The Ideology of New Industrial Societies in the Cyberage

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I

In recent years many of Asia's major developing countries have undergone a rapid progress in science and technology, and most of them now have begun to take a significant interest in scientific research and technological innovation as a means to enhance the quality of life in their respective societies by way of creating material abundance. While the term "development" defies any sort of uniform definition, in most Asian countries, it is always equated with economic growth, and there is a widespread belief that such growth can only be achieved through the scientific-technological renovations of the forces of production. Development, economic growth, science and technology have become as vital appendages for each other. Science and technology belong to economic growth, that is, they belong to development.

After World War II, much attention was given to finding ways in which newly emerging independent nations could become industrialized as were the former colonial powers, for it was thought that a rapid transformation from agrarian economies to industrialized dynamic systems was imperative to the attainment of national wealth. Historically, the transformation of agrarian societies to industrialized ones has nearly always generated social, political and cultural turmoil, and Asia has been no exception to this dictum.

The role of science and technology in economic development grows larger day by day, and, as it does so, the rationalization for productivity advances steadily, but changes in traditional ways of thinking and perceiving proceed at a slower, uneven pace, and an unsettling discrepancy between the rationality of the production system and social consciousness widens proportionately. Science pivots around the principle of rationality. As science and technology move forward and encompass the globe, East and West, North and South, become more and more as one sphere of rationality. The Enlightenment, once

the embodiment of rationality for the West, now embraces and is embraced by most of the world; as if the process of rationalization were indeed the very destiny of human history as Weber once so fervently proclaimed. And while that rationalization process is seen to be modified by time, place, and need, it cannot be reversed.

Science, orbiting round the rationality principle, manifests the notion of universality: a claim to universal applicability of all the laws of nature is essential to scientific thinking. It is this universalism, the hallmark of modernity, which stands in opposition to the particularism of traditional society. Today, most of the once agrarian nations have initiated a production system under the principle of rationality. However, the process of rationalization in the newly industrializing societies of Asia is met with resistance from long practiced indigenous modes of life. Whereas productive forces revolve on an axis of rationality, the political and social consciousness of society clings to the particularism of patrimonial society. If I might be permitted to use the rhetorical constructions of Marxism here, there exists an enormous contradiction between a rationalized economic base and an agrarian superstructure. The process of rationalization is not effecting corresponding changes in the superstructures of most newly industrializing societies. Rather, what appears to be in evidence instead is that particularistic political and social consciousness is determining the direction of the rationalization process of the economic base in ways detrimental to an acceptance of the notion of universality which science, in the name of rationality, embodies.

Universalism demands that we are all created free and equal, that economic opportunities are to be afforded for all, regardless of gender, class, or religion, just as the laws of nature apply equally to all. Particularism, on the other hand, scorns the notion of equal rights and favors claims dependent upon the personal and social attributes of the individual. The efficiency of a production line in any industry requires an acceptance of universalistic thinking on the part of management. In the case of so many of the industrialized countries however, patriarchal, regionalist and affective social relations irremediably stifle the building of horizontal human relations, just as similar versions of such hierarchical human relations did in the past for Amer/Euro communities.

A study of the recent political and societal histories of many of the developing nations in Asia would lead one to surmise that modernization and counter-modernization are

taking place simultaneously. As the rationalization of productive forces progresses, so also does the patrimonial value system continue to impact on the political and social realm of society. Historically, this phenomenon can be understood as being part of the nature of society. Resistance to modernity has been recurring in one form or another in the West over the past two or three centuries and in contemporary Third World and in developing countries; we see its unmistakable signs again and again.[1] The kind of traditionalism which the Hungarian sociologist, Karl Mannheim analyzed as a form of counter-modernization ideology in early 19th century Europe [2] makes periodic appearances and today we find it dominating Third World societies. It manifests itself in the tendency to impose values developed to maintain a feudalistic society onto reform and modernization. When modernization is deliberate, as it is in most developing countries today, traditionalist sentiments rally to counter the reforms, seeking to absorb them into the old structures. Thus, for example, we often see class and gender hierarchical systems rigidly maintained so that industrialization looks more like feudalism than modernism, for the freedoms associated with modernization are carefully regulated so that they still belong to the upper echelons of society, as before. In this postmodern age, traditional counter-modernization moves are masked by the sanctity of a particularistic notion of multiculturalism. This notion fosters the renunciation of modernization especially, of rationalization. And proponents of Asian values, who see rationalization as but another imperialistic attempt at the Westernization of Asia have been quick to operate within that sanctity. In that sanctity too, we find the call for Confucianism to serve as the ethical base for an industrial production mode. Confucianism belongs to so much of Asian tradition and it is probably the world's oldest prevailing system of moral hierarchy painstakingly and deliberately developed to maintain harmony in feudalism. Under the pretext of cultural pluralism, Confucianist advocates have gained support in their propagation of the personalist Confucian view of society; but it is hardly a view compatible with the tenets of universalism which are essential to modernization and economic development as it has been conceived at least

