

New Media in the
Third World

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Being a European educated "egghead", I try to systematize all occurring problems before examining the facts. As such, I attempt to understand the various systems of new media and their impact on society and the individuals in the Third World as parts of a wider and more comprehensive system of reference, that is, a national culture, which is itself part of the all inclusive and comprehensive system of world culture.

I understand "culture" in the American sense of the term, to be a system of technology, of language, attitudes, beliefs and socio-political means of power and interaction within a historically bound community. If I put 'technology' in the first place, I do so, not because it is the topic of this conference, but because man, being a "tool-making animal", structures his culture according to technology before modelling it along social, political and ideological patterns.¹ Consequently, when speaking about the role of the new media in the Third World, we have to ask ourselves:

1. How does it interfere with the traditional systems of economic, social, political and personal interaction?
2. How does it influence the prevailing overt and hidden trends of development?

These questions have to be considered from various angles, the very first being that of the communicative aspect of the new technology in the public as well as in the private sphere.

Television allows us to witness physically a reality which is actually far from our eyes. Being trained, as we are, from early childhood, to believe that reality is what we see and what we hear, later on, as media users, we are induced to believe that what we see and hear on the television and via video is real even if we know that we are, in fact, watching a piece of fiction.

This fundamental notion is of course much older than the modern

1. Compare : Ribeiro: The Process of Civilization

tool of audio-visual technology. The traditional media, for instance theatre, makes use of the very same mechanisms of perception, emotions and consciousness for interaction. However, there is a basic difference between traditional media and the moving images created by modern media. The spectator of traditional media understands what is involved in the performance, who produced it, how and for what purpose. The production of reality produced by modern media is based on an economic, social and especially technological system of which the viewer remains oblivious. When people watch a puppet theatre in Java, when they see and listen to the epic poem of Ramajana, they are confronted with a reality which is as far removed from theirs as that of a Far West film which comes to them via video cassette. However, through their cultural system, they learned in their early childhood to distinguish the reality of the play in relation to the experience of their daily lives. In contrast to this, American fiction is foreign to them. They are ignorant of its roots and therefore absolutely incapable of incorporating what they see into their internalized conceptions of reality and fiction. I will come back to this problem in more detail later.

Films produced for television and video are sophisticated technological and cultural systems of production which cannot be seen through, especially when the audience is made up of people in the Third World. In order to do so one is forced to analyze the interconnection between producers and users of the new media. That is, one is impelled to examine the system which creates and represents a new cultural identity in contrast to the reality of the Third World.

By definition, "to analyze" means to separate the facts and to search for the causal or correlational link between them. Herein lies the first major difficulty concerning the use of modern media in the Third World. Compared to the past and to former technology, it is much more difficult to isolate the different aspects and phenomena surrounding the mass media. In the words of one of the foremost experts in this field, Armand Mattelart:

"The convergence of a number of networks, through which travels a flux of information onto a television screen, no longer allows for the isolation of domains that were once dissociable: newsreel information - entertainment information - education information - social control information."¹

The new technology makes it very difficult to determine the cause-effect relationship between the mode of production and the ways of consumption. On the production end you have technical innovations, commercial trends, power and profit. On the consumer end, the needs, expectations, social and cultural background of the viewer. How the two worlds interrelate is not at all clear. Where once we could blame imperialism or transnational companies for the creation of a particular mode of production, now we have to look elsewhere to understand why televisions and video films are consumed in the Third World so eagerly by people whose needs, materially speaking, lie clearly somewhere else than amongst the fruits of Western industrial culture.

In order to face the difficulties of analysis, let us choose a method which was elaborated by Donald Mc Granahan² especially for arriving at an understanding of Third World development and which involves the use of an "indicator". An indicator is a variable which points to something quite different than that which it measures. A thermometer, for example, measures the body's temperature. The measurement of an abnormally high temperature becomes the indicator for something not quantifiable, namely illness. In a similar manner, the statistics measuring the use and diffusion of television and video cassettes in the Third World can serve as a valuable indicator for the health or the illness of the Third World's social body.

The profound changes which are occurring throughout the Southern hemisphere did not, of course, originate with the emersion of

1. Armand Mattelart, Hector Schmucler: L'ordinateur et le Tiers Monde, Maspero ed. Paris 1983

2. Donald Mc Granahan is director of the United Nations Research Institute for Social Development in Geneva (UNRISD)

the new media, nor can they be considered as the cause of the revolutionary transformations which are shaking the whole system of interaction in the developing countries, and yet through the indicator "TV-video" we can better comprehend the general trend of economic, social and psychological changes in world culture.

