultures know, it is much easier, and more common, for storytellers and singers to change their stories than for them to keep the stories the same through their retelling. History is constantly being revised in an oral society. New things are constantly being added in order to keep up with events, and to avoid being boring. In a print society, all is written down, and one of the functions of the scribes and priests is to see that the writings are preserved and properly interpreted, so that the past continues to shape the present.

Similarly, great spatial empires did not exist until the invention of writing, when rules and decisions from the center could be carried to the periphery, and the same scribes, priests, and lawyers who colonized the present and future from the past could also interpose the law of "civilization" over that of the unwritten taboos of the conquered tribes. The politically-unifying role of writing is especially clear at present in a country like China which has a single written language, but a great many mutually unintelligible spoken languages. While the script is pronounced differently in different parts of the empire, it carries roughly equivalent meanings.

"In the beginning was the Word." The Bible (i.e., The Book). The Torah (i.e., The Law). The Magna Carta. The Constitution. The British North America Act. All in all, "a government of laws, and not of men."

"Go tell it to the judge," because it is in the court of law that the books are read and interpreted, though not by you: only those who are "learned in the law" can read them, and approach the bench on your behalf for succor and your rights. It is far too complicated for you, because the words have secret and precise meaning which only initiates know so that they can utter them properly, and in proper sequence.

Or, consider the courtroom itself: how much like a church it is. The communion rail: the Rood screen which separates the Holy of Holies from the Hoi Polloi. The raised bench for the judge. The wigs and robes. "All Rise." "Be Seated." "Be Quiet." "You are in contempt of court." This is solemn. This is holy. This is the place where, through the proper understanding of the written word, the unchanging past is able to rule in this otherwise changeable and naughty world.

5. Printing, printing, printing. . . . And then, when the Mechanical Bride was led to the altar, a wholly new cultural system emerged in support of (as McLuhan says on the phonograph record of his *The Medium is the Massage*) "printing, printing, printing, printing, printing, printing, printing, printing. . . ."

Whole new classes rose and fell. Lynn White tells how, with the prior invention of the spinning wheel and the consequent abundance of linen rags for mixture with wood pulp to make paper, the oncemost expensive part of copying the Bible — the parchment made from the hides of very many goats — soon became the cheapest part, and the once least expensive part — the wages of the scribes who copied the words — became the most expensive. When it became thus "cost effective" for Gutenberg to invent a mechanical way to replace the scribes, he did so.

Intending only for the most part to make God's Word more readily available to more people, early advocates of printing facilitated individualism by making mass communication for the first time private. As McLuhan would have it, with print you can not only inspire but conspire. You can curl up with a good book and laugh, cry, get angry, get aroused — and no one need know why! All the action is in your head. You can read slowly, quickly, skim, start at the back of the book and see how it turns out, skip over the hard or dull parts.

Books (and newspapers and magazines) are so cheap. If one considers the incredible amount of information that appears in the daily newspaper, one must ask how it is possible to get it to your breakfast plate for so little direct cost to you. It is not only that advertising covers so much of the cost. Rather, it is because for several hundred years we have built up an elaborate information collection and dissemination subsystem around printing which serves so many, many different interests that many of the costs can be and are hidden.

The most basic hidden cost is the educational system itself that tries to teach people in the society how to read and write. But in

addition to teaching these skills per se, the schools more importantly inculcate reverence for the printed word, and the assumption that knowledge is contained only in books. Thus, those who can more skillfully manipulate the written word are more knowledgeable than the rest of us.

6. The Public School System. "What if TV had been invented before the printing press?" That is an interesting question because the public school system, though invented after the printing press, came before television. Thus, the school system, one of the most important social inventions of the 19th Century, came into being at a time when print was the only medium available for scholarship. Moreover, its heritage was that of the solitary scholar who knew it all, reading to students from His Book (which was the only one around) which he himself had dutifully copied from his own great mentor. His students in turn dutifully copied down what the teacher said, never questioning, seldom understanding. Then, if they became teachers, they merely passed on that information in the way they had learned it, in the same linear, logically-unfolding way.

In addition, in the 19th Century, there was a general belief that knowledge — or at least the basic knowledge that we all need to be good workers or managers in the industrial system — was virtually finite, small in quantity, and knowable by a known process: know this, and you know it all (or all you need to know). Know it in this sequence, and you know it properly. Do not look ahead in the book. Do not skip ahead or you will hopelessly screw up the system which is built upon the assumption that one's age and grade accurately indicate one's knowledge thus far attained. So, go this far, and no farther, and you will "graduate." If you go farther, then you will know more than those who graduated sooner. Education in this situation means something, and everyone knows what it means.