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[1] Peter Berger, et al, *The Homeless Mind*, (Middlesex Penguin, 1977), pp. 168-169.

[2] Karl Mannheim, "Conservatism," *Sociology and Social Psychology*, (Routledge, 1953), pp. 94-95.
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for the last 50 years. That is to say, the personalist Confucian view of society promotes an industrialization and an economic growth that benefits the quality of life of only an elite segment of those societies. Attempting not to be seduced by what is erroneously perceived as thinly disguised Western imperialism, Asian value proponents set themselves on the very same disaster course the developed countries of the West had embarked upon in the era when they did hold fast to non-universalistic tenets of imperialism.

We know that as the economic base of a society becomes more rationalized, the conflict between traditional and rational worldviews becomes more critical. This accelerated encounter is the fatal phase of social change which many countries of the West have already passed through and which many developing countries are about to enter at full speed. Yet these developing countries have an historical insight into the dilemmas of industrialization which the countries of the West did not have. Moreover, they also have an advantage of planning their entrance into industrialization at least to some extent. Such planning could include ways to protect, if you will, those aspects of village life which might well humanize the harshness of urbanization. There is no need for customs of long standing to end, though they might well be modified by the individuals observing them to suit particular urban life patterns. But the observance of traditional ceremonies and the changing of village interests to neighborhood ones do not obstruct the workings of higher productivity. Indeed, they likely increase productivity. What does hinder productivity and the general health and wealth of a nation are worldviews that insist upon inequalities based on class, religion, region, or gender. Rather than encouraging the institutionalization of inequities in the transition from agrarian to industrial, governing bodies should seek out ways to educate the populace away from those practices and customs which are barriers to equality and access to the "good life" which has always been hailed as the promise and raison d'être of development. When it is the governing powers seeking to educate the populace, public education and work place laws against discriminatory practices are a good place to start. This is especially so in Asian countries where education is highly regulated by government. But it is now, and has been, another matter throughout history when the governing powers are not themselves inclined toward notions of equality.

The rationalization process of any society is marked by an increasing creation of formal institutions to which are assigned political, administrative and management tasks. However, in this process, the older institutional base persists so that generally one finds a mixture of new patterns with old. The mixture produces new forms which fall into neither modern nor traditional institutional systems.[3] Industrial sectors in which science and technology predominate adapt rather easily to the creation of new patterns of rationalization. But the old patterns and traditions remain influencing the orientation and disposition to action of those who make decisions and manage affairs at the level of formal institutions. This has nearly always been the case wherever military regimes have initiated a nation's modernization. Military technology and traditional authoritarianism combine together to fashion a new form of control. The end product, in general, is a decidedly undemocratic technocracy. And this form of government is most damaging in those societies wherein a civic culture has not yet matured.

In most Asian developing countries one finds political leaders who have espoused an ideology of development. And despite the truism, so eloquently and rigorously brought to light by the Nobel Prize winner, Amartya Sen,[4] that economic development cannot be sustained if it is compromised by authoritarian practices, many leaders simply ignore the evidence and employ the cant of postmodernity's cultural relativity movement to provide a specious rationale for interpreting democracy and fundamental freedoms in terms of feudalistic value systems. Feudalistic value systems, let me repeat, are those which are founded on notions of the basic inequality of human beings. In essence, authoritarian leaders attempt to interpret democracy through undemocratic principles.