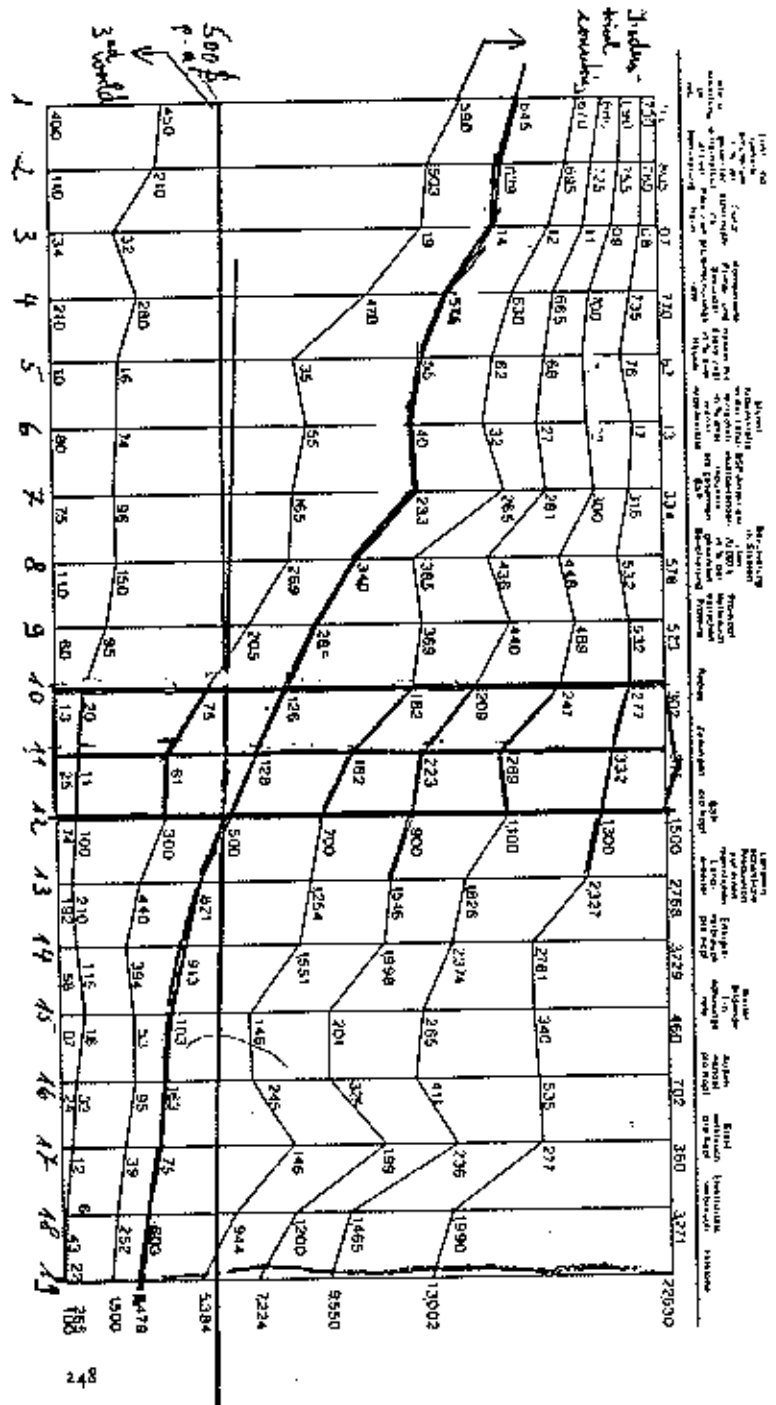
Taking the diffusion and use of the new media throughout the Third World as an indicator of development, it would be naive to equate its increasing presence in the urban areas of the Third World with the general progress of developing societies. It is evident that in any society the linear growth of one particular factor within the global system - in this case that of the number of television receivers or video-recorders - does not necessarily indicate progress. What'smore, it may even accentuate pre-existing economic, social, political and cultural disparities and contradictions, so that a continuation of growth in this area could even provoke the collapse of an already precarious balance in the social system. For this reason, the widespread application of a new means of communication or any other technological innovation has to be put into perspective and weighed against the improvement or worsening of the general economic and social conditions. More specifically, such factors as food, work, health, distribution of the Gross National Product must be compared to the mobility, autonomy and freedom of the individual, to his potential and his expectations. In other words, the rapid increase of television sets, and video recorders, the multiplicity of offered programs and cassettes in Caracas, Lagos or Jakarta is by no means a univocal indicator of general progress among these societies. As we shall see, this kind of "progress" creates immense problems and for the time being has done more to contribute to the economic, social and cultural crisis than to alleviate it.