In all of this, the book was central. The Text. One per pupil per subject. Approved by the Board of Education. Do not read any others — that will only confuse or mislead you. If you do some additional reading, then you will have to go to that holy of holies where silence must prevail, the library. There, the stern representative of God's Word sits to tell you that you must not behave like a human here: I control this center of all local knowledge; I determine what books are here and who shall get them (you cannot get them without a card); I will make it so unpleasant for you in here that only the most determined will ever come again — and they will be thus sufficiently socialized that they can be trusted to be immune from the confusion of another point of view.

7. Two Cultures. The school system's acts of indoctrination into print-worship are real and awesome things, but there are other reasons why many teachers ignore non-print media. For one thing, most teachers — perhaps even many science teachers — fall squarely on one side of the "Two Cultures" dichotomy: they fear and hate technology.

The thought of having to interface with a motion picture projector—never mind a motion picture camera—is just too frightening for most of them to contemplate, much less attempt. How fortunate that "the humanities" enable them to feel that technology is evil and that virtue resides only in the wisdom of the past as embodied in books: AV is obviously only a frill at best, which lazy, incompetent, and unprepared teachers use to mask their inabilities.

There is more to it than this, however, because there is also a strong and significant class/cultural bias against technology and hence against non-print media. In our culture, it is a mark of sophistication and elevated status not to have to manipulate tools, and hence one can demonstrate one's higher status by failing to understand how tools operate. It is a mark of learning, breeding, and class superiority to have someone else manipulate machines for you. The purpose of gaining higher education for many people is in fact to be able to be freed from interface with technology, and to have others be manual laborers on your behalf. If you are a woman, the case is even clearer: while some men might still be manly enough to thread a projector, certainly that is not proper woman's work!

Interestingly, the anti-machine bias reveals itself even in print itself: only the intellectually inferior learn how to use a typewriter, while it is the clear mark of a genius to have illegible handwriting, and yet be totally incapable of typing. Only the boss has a scribe—a stenographer—to sit on his knee and write his words for him. The boss cannot even touch a pencil or dictaphone. Knowledge of typing (though not knowledge of how a typewriter operates) is, strangely enough, women's work, but here it is plain that the status differentiation between men's and women's occupations justifies this. Indeed, it is so clear that many women who wish to be, or to be viewed as being, "liberated" are advised either to suppress their typing skills, or, better yet, never to acquire them, or else they might be typists all the rest of their lives, and never come to be the boss.

I think this anti-technological bias is quite serious because I believe with McLuhan that "we shape our tools, and thereafter our tools shape us" — that humans become human, and change the definition of what it means to be human, by interacting with each

other and the environment through tools. If any of us chooses not to learn, or is discouraged from learning how to use certain classes of tools, then we are cut off from certain types of significant experiences. If we are teachers, then we are significantly ignorant of a world that others live in and understand, but of which we have no real knowledge.

I believe, thus, that there is another "two cultures" growing rapidly and importantly in our society, two groups of people with increasing inabilities to perceive the world of the other, people sharing increasingly hidden and private epistemologies. I am not referring to the difference between people who are brought up on television vs. those who are brought up on books (which is important, and as profoundly so as the difference between those who are brought up on oral traditions vs. those reared on texts). Rather, I am speaking of the difference between the few who are experienced in making electronically-mediated statements, and the many who are restricted to writing.

Since the schools tend to be managed and shaped by the latter — and the human environment increasingly shaped and managed more and more by the former — there is reasonable cause for alarm.

8. The Three R's. The academic basics are said to be reading, writing and arithmetic. The number and sequence here is important, I think. According to this, there are only two things one need know to be basically educated: to be literate and to reckon. Yet literacy is apparently twice as important as reckoning ability because it is broken down into two different sets of skills — reading (first and most important, so that you can receive your orders) and writing (second and less important, unless you attain the status which permits you to be an order-writer). Last and least of the Three R's is arithmetic. And last indeed it is. Studies show that it is the poorest taught of the basics, and most certainly the poorest acquired. Mathematical illiterates vastly outnumber print illiterates.

Yet, what a different world do those few who acquire even basic modelling capabilities in mathematics inhabit compared to those who fail to acquire them! Who understands physics, chemistry, biology, or engineering who does not understand mathematics? What, if any, of the artifacts of modern life are possible without mathematics? In the 1950's and early 60's, a "revolution" swept through the social sciences, called the "behavioral revolution," but more accurately termed a "mathematical modelling" revolution. For a while, it seemed as though the social sciences were going to become truly

"scientific," which is to say, based upon mathematically-expressed and testable theories.