Multiculturalism is to be treasured as the cultural ground for political pluralism but it should not be abused in order to exclude the universality of humanity or to endorse any values which run counter to human dignity and rights. But such abuse is rampant when political leaders call upon Asian values and cultural relativism to justify their denial of the human rights of specific groups or dissenters.

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[3] F.W. Riggs, "Bureaucrats and Political Development," *Bureaucracy and Political Development*, ed. By J. La Palombara, (Princeton, Princeton University Press, 1963), p.123.
[4] Amartya Sen, "Democracy as a Universal Value," *Journal of Democracy*, 10, no.3 (July 1999).

II

My remarks here on the twisting of multiculturalism for totalitarian ends are not to be taken as peripheral comments on moral philosophy, for they have much to do with the uses which the principle of rationality, inherent in the scientific method and its technological instrumentality, is put to in developing countries today. The history of all the peoples of the world, human history that is, has been and continues to be influenced by science and technology. Humanitarianism and the tenets of democracy hold that the ultimate end of scientific activities should be the preservation of life and the promotion of a good life for all. Obviously there are other 'isms' and other worldviews which embrace quite opposite goals. My concern in this paper is to point out that those of us who hold with democracy and humanitarianism cannot assume it will automatically steer toward the preservation of the dignity of life even in advanced democratic countries which presumably have that as their goal. Those leaders of developing countries who cynically toy with the notion of first becoming economically stable through technological advances so that their citizens might later embrace democracy with "full bellies," are surely aware of the danger of deadening civic interest in democratization or concern for the welfare of others which is inherent in the technology of the information age.

Mordern science forms much of our knowledge about the nature of the world and ourselves in it. Indeed science is so much a part of our lifeworld that we cannot even consider it to be "prescientific," as Husserl, who first conceived this insightful concept, believed. Every human being is born into a lifeworld, a domain made up of multiple human understandings or interpretations of the world. Each individual's lifeworld domain is also used by that individual to understand the world. A Lifeworld is characterized by the actions of, and the meanings derived by, human inquirers in communication with one another and their environment against a background of cultural networks. The concept of lifeworld is not an explanation of or a description of our everyday world, rather its function is to show us how we, as individuals, arrive at meaning, that is, how we interpret and come to understand.

Our understanding of the lifeworld concept has come to include the notion that science and technology have always shaped our lifeworlds and will in the future. We perceive and mediate the world through science and technology and the world we mediate is itself,

and has been itself, shaped by science and technology. An individual's perceptions and mediations of the world and the world itself are part of that individual's lifeworld and both - one's perceptions/mediations and one's lifeworld - are permeated with science and technology. In our individual lifeworlds we relate to the things surrounding us not only through our naked senses but also through the instruments produced by technological innovations effected by scientific achievements. For example, many, whose own eyesight would never permit reading, read books with the aid of glasses. We can even observe germs through a microscope, we listen to a performance of Beethoven's Violin Concerto played by Isaac Stern on a compact disc again and again. It is very nearly impossible to think of perceiving and negotiating one's way in the world without technology: the alarm clock which wakes me up, the underground train I take to work, the fax machine I use to communicate with colleagues in another country, the email attachment I use to send or receive manuscripts to and from the continents of the globe, the sturdy, old "BC" (Before the Computer) talismanic Olympia typewriter I compose on - all these and more have become part of myself, of my way of perceiving and negotiating in the world. And the world I perceive is, as Don Ihde, a philosopher of technology of long standing, points out, a world more saturated with technology than ever before. This "saturation" he maintains is not only denser than in previous times, but, since 1989, the technological paradigms have shifted from the mega-industrial technologies to the information technologies of the cyberage.[5] This shift is more apparent in advanced countries which are entering, or are already in, a postindustrial state, but for other countries, such as those in Asia, the two stages exist side by side. And therein may lie the undoing of the nascent democratization processes in many Asian nations. That undoing, however, will lie not so much in their nascence as in their contamination from the authoritarian traditionalist values crafted onto them.