In order to demonstrate how one can consider the new media as an indicator for actual and predictable development, let us consider the following table of an UNRISD study. (see next page)

For what I wish to demonstrate, it is of no importance that this table is more than 20 years old and, for this reason, does not

Income per capita and corresponding indicators (Data 1960)

Source: Nohl/Weschler: Handbuch der 3. Welt, I, p. 248
 Korrespondenzpunkte für Lateinamerika und Pro-Kopf-Einkommen (Darmstadt 1960)



Legend

- 1) Life expectation at birth
- 2) Wage-earners int of econ. active population
- 3) Average of persons per room
- 4) Combined prim./sec. schooling rate
- 5) % electrified households to all h.
- 6) % male labour in agriculture/total male labour in nat. economy
- 7) Industrial part of GNP/ GNP total
- 8) Population in towns above 20.000/ total P.
- 9) Consumption of animal protein
- 10) Radios
- 11) News-papers
- 12) Income per capita
- 13) Agricultural production per male agric. labourer
- 14) Energy consumption p.c.
- 15) Rate of higher education
- 16) Foreign trade p.c.
- 17) Steel consumption p.c.
- 18) Electricity consumption p.c.
- 19) Telephones

include any data on television or on any other of the new media apparatus. What can be seen at first glance is that completely different indices correlate with the income per capita and correlate among themselves in a significant graph. The thick line separates the developed from the developing countries. It appears evident that without any reference to the internal social stratification, the difference between radio and newspaper diffusion is much higher in the \$300 annual income bracket than in the \$1,500 one. The higher the income, the narrower is the discrepancy between the amount of newspapers which are read and the degree to which radios are listened to. This may be due to a number of economic and technical reasons, two of which are the extent of press distribution and the level of literacy. What appears certain, is that information which needs a mental translation from reception to understanding, let us call this "digital", has a much wider market in the higher income bracket and correlates with a higher degree of education.

The analogue type of information, the audio-visual one, if it still correlates with the income rate because it needs a receiver, correlates inversely to the rate of education. One needs to be literate to read a newspaper. One needs less to understand the message of a comics magazine. One need not be literate at all to watch a television film. Moreover, the audio-visual message transmitted via television or video will reach the illiterate viewer by the visual alone and not by the accompanying language for the simple reason that either he does not understand the language in which it was produced (e.g. English) and even if he does understand it (e.g. when the subject is a national product), he doesn't comprehend the meaning of the text because the cultural background of the spoken universe does not correspond to the one in which he grew up. McLuhan's "the medium is the message" may be placed in doubt, but one cannot refute the gap between the perception of messages which require digital training of thought and those of an audio-visual nature, which need none. Thus far his theory has proven to be correct and applies fully to the table above.

Nonetheless, in this table of international comparison, the

most important indicator for our topic, that of the discrepancy in income within individual nations, is missing. It seems that in the Third World, the greater these differences are, the more the usage of new media becomes concentrated in the very narrow strata of high incomes. At the same time, but for other reasons, the longing for them becomes especially urgent among the poor. If it is true that the have-nots of modern media, who are the very large majority in the Third World are not about to tolerate their own deprivation of such innovations, then we can conclude that the introduction of the former in the Third World is a potentially explosive catalyst of social unrest with unpredictable political consequences.

In order to illustrate the meaning of social disparity in Third World countries by the indicator, "use of new media", let me take an example, which points to the situation in all developing countries with the exception of Singapore, Hongkong and Taiwan. The average income of the owner of a video-recorder in Latin America is \$52,500 compared to only \$32,950 in the United States and \$27,450 in Europe. This means that the buyer of a video-recorder in Latin America needs an income ten times superior to the average of his countrymen, while in the United States and in Europe the ratio is only 2 to 1. It can be said that the gap between the social classes in the Third World is indicated moreso by the access of the latter to the new media than by the accumulation of such status symbols as housing and the possession of a car.

As far as the usage that television and video viewers make of their apparatus is concerned, Mittelart and Schmucler estimate that 75% of Latin American video-cassette owners purchase pre-recorded fiction. In the United States this number is 48% and in Europe, 41%. This ratio points to the disturbing fact that up until now the new communication technology has been adopted by the Third World in a purely consumptive way without any attempt to benefit from it in order to increase personal culture or to encourage individual development. The two authors cite a marketing study of Time Review which came to the interesting conclusion that in the first place the introduction of modern media accentuates the social division within the already small minority in the Third World, which owns

electronic media and that in the second place, all the publicity around the liberating function of television usage and video machines and the like has proven to be an illusion because nearly nobody in Latin America records television programs through personal choice nor makes any other creative use of the possibilities offered by the new technology.¹