Though it is too much to say that the mathematizers were fully defeated, the anti-technological, anti-scientific bias of our culture, coupled with the rise of neo-conservative environmental and ethnic romanticism as the major intellectual fad of the late 1960's and 1970's has at least dampened, if not fully routed, the "behavioral revolution" as far as most of the social sciences are concerned.

Thus, after a brief bout with an alternate modelling perspective, print has re-established itself in the social science curriculum, and with the renewed interest in the classics and the basics in much of the rest of the curriculum, mathematics remains an academic stepchild, while print reigns supreme.

9. But Is It Art? Little attention has been paid thus far to another approach to modelling that exists in our school systems. That is art. Yet, for a variety of reasons, "art" is in worse trouble than mathematics. There are several reasons for this. One is a fundamental ambiguity as to what is meant by "art."

Generally, the term is used to designate two totally different curricular aspects. One aspect is indicated by courses titled something like "Art Appreciation." In these courses, selected artifacts by "great artists" of the past are shown in reproduction to be Great Works of Art which are to be appreciated, if not idolized, and perhaps even owned, in reproduction. In Art Appreciation courses, students are thus socialized into the visual clichés of our culture so that they are rendered blind to an aesthetic appreciation of many of the humanmade and "natural" objects of the real world around them - except insofar as these objects are themselves in imitation of, or mediated by, these cultural clichés. The essential information one gains from the usual course in Art Appreciation is that of passivity towards the creations of others, and an authoritarian acceptance of some of these as being aesthetically superior to others in the past, and to all in the present. There is, however, a second meaning of "art" in the school curriculum. "Art" is used to designate the time set aside for a few trivial periods of highly-private self-expression. Thus, there are "Art classes" where (according to the stereotype) flighty, undisciplined female, or effeminate male teachers urge their charges to "be creative" and to "express themselves."

Thus the duality of "art" in most school systems today. On the one hand, art designates conformity with past aesthetic standards. On the other hand, it designates private, virtually non-communicative ex-

pressions of one's "self." On the one hand, "art" reeks of tradition, heritage, the past, and social control; on the other, it is one of the few opportunities in the school system where a person can "be herself," often so much "herself" that no one can understand what the "work of art" "means."

Almost never is "art" used to encourage true creativity or innovation. Conversely, seldom is art considered to be a way of developing alternate ways of modelling and communicating perceptions of the world through non-print oriented ways. This seems to be among the most important uses. Art classes could be a place where one could learn to explore with a wide variety of non-print oriented materials and techniques. But the purpose of this exploration would be to attain aesthetic and non-print oriented but public and understandable communication.

what should be done?

Thus, with help in breaking the over-dependency on print in our school system coming neither from mathematics nor from art, what can we do?

Stop Teaching Literacy. I am willing to argue that we should stop teaching reading and writing as basic, required courses. We should instead relegate them to the present role of Art and Latin — as frivolous extras which people may take if they insist — but only with great difficulty.

Reading and writing can be taught rather easily and quickly when a person wants to learn how, and when she is learning something personally/politically relevant, as Freire's experience indicates. There is no reason why so much time has to be wasted in school on something which (English teachers, editors, and other print-snobs say) no one ever learns properly anyway — even after thirteen years of formal education; even after getting a Ph.D., in fact. Learning a foreign language is also instructive here. After thirteen years of studying "French" in school, most Anglo-Canadians, for example, still cannot speak or write, or read French. After one year in France, they can, and after three months in Berlitz they can — if they know that they must in order to be "successful" in whatever it is they intend to do with the language.

Please note that I believe it is important that we teach people how to communicate in *some* medium from an early age. It just need not be reading or writing.

The New Basics. So why not simply replace reading and writing

with Super 8 and/or Portapak instruction? with three-dimensional modelling? with instruction in aural communication technologies such as making audio tapes? with electronic synthesizers? with computer programming? and later on with lasers, holograms, and other advancing communication technologies?

The emphasis in all of these must be on using these technologies, with some time also spent on appreciation and criticism of the works of others. But most of these communication tools — the Portapak is the best example — are virtually self-instructing, and should be left that way. In addition, it probably is necessary to have some understanding of the underlying physics, electronics, or mechanics of the specific technology involved, but even a "cookbook" or "blackbox" approach is better than sheer ignorance. A similar argument is found about teaching statistics. It is best to know how to derive every equation you use so that you will "really" understand what you are doing. But, failing that (as most do), it is better to know how and when to use a Chi Square test, for example, than not to know what one is at all, and hence to be ignorant of statistical inference, even though you do not fully understand the mathematical basis of it all. It is best to know both, of course, and so also with video - or your automobile.

objections—and rebuttals

Now, this seems all straightforward and reasonable, doesn't it? So why aren't we doing it? Well, there are a number of apparently good reasons. Let's consider some — and see if we can answer the objections.