Industrialization began in the West before real democratization was present, certainly before an acceptance of universal human rights was in sight. Though political scientists often quibble about how to measure democracy, Robert A. Dahl's eight criteria, nevertheless, are often cited as being fairly comprehensive and succinct. Let me list them

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[5] Don Ihde, "Philosophy of Technology, 1975-1995." *Society for Philosophy &Technology,* Vol. I, No. 1 and 2, (1996).

here. Democracy may be said to be manifest when there exist 1) the right to vote, 2) the right to be elected, 3) the right of political leaders to compete for support and votes ,4) elections that are free and fair, 5) freedom of association, 6) freedom of expression, 7) alternative sources of information, and 8) institutions for making public policies which depend on votes and other expressions of preference.[6] Arend Lijphart who uses these criteria in his analyses of today's democracies points out that they render democracy as a twentieth century phenomenon.[7] The criteria may seem strict to some, but upon reflection, it is difficult to imagine democracy as we speak of it at UNESCO without all eight. It may be of interest to those of you at this Asia Pacific conference to know that Lijphart asserts that Australia and New Zealand established the first genuine systems of democracy within the first two decades of the twentieth century. The United States, on the other hand, he says, did not gain a firm grip on democracy until 1965 with its passage of the Voting Rights Act. I mention this last as an aside to point out that no matter where the roots of democracy began, its realization belongs to those who seek it and work for it, wherever they may be.

If we accept the Hegelian premise that modernity begins with self-consciousness, we might also say that in Western tradition the self-consciousness inherent in modernization and industrialization has been a strong catalyst for democratization. None of the eight criteria would have meaning without self-consciousness, without individuality. That is not to say that democratization was not hard won in any country, it is only to say that individual citizens' awareness of individual being and right to self-determination is essential to democratic development. We know the histories of Western democracies, we know that the rights of workers to partake in the fruits of economic development through industrialization were hard won, but won, not only by protesting workers or minority groups but by citizens from middle and upper classes who also had come to a Hegalian self-awakening. And we know too, or, at least, believe, that the institutionalization of certain democratic tenets, like the freedoms listed above, must eventually lead a central government to the recognition of every citizen's right to self-determination and all that that entails. Witness the monumental courage it took for the world's self-proclaimed

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[6] Robert A. Dahl, *Polyarchy:Participation and Opposition*, (New Haven, Yale University Press, 1971) as quoted in Arend Lijphart's *Patterns of Democracy*, (New Haven, Yale University Press, 1999), p.48.
[7] Arend Lijphart, *Patterns of Democracy*, (New Haven, Yale University Press, 1999), p.49.

"oldest continuing" democracy[8] to declare suffrage for all its citizens in 1965, an act that declared before all the world its recognition of its governmental responsibility in the abuse of the fundamental rights of some of its citizens.

Most of the developing nations of Asia did not have modernity thrust upon them by the tides of history, they chose it. They chose economic development so that they could enjoy the same fruits of wealth that they saw their former colonizers enjoy. It is possible that in the beginning many of those countries were suspicious of democratization simply because they had been sorely oppressed by other democracies whose notions of citizens' rights to self-determination extended no further than their own shores, but it is more probable that, especially for those of the Asian countries which had long adhered to an authoritarian mode of governing and living, the hope was to gain the fruits of industrialization without substantially changing hierarchical structures involving class, gender or region. And it seemed to work. There was the much-touted Asian economic miracle and now, among those "miracle" countries, there appears to be a promising recovery from their fall from economic grace. But there is not now, nor has there been a self-awakening in the Hegalian sense. Instead, authoritarian governments have encouraged their subjects to become consumers who care only that the government manage economic growth efficiently. For such as this, there is no need for democracy.

Efficient industrialization and consumerism is no different for these citizens than was efficient feudalism. Only a few months ago in South Korea much public acclaim was given to Park Chung Hee, the military dictator (1961-1979) whose tenure was marked by some of the worst civil rights abuses seen in the Republic of South Korea under a series of military dictators. He is remembered by misty-eyed Koreans however for bringing economic growth to South Korea. Unfortunately, in South Korea and elsewhere, science and technology have made a considerable contribution to effective government, but the political result is the augmentation of sometimes benign, sometimes malevolent, government control over society. If there are dissenters who do not benefit from the system, they will not be heard, nor will those who dream the dream of democracy. The traditional "collective" perspective inherent in particularism takes it for granted that there

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[8] It is only fair here to note that the proclamation carries a bit of politicking and nation-building. Social/political critics in the U.S. are far more modest and certainly, more critical, as this essay shows.

will always be those who cannot share in the wealth. In view of such prevailing sentiments, it is safe to say that no Hegalian self-realization preceded modernization efforts in many of the Asian developing countries, nor has it yet emerged out of economic growth.