Now let us come to the important problem of the promotion of the new media as an indicator of the growing economic and cultural dependency of developing countries on the industrial ones. The extent to which the promotion of modern communication's technology is monopolized by the First World is an indicator of the degree to which the Third World is deprived of its own cultural power and technology. Take as an example the following descriptions of 2 Latin American enterprises, which upon first view give the impression of being autonomous and very successful:

The first is that of the major television chain in Brazil, Rede Globo, whose headquarters are in Rio de Janeiro. The second is that of Televisa in Mexico. These are both corporately connected. Both are multi-media enterprises with chains of newspapers, a radio station, book publications, audio-visual and audio cassettes. Globo owns the largest television chain in Brazil with 5 broadcasting stations and 36 affiliated stations, plus hundreds of retransmission stations. It has an AM and FM system, an audio-visual recording studio, the electronic industry, Telecom, a theater, a promotion's enterprise, an art gallery and still more. The latest statistics indicate that their programs reach 58% of the total population of Brazil.

Mexico's Televisa, in existence since 1973, owns 4 television chains with 61 stations of retransmission. According to the statistics of 1979, of Mexico's 55 million television viewers, Televisa reaches 41 million. The company owns 47 enterprises within the cultural industry. With a total of 70,000 television hours of fiction and documentation at its disposal, Televisa annually exports 24,000

1. Mattelart: op. cit.

hours of television viewing to serve the Spanish-speaking population of 18 million, living in the United States. Furthermore, it owns 5 of the biggest radio stations in Mexico, 5 publishing houses for books and magazines, 9 show business enterprises, 3 film studios, 4 record studios, a tourist agency and more.

These two impressive examples would not suffice as an indicator if Rede Globo and Televisa were considered simply as successful national enterprises. The penetration and diffusion of modern media technology in the Third World serves as an indicator for the profound economic and social changes only when considered transnationally. It is impossible within the limitations of this article to present an exhaustive account of the dependency imposed on the Third World in this realm. Instead I have chosen an example:

In the very country where Televisa is a powerful, independent, national enterprise, the United States, Japan, West Germany, France and the Netherlands established in the Free Trade Zones of Mexico around 500 electronic plants precisely for the purpose of producing new media technology. In 1982 these employed 120,000 workers, 85% of whom were women between the ages of 17 and 23. Their output represents 10% of the world's production under foreign contract and 30% of the whole Third World market. The United States alone established in Latin America 370 plants for electronic products, 193 of them in Mexico and 140 in Puerto Rico. 226 other U.S. plants are established in South East Asia, 90 of these in Hong-kong and Taiwan, 62 in India and Singapore. In 1975 already 7 out of 11 enterprises controlling the color television market in Brazil belonged to transnational companies and 80% of their components were imported from industrial countries. In Venezuela 89% of the capital invested in the cultural industries was of foreign origin and the 11% of national origin served only for the production of unsophisticated material like wood, cardboard, paint, etc.

The problem of dependency is aggravated still further by the one-way transfer of advanced technology. Out of a sample of 29 contracts for media production and diffusion made for Venezuela, 62.5%

were of U.S. origin, 16.7% Dutch, 12.5% Japanese and 4.2% West German and French. The stipulations for these contracts are still more revealing: 37% prohibit the production of derived products, 43% prohibit the export of goods produced with the help of the transferred technology, 65% comprise juridicial clauses which severely limit the access to technical information and 62% limit the use of these technological innovations once the contracts are broken off.

Mattelart points out that Sony has produced its semi-professional U-matic in cooperation with the Brazilian company Moto-radio since 1981 and intends to produce the series of Setamex-type cameras, monitors and video reporters outside Japan.¹

These are some examples of the way in which Third World countries are driven to become dependent on the hardware of new communication media produced by the industrial nations. They are significant indicators of the degree of dominance claimed by one part of the human world over the other. They demonstrate how this dominance lies clearly in the monopolization of advanced technology by a few centers of the Northern Hemisphere.

The concentration of technical know-how is automatically followed by the concentration of corresponding software production in the studios of the industrial powers. Monopolization of the new media industry is favoured by the fact that those countries which export their studio creations to the Third World are the former colonial or imperialist powers which once imposed their language and culture on the small corrupt native minority, today ruling most of the officially independent former colonies. Hence, most developing countries import the broadcasting systems of their former colonial rulers or, in Latin America, those of the United States. So, for example, India's broadcasting system is a close imitation of England's; that of the francophone countries of Africa is modelled after the programs in France; in the Philippines it is based on the

1. Tirado: Análisis de la industria electronica y de telecomunicaciones en Venezuela, CENDES Universidad Central de Venezuela, polycopied in 1976 in Mattelart: op. cit.

style of U.S. television. Intangible elements, such as broadcasting norms, styles of production, professional codes and expectations are all strongly influenced by those of the former colonial rulers.¹ Training courses, technical assistance contracts, advisors sent from the centers of technology and economic power virtually guarantee the continuity of cultural dependency.