Objection A. It is too expensive to use electronic media. Pencils and paper cost almost nothing.

Rebuttal: Electronic media are expensive, there is no doubt about it. But print is expensive too. It is just that many of these expenses are hidden, and others are covered as a consequence of economies of scale. We have built up such an infra-structure around print, and have had it for so long, that we fail to understand this. If we were to encourage more use, especially if the schools were to encourage more use, then the price will go down per unit. Also, and this is important, many of these technologies can be expected to continue to miniaturize rapidly (as electronic calculators did) and also to become cheaper.

There are, however, two serious counter-rebuttals to this willingness to expand indoctrination into the use of electronic media. One is raised by Ivan Illich in his notion of "convivial tools." By this term,

Illich intends to have us evaluate technologies in terms of whether they are good for humans or not. For example, Illich believes that buses are better than private cars, but that bicycles (because of their portability, mechanical simplicity and durability, energy efficiency, ecological compatibility and the like) are best of all.

Similarly, Illich would rank the telephone ahead of television because the telephone facilitates simple, user-generated, two-way communication, whereas TV encourages owner-directed, one-way propaganda and intellectual colonization. While radio is also one-way and manipulative, Illich judges it to be better than TV. Moreover, tube radios are better than transistors in spite of the portability of the latter, because tube radios can be locally manufactured and repaired, whereas transistor radios are centrally manufactured and cannot be locally repaired.

I do not share this view of technology. All technologies "work us over." While some have been around longer than others, and thus while we may have achieved conventional symbiosis with them by now, they were as disruptive of human life and the environment when they were first introduced as any modern technology. It is sheer romanticism to think otherwise, I believe, as the history of technological transfer clearly indicates.

There is a second counter-rebuttal to encouraging widespread instruction into the use of electronic media in the schools, and this is a question of who would profit from such an emphasis. Do we really want to help a handful of Japanese, American and German capitalists in the electronics industry get richer? Perhaps not, and so we might well want to make this a revolutionary project coterminous with our attempt to expand media literacy. I can see no reason why the electronic industry per se must have the socio-economic form and structure it has now. It is a question of politics and economics, and not of electronics.

Finally, I believe it is more expensive not to encourage wide use of electronic media because presently fewer and fewer people are gaining greater and greater communication skills. Furthermore many who have these skills find the present authoritarian system means that they cannot get their messages heard. This imbalance is a serious problem in a would-be democracy, as an unconscious or irresponsible elite controls the media while a growing number of media illiterates consume them.

Objection B. But we still need to know how to read and write.

Rebuttal: Maybe, but as I have said, the truth is that many adults do not know how and/or do not use these skills, even though they do watch TV, go to the movies, listen to records and the radio, and

are influenced by these media. Anyway, when people do want to learn how to read and write, then they can do so rather easily, as I have said, and some may choose to learn how to read and write in school. And to be honest, I am not really opposed to teaching reading and writing. I am merely overstressing the point to show what I consider to be the absurdity and danger of our present situation.

Objection C. They won't let me.

Rebuttal: If they won't, then you should better understand why I titled this paper, "The Pedagogy of the Oppressed: North American Style." A refusal becomes a conscious political exclusion by vested interests, namely by those who control present AV media; those who control present print media; and those who would colonize us by brandishing past accomplishments of our culture.

If you are committed to true education — to encouraging people to live successfully in the "real world" around them; to being free (namely, exercising control over their own lives, rather than being manipulated by others) — then I believe you must try to see that media illiteracy is reduced through the formal school system.

This is not being disloyal to your role as a teacher. The function of education and the role of a teacher are always the same. The function of education is to socialize people into the skills and attitudes they need to be "successful" members of their cultures. The role of a teacher is to be a living example of such a well-socialized and successful member. What changes, then, is the society within which that function and that role are carried out. Thus, what one teaches, and how one lives, must change as societies change. The communication media environment of our schools has changed greatly since the school system was set up, yet our schools act as though this were not so.

I think it is time for each person in North America to win back her right to say her word and to name the world. If so, then each revolutionary teacher must herself struggle to acquire media literacy, and to aid her students in gaining mastery as well. It is more likely to be an easier task for the students, who are often closer to the modern audio-visual environment, than for the teachers who are saturated by print and will tend to want to "take pictures" of their essays and lectures rather than fundamentally re-think and re-view the world through the new media.

But for the true revolutionary teacher, who is willing to be born again and to try to learn how to think aurally and visually, the sense of self-liberation and social value should make the struggle worthwhile.