Consumerism is not new, nor does it belong to any one particular form of government, however it can be said to be as totalitarian as any dictator, particularly when it is technologically driven, as Herbert Marcuse, the German/American philosopher demonstrated in his 1964 *One-Dimensional Man.* [9] In that work, in which he critiqued both capitalist and communist societies, he was particularly interested in the decline of revolutionary potential in capitalist societies because of a new form of social control: namely consumerism fueled by scientific-technologies. Through it a false need was created by mass media, advertising and industrial management, with the result that workers, who should have been freed by technological advances, had instead to work all the more in order to satisfy an insatiable need to possess. Society was seduced by scientific-technological progress into a consumerism accompanied by a bland acceptance of the Establishment. In advanced societies, he argued, technology is not neutral,[10] rather it assumes a new form of domination and it is the prevailing form of social control in advanced industrial societies. [11] Moreover, Marcuse contended that our capacity to think critically and to act in opposition were being eroded.

Because Marcuse published his book in the United States, one of the advanced industrial societies he was criticizing the most, his ideas quickly were taken up by a generation of scholars and students who shouldered his banner of protest. Marcuse, who championed minorities and insisted that oppositional thought was necessary and healthy, was early able to witness some of the fruits of his protest when the government of the United States passed the Voting Rights Act and finally earned its claims to democracy.

I have more than one point to make from this anecdote about Marcuse. The first is simply that the influence derived from his book in the United States in 1964 could not exist in most of the developing countries of Asia today. Even assuming a book such as his, written by an Asian author criticizing the very core of government, would not be

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[9] Herbert Marcuse, *One-Dimensional Man*, (London, Routledge, 1964).
[10] Ibid., xv-xvi.
[11] Ibid.,p.9

banned, it would hardly be used, as Ihde reminds us *One-Dimentional Man* was, as a text book, [12] and rationale for needed protest.

My second point is that, Marcuse notwithstanding, consumerism is alive and well in highly industrialized societies. But, wherever those eight criterion for democracy exist, one hopes it will always have detractors and protestors who will change its course. We might, however, well assume that governments which refuse to allow for real democratization in their plans for economic growth will continue, without opposition, to use consumerism as a means of control for, even if we do not accept Marcuse's argument that technology is not neutral, we must concede that the uses of technology, especially in certain fields, depend upon the will of policy-makers. And here, alas, I must note that policy makers are the least critical and the least astute about the dangers of technology and the most in need of hearing cogent criticism from civic groups and intellectuals.

My last point is that whether technology is used willfully by governments for social control or not, it becomes part of our lifeworlds in the most intimate and coercive way. It becomes part of us as much as it becomes part of our world. My glasses are not simply tools, they are my very sight and they determine not only how I will see, but what I will see. I am not at all aware that my glasses are tools, they are, quite simply, even, quite "naturally", a part of me. The tools we use become as living extensions of our selves. We are not aware of the limitations of these extensions, they simply become part of our being in the world, that is, they are as one with us in interpreting the world and interacting in it, an integrative part of our every cognitive act.

III

Most developing countries exist in at least two technological spheres. Unlike more advanced nations, they are either just entering or firmly entrenched in the mega-industrial stage about which Marcuse was writing but, at the same time, like post-industrial nations, they too are entering the cyberage of computers and the internet, the world of virtual, not

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[12] Ihde, "Philosophy of Technology, 1975-1995," 4.