Besides this, there is a plainly economic reason for which Third World countries continue to rely on the metropole for technical leadership and materials. The following passage taken from a study on "media imperialism in the Philippines" points to this fact:

"Once a country introduces television, there is great demand from purchasers of television receivers, from advertisers and from those responsible for deciding to invest in television to fill viewing time. Even a schedule of only five hours a day generates more demand for programming than local sources can supply, even using the cheapest type of programming such as talk shows. For instance, the BBC's average cost per hour in the mid 1970's was \$30,000. At an average cost of only \$500.00 per hour, a country would require a production budget of close to one million dollars a year. Third World countries, with the exception of OPEC countries, do not have this kind of money - nor do many of them have the necessary trained manpower or production facilities. Consequently, in order to maintain a daily schedule, programmes must be imported and, for poor countries, American programmes are available at an unbelievably low cost. For instance, the price range of half-hour episodes of American series in 1980 was \$150-200 in Thailand, \$130-150 in Korea and \$225-260 in Hong Kong. Japan, on the other hand, paid from \$3,000-3,500 for the same fare (VARIETY 1980). These "countries' prices" are a function of the number of sets in use and are applicable to programmes that other countries in the same area agree to acquire. They also reflect the extent of encouragement that the producing and distributing companies want to give a television station in the hope of expanding the market for their products.

Furthermore, there is a constant and expanding demand for television materials within the U.S. itself. This leads to the production of television series and serials which allow for lower costs than one-time specials and which also solve the

1. This is even more relevant to cassette production, especially where subject matter and style are concerned.

programming and scheduling problems of the American networks. There is, as a result, a ready supply of series for export and, because of the growing export market, many television programmes are budgeted with export revenue in mind."¹

A further quotation from H.J. Schiller also taken from the above-mentioned study demonstrates the subtle way in which Third World audiences are caught up in the craze of new media consumerism:

"One immediate consequence of the huge, American-owned productive complex now operating internationally, is the pressure it generates to obtain access to and domination of the local media. Only in this way can it attract and process indigenous audiences into consumerism....The production of movies, television programmes, games, records, magazines, and books is consolidated in a few corporate superstructures and made part of multi-product lines of profit-maximizing combines.... The transformation of national media structures into conduits of the corporate business system and the heavy international traffic of commercial media products flowing from the center to periphery are the most prominent means by which weaker societies are absorbed culturally into the modern world system."²

Economic and especially cultural domination is indeed a much more complex phenomena than would appear at first - let us say - materialist glance. What the statistical indicators fail to do, while proving the technical dominance of the United States, Japan and Europe, is to explain why the masses in the Third World do not choose to ignore the instruments of their further oppression. Instead, no matter what the message is, whether it proclaim the revitalizing efficacy of coca-cola, the lightning speed of the latest model of a brand-name car, whether it be a Western, a horror film, a sequence in the ever-running Dallas series, if it comes from the Northern Hemisphere it seems to fascinate a public living in the most dire conditions of malnutrition, shabby housing and unemploy-

1. Mercado and Buch: "Media Asia" 1981 vol. 8(7)

2. H.J. Schiller: Transnational Media and National Development from: J. Richstadt (Ed.): New Perspectives in International Communications Honolulu 1977 pp. 33-43

ment. The question is still more baffling when one considers that this very same audience which feeds on the shallow products of industrial media, possesses its own rich indigenous culture.

In order to arrive at an explanation to this seemingly incomprehensible dilemma, I think we must have a closer look at the revolutionary change in the cultural needs of two billion of the world's population.

Basic needs is the term that socio-economic scientists use when referring to food, housing, health, work and education. Never, however, do they include the viewing of television or video recorders in this category. When speaking about that part of the world's population which lives below the poverty line and whose only goal can be to survive, there is no doubt that those needs listed above are the major concerns. However, I am less certain that when referring to those living above the poverty line that one can so easily divide basic human requirements into those that are "primary" and those that are "secondary" to survival. The following passage from Mattelart should illustrate more clearly the difficulty I see in trying to rank human needs hierarchically:

"More and more often one can spot in the Iquique Zone a Brazilian Indian pulling out from underneath her sixth skirt a roll of dollars with which to buy electronic devices which she then sells as contraband in her own country.

In the South of Bolivia whole villages are beginning to see their daily lives being transformed by the introduction of sophisticated technical apparatus, whose acquisition was considered impossible just a short time ago. Overnight little islands of transnational culture are being implanted in the midst of thousand year old traditions and are beginning to gnaw these away.

The question here is why does this simple Bolivian Indian want to buy electronic gadgets and why does her village or poverty-stricken neighborhood agree to spend the little money that they

1. Mattelart: op. cit. p. 58

have or that they can borrow on the purchase of U.S. produced video recordings and the like. If there is indeed a hierarchy of needs, one would think that these people would first think of bettering their water supply and establishing some kind of sanitation facilities, of investing in agricultural equipment or in seeking training for a qualified job. Instead, the Indonesian taxi driver, the Nigerian oil field worker, the Indian shopkeeper choose to remain for a lifetime in debt for the satisfaction of being able to watch a television program. How is it to be explained that these needs are more urgent to them than the alleviation of their miserable conditions? To answer this question by blaming publicity for creating such absurd needs or by accusing the consumers for their lack of education and common sense is too easy. This kind of reasoning ignores the socio-psychological link between fiction and reality, which I mentioned at the outset of this paper.

Now, when we think of our needs and the way they are satisfied what comes to mind are the goods and services which we learned to regard as being valuable within our specific social group. Inside our cultural environment we learned to eat a certain kind of food and to respond to a particular manifestation of love and tenderness. More precisely, any behaviour is goal-oriented. The goals, in turn, represent collective and individual means of satisfying needs. These may be basically organic, but they are shaped and historically produced by the expectations of the group or the culture to which we belong.

To use an example, tons of research documents have been published expounding upon the needs and sources of gratification of young American and European TV viewers and on the reasons why they desire video equipment from their parents. The interpretations that social researchers have come up with to explain these needs are not only quite different from one another they are often contradictory. On one point, however, they all agree: The satisfaction derived from watching television and other media productions serves as a compensation for the need of active communication and interaction, like play, work and tenderness which remain unsatisfied.

What appears in this case to children applies in general to the Third World customers of modern media. The need to watch the screen and the satisfaction that goes along with this activity is inversely proportional to the opportunity which the watcher believes he has before him to cope with his expectations or to fulfill culturally determined goals by planned activity. Put in a different way, television viewing is compensation for frustration in social communication and interaction and frustration is the consequence of economic, political and cultural conditions.

In this light, we can define needs as feelings whose conscious expression arises in response to the distance between social goals and self-expectations and the capacity which each individual imagines himself as having in order to fulfill these expectations. Now, when a need is felt by an individual or by a group it is necessarily linked to the goal which is strived for. It is historically and socially irrelevant to judge such goals as being "right" or "wrong". The ambition of a 12-year old North American boy to one day become president of the United States and that of his Iranian contemporary to go directly to the seventh sky of Allah by running into the Iranian mine fields are both based on the same ground of human psychology. They vary only in their degree of realistic or fictive thinking when considered in their cultural context. Keeping in mind this hierarchy of needs in the Third World, it would therefore be a typical example of Western ethnocentric prejudism to judge as "wrong" the Indian Sikh who purchases a television on heavy credit.

The distance separating the individual's or the group's real situation from the pursued goals, be these economic, social or political or ideological is considered by those who seek them to be needs. The size of the gap depends itself on the actual situation of the individual and of his group. The greater this distance is conceived to be, the more urgently it requires a fictive solution. By a "fictive solution" I mean any answer which seems to satisfy the felt need without actually attaining the goal which is sought after. A fictive solution shifts the goal from something which is longed for, but which is somehow unattainable - be the hindrance real or imagined - to a dream of a goal.

In summary we can conclude that:

1. The greater the distance separating a need and the possibility to fulfill it, the more fictitious must be the individual's attitude and behaviour.
2. The fictive solution must effectively compensate the disability whether it be real or imagined, to reach the goal created by a certain need.

Historically and as can be judged from individual biographies the fictitious answer to a need is as effective as the real solution. One can say that the whole production of thought, of fantasy and art, of literature and religious ideas and rituals are the fictive solutions or the compensation for real needs, that is, of internalized goals. One can say too, that the industry of culture understands perfectly well this need to compensate. It sells its products with increasing success precisely because it knows only too well how to promote its market of dreams on a world-wide scale.

Perhaps this may all seem like very abstract thinking. Such reasoning, however, explains the fads which allowed for the penetration of new media in the Third World in the first place.