actual, reality. If there has been little critical interpretation going in the developing countries about heavy industrialization, there would appear to be even less about cyberspace or cyberculture. The voices of concern raised in developed countries have been struggling to be heard and they are gaining ground. But there is, even in the West, a mystique about cybertechnology. One finds, for example U.S. President Clinton asserting that every child should have access to computers and the internet in the schools. He has not gone as far as South Korea's president Kim and actually authorized training in computers for every teacher, from grade 1 through 12 at government expense. Yet Clinton is as vague as Kim as to what the training will accomplish, or what it is beyond the ability to manipulate the machine well enough put in programmed step-by-step learning software and to get on the internet. Such is the power of the mystique surrounding computers. Educators who have done their homework do know, however, and as Todd Oppenheimer reported in the pages of *The Atlantic Monthly*: there is abundant research demonstrating " that computers do not significantly improve teaching and learning." "Yet," he says, in the U.S., "school districts are cutting programs - music, art, physical education - that enrich children's lives to make room for this dubious nostrum." [13] There are certainly valid critical interpretations of cyberculture and technology, there is a need to make all policy makers and global citizens aware of those valid criticisms so that they have knowledge of the consequences of letting technology become the prime determining force in their lives. I am going to argue that it is through education that our citizens will come to insist on rethinking, redefining and reinterpreting the technology of cyberculture. But first, I want to describe and analyze some of the already existing dangers and what they portend so that we can have a broader perspective of just what it is that the citizens from every sector of society need to be aware of in terms of economics, democracy and the very nature of human life itself.

When I began working on this essay I had in mind developing a concept that I had long been ruminating about, as far back as the days when the internet was considered, and very nearly was, free to all, and called the information highway, and when we at UNESCO fairly sang out our hopes of using that highway to share the fruits of technology with those who had none or little of their own, and to spread democracy

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[13] Todd Oppenheimer, "The Computer Delusion," *The Atlantic Monthly*, vol.280,No.1 (July 1997),pp45-62.

through networks of scholars and NGO's. And while I, and you as well, I am sure, still hold fast to those hopes and, indeed, even see signs of their realization, the nagging fears I had then have also been brought to the fore through virtual reality and need now to be addressed on a grander scale than they have in the past. The fears that nagged me then had to do with a new class of citizens, dubbed "netizens," a group which, in every society, but especially in the nascent democracies, would become the new middle class, that class which since its first emergence in our societies we have come to depend upon as spokespersons for individuality and the universality of civil rights. "Netizens," of course are those in the internet's world of information trading and gathering who spend their days in cyberspace, communicating in cybertime with other "netizens" from around the world. What concerned me, of course, was the changes their work, and the training they received for their work, would make in their lives and in their very beings. What are the consequences of operating and living in a world devoid of nature, where time and space take on different realities and problems are those that are solved through finding the right information, where not only knowledge but the very act of knowing itself are reduced to the possession of information. And, in computer and internet terms, information, of course, is what one gets on the screen. For these "netizens" what they get on the screen becomes their work-life, and soon becomes their after-work life as well, not only because they have become so accustomed to a particular way of perceiving and assimilating what goes on about them, but because they are given the same sort of media for perceiving in their private lives.

What sort of reality does the media present to them (and us)? Think for a moment of the Gulf War which the world watched on television, not as a war involving people, but as a war of cyberspace. Paul Virilio, the French theorist on technology, cites that war as one "local in space but global in time" due to the combined technology of CNN and the Pentagon. As such, it was a war whose locale, whose actors - victims and perpetrators - had neither names, bodies nor real existence in our consciousness.[14] We do not need too many examples here to see how perception is manipulated, until at length what the screen presents becomes the only reality one knows and is inclined to perceive. Especially for

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[14] Paul Virilio in an interview with Louise Wilson on October 21, 1994 (see Http://www.ctheory.com) in which, among other things, he discusses the Gulf War and the totalitarianism latent in technology.

those whose daily routines will belong to cyberworlds, virtual communities will regulate thoughts and actions, forming their self-identities,[15] unless, as social critics like the ones I am citing here are so strongly advocating, there is some sort of intervening grace in the form of education for awareness, reflection, and autonomy.

Lifeworlds change. They are constantly being reinvented and so, we might say is reality for lifeworlds constitute our reality. The lifeworld I have briefly sketched for "netizens" appears devoid of nature, of real sky, rock, tree. In cyberspace one sees and hears at a distance, one is de-localized. It is as if we live in two worlds at once. It is not, Virilio says, that reality vanishes in cyberspace, but rather that it changes. While we are able to live in two realities there is antagonism, but when, he says, the two become one, the consequences will be profoundly negative in terms of our humanity.[16]

These negative terms were part of the concept I was trying to articulate when I thought about this class of "netizens" whom I saw as a new middle class but one emerging without a civil cohesiveness in real space and time, without an awareness of those who live and toil and receive none of the benefits of economic growth, only its upheavals, and only, for some, the terrible poverty it sometimes produces in its wake. It seemed to me, in the last few years that I was mulling over this notion, that the tearing apart of the self, the dislocation of the self from nonvirtual reality which cyberspace created, was a phenomenon that would more likely be found in developing countries which had weak or superficial traditions in any or all of the eight criteria necessary for the continual democratization all of our histories demand.