Let us consider first the social group toward which the marketing of electronic hardware is foremost geared. It is composed of the higher income bracket, a very small minority of indigenous urban commercial administrative and military agents of national or foreign power. These are people who educated themselves in the West, which means that their internalized goals are to be active consumers in the manner of the former political heads and actual economic rulers of the world. They see no possibility of attaining the position of their dominators. That is to say, they will never be the managers, politicians, generals, scientists or artists of New York, London, Paris or Tokyo. Nonetheless, they can compensate for this frustration by driving the same kind of cars, by playing golf, by sending their children to the same exclusive schools that the elite sends their offspring and above all, by storing all the information and the fiction produced by the cultural industry. Through television and video viewing they feel that they can partake in the

active life of those in power from which they otherwise find themselves excluded. They resemble those European and North American boys and girls, who are mesmerized by horror films and space vessel commandos because they are deprived of actively shaping their own daily lives.

This is not the whole story. I already mentioned the fact that a television receiver and even more so a video recorder are very important status symbols. They separate the few "haves" from the innumerable "have nots". Now, for the "haves" in the Third World, the simple fact that they possess such a sophisticated tool, whatever it may be - the car, the color TV set, it is proof to themselves and to the world around them of their success. Usage of a television or video machinery is analagous to the sense of satisfaction that their children derive upon receiving the grade "A" at school or at college. It is something like a certificate guaranteeing to all who can see them that they indeed belong to the mighty, successful world of the elite from which they are actually ostracized because they live in Lagos instead of in New York, in Lima instead of in Paris, in Jakarta and not in Tokyo.

But, let us now turn to the much larger group of those who are forced to strive for physical and social survival. This is the overwhelming majority of the very poor, especially the deprived youth in the Third World countries. These young people emerge from the patterns of traditional societies and are accosted by the reality and the fictitious aspirations of industrial society, which mark the economic and social trends of today's world.

In pre-industrial cultures the needs of the group and the individual were internalized within a traditional framework of communication and interaction. So too, were the compensatory mechanisms. Thus, the real solutions as well as the fictitious ones fit into the context of the social group and individuals pursuing them. The expectation of a girl in an African tribal culture, for instance, conformed with her real and compensatory means to achieve the internalized goals and thus to satisfy her basic needs. Not so, when the needs she learned to recognize while growing up in the African

tradition clash with those nurtured by industrial and post-industrial culture. The traditional forms and modes of communication and interaction inside her family and her village are violently intruded upon by the products of industrial culture - be it a transistor radio, Western music and language, school or what her brothers relate of their attempts to earn a living in town. The girl's self-estimation of her ability to cope with these newly felt needs, stemming from industrial culture, is extremely low and yet her craving to belong to this irruptive style of life is inversely proportionately strong. Since she sees no chance of obtaining the real goals of industrial society, she must seek compensatory satisfaction.

The most effective source of compensation comes across audio-visual devices. The visions and sounds they produce allow the spectator to participate emotionally and therefore "really" in this fictive world of abundance, ambitions and conflict. The longer our African girl is separated from her authentic social and individual situation by the reality presented to her on video, the greater is her need for this kind of compensatory fiction.

Television viewers in the Third World are as excited by anything that appears to them on their screens as children are in the Northern Hemisphere when watching television commercials. The major difference is that, being adult, the needs of this audience are all the more urgent. However, instead of working for the satisfaction of their needs - a task which their low self-esteem assumes to be impossible - they compensate for them by living them on television. So long as these adults are convinced that they can never belong to the industrial culture, which they admire so much, at least they can hope to be able to one day purchase the hardware for audio-visual dreaming.

One of the most serious studies undertaken on the connection between poor youth and communications systems, was conducted by two Indonesian social scientists and published in the English edition of the influential Indonesian magazine, Prisma. The subjects under consideration were the youth of the poor kampong of Jakarta.

What they considered to be "poor" was the following:

"Of a population of 4.5 million, more than one fifth belongs to the younger age bracket (15-24 years)... and live in the poor kampongs of Jakarta. What we mean here by a poor kampong is an area...with minimum living facilities: poor health and sanitation facilities; of Kampong paths and sewage; overcrowded houses, among which are mere old shanties with very poor inhabitants, or clusters or illegally occupied shacks..."

In order to be classified in the low income bracket, the subjects of the study had to answer to at least of the following criteria: 1. those living in areas of illegally erected houses; 2. those living...near railroad tracks, riverbanks, under bridges, etc.; 3. those living in the parts of the city with minimum facilities, where housing is crowded and where sanitation facilities are wanting; 4. the unemployed, regardless of whether they have a home and are supported by others or not.