There is a hue and cry coming from developed countries regarding the totalitarianism of technology and especially computer cyber technology. Theadore Roszak's critique of information technology argues that youngsters are being trained to think like computers rather than simply to think clearly and reflect or create. Moreover, he points out that the emphasis on information rather than thinking that is inherent in computer use may well develop students who conflate information with knowledge and make all problems

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[15] Tim Jordan, *Cyberpower*, (London, Routledge, 1999), pp.4-5.

[16] Paul Virilio in an interview with Carlos Oliveiera conducted and published in German by *Frankfurter Rundshau*, (September 2, 1995). Translated by Patrice Riemens at the Institute for Development Research at the University of Amsterdam. Available from http://www.ctheory.com under Global Algorithm 1.7

computer solvable. [17] Other critics of technology in the schools, like Neil Postman, remind us that John Dewey demonstrated that schools do not serve a public so much as they are part of creating a public. [18] Education is geared today toward economic utility, consumerism, technology and the particularism of multi-culturalism. But other objectives and narratives have been served in the past and can be again. Postman suggests such school narratives as 'a view of history of humankind in terms of errors and corrections,' or 'the laws of diversity.'[19] I should like to suggest ' exploring the historical development of the concept of democracy and human rights' or 'exploring the role of technology in our lifeworlds.' Postman's point is clear enough: education should be about more than consumerism, if it should be about it at all.

For all the sense of technological oppression in our lifeworlds today, there is no dearth of hue and outcry, and no dearth of positive proposals for change. What is needed now is for Asian educators of every stripe, from philosophy, early childhood education, economics, languages, history, economics-all, to work together with their counterparts in the West, and to share ideas on finding ways to reevaluate and reinterpret technology in our lives. As well, we need to be doing this in our schools. Certainly our university students need to be able to read books critical of their governmental system, and certainly all students at every age need to be taught to think critically and to develop a disposition toward reflective and analytical thinking

The tyranny of the cyberage is global. However, as I have pointed out repeatedly in this essay, those nations with democratic traditions allowing for dissent and alternative sources of information are in a better position to reinterpret and reevaluate technology than are those nations bent on draconically fitting democracy to patriarchialism and particularism. Still, those nations too must pursue the reinterpretations I am talking aboaut here. There are efforts in many of our Asia-Pacific countries to work with philosophy and critical thinking in the schools. We have shared many of those efforts at such meetings as this and there are several APPEND programs in operation now. We need to do more. We need themes such as Postman speaks of, we need units of study

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[17] Theodore Roszak. *The Cult of Information,* Berkeley, the University of California Press, 1994.
[18] Scott London's books review of Postman's *The End of Education,* (New York: Alfred A. Knopf, 1995) at www.west.net/~insight/london.
[19] Ibid. p.2.

examining the effects of technology on societies - on our societies. These are themes even young children can explore if we but give them the tools. We might try exchanging teachers and programs for the length of a semester and we might also consider the importance of sharing the methods by which teachers are trained to incorporate critical thinking, or CT, as it is called, into the curriculum in such countries as Britain or Australia where, if my reading here is correct, it is an educational mandate. My understanding is that teaching students to think and not merely to solve teacher articulated problems and use computers is a matter of great concern even in Western countries, and that resistance to the teaching of thinking is widespread for a variety of reasons. Getting those NGOs which are concerned with women's rights and political participation to delve into the possibility of approaching these issues in the classroom through curriculums dedicated to using critical thinking might also lead to a stronger persuasive force. NGOs, as we all know, have a good track record for effecting changes in institutions.

Totalitarianism is doubtless latent in all technology, as Virilio insists. Certainly technology has always played a role in the formation of our lifeworlds, that is, in that domain in which we make meaning of the world. But technology is not the only force creating our lifeworlds, we ourselves are also a force, as is our rationality and it is not at all too late to muster these forces and reclaim the humanitarian impulses and traditions that cyberworld threatens to obliterate.