The following is an excerpt of the results of this study as it was printed in the Prisma journal:

Film and Television

Due to the economic condition, television is a most unlikely thing to own for the people in poor kampongs. Nevertheless, many TV programs in the kampongs are watched by the kampong youth. The TV programs are not continuously followed; only programs suitable to their interests and taste are selected. There is also a correlation between the frequency of TV watching and age. In the *Kelurahan* of Kebon Melati for example, most of the elder people (70%) never enjoy or watch TV; most of the youth are interested in TV serials and sports; and almost all children watch and enjoy serial films made for children. During the hours when programs they favor are shown, the youth usually gather at the homes of TV set owners. These homes often become very crowded and some of the young people watch television through open windows and even from outside the fence. On the other hand, serious programs like news, reportages on development, inaugurations by high officials and speeches do not capture their attention. We can see this when the film ends: young people and children would immediately disperse. According to observations, this happens commonly in all poor kampongs, almost without any exception. Repeated advertisements accompanied by sound and music, funny tunes and voices, are subject to quick imitation—sometimes in unison? when the jingle of the advertisement is sounded.

The frequency of watching TV or watching movies in favorite theaters and the influence of the film on the youth have been insufficiently studied. The *Kelurahan* of Guntur is the only area surveyed that has a roofless folk theater with relatively low admission fee and old films. Observations indicate that there is a connection between age and preference for film genres; elders and women enjoy national and Indian films with maudlin themes or those that show luxurious scenes in exotic places, and funny movies, while young people seem to prefer

8. Laporan Kesimpulan Penelitian Pembaca Majalah Berita Tempo ("Report on the Conclusion of Survey on the Readership of Tempo Newweekly"), Jakarta, PT on March 20, 1953.

Western—and recently Italian or American Westerns or spy—films full of stories about heroism and virility or sex and violence. Age limitation is not rigidly observed so that the regulation of “17 years and up” or “for 15 years and up” is automatically viewed as “for 17 years and up and down.”

Several conclusions can be drawn from this conclusion? that there is a consistency between the preference for radio broadcast, reading material, film and television, mainly or solely as media of entertainment on the one hand, and the tendency to be indifferent about, or to dislike serious programs or programs that could serve as means for education. It is furthermore obvious that the influence of film and television on attitudes and behavior is greater than the influence of other media such as the radio, newspaper and other reading matter. This is partly due to the audio visual techniques of the film; in contrast with the radio that only offers the voice of the crooner, or the music in a radio play, movies and television show *how* the crooner sings, his style, his dress, his hairdo and pose, or they show how a shooting battle ensues, how the hero tortures or kills the bad man—or the other way around—and how they dress and act.

But it is obvious that this means of communication does not or has not taken root in the culture of the youth of poor kampongs. Television is only owned by the well-to-do who are usually of a higher education level and social relationship and of more flexible attitude. On the other hand, as we mentioned above, most of the poor elders have never watched television. If the assumption was true that compared to that of other media the impact of television is relatively greater among the youth and that much of the behavior of the youth is influenced by information sources such as movies and television, there would be good reason to say that there is a widening cultural gap between the youth and the well-to-do on the one hand and the elders on the other hand. This asymmetrical cultural growth may be able to explain the increasing alienation of the youth, the formation of limited groups, the widening generation gap and the conflict between generations. The alienation of the youth is also noticeable from their participation in religious activities and their views on these activities. Generally speaking, the youths relatively seldom attend the mosque or *langgar* together with their elders except on special occasions during religious festivities.

The most obvious impact of communication with the metropolitan centers around the poor kampongs is the formation of a certain pattern of consumption among the poor youths. The discrepancy between the ever-increasing hope and the ugly daily reality surrounding the youth is being bridged by various forms of emulation of sumptuous conditions they notice of their neighbor, the modern metropolitan center. This consumption pattern manifests itself in the imitation of the newest thing in fashion, in talks about luxurious topics or things and in the emulation of attitudes they see around them. The emulation is frequently overdone and is more for demonstration effect than to reflect the reality of their daily lives. For example, the imitation of dressing with such conspicuous colors, thick powder and cosmetics, long hair, the use of symbols of youth like necklaces, bracelets, chains or excessive scribbles, pictures and attitudes. The increasing use of marijuana and narcotics among the youth of poor kampongs for example is rather a form of emulation and demonstration effect than the reflection of a conscious desire. In a few cases we can use the emulated social group, namely the rich group and the “owners of luxuries” as barometer for this excessive emulation and demonstration effect: at the point where the fashion of clothes has touched and has been excessively imitated by the poor youth of the kampongs, the rich group tends to “change the fashion of clothes they are wearing.” Phrases and derisions like “you, *kampongans!*” often heard among the rich is mainly directed toward the “imitators from the kampongs.”⁹ This phenomenon of “culture shock” tends to widen the generation gap between the youth and their elders and families, and does not take them closer to the rich.

⁹ This phenomenon seems very similar to the term “culture shock”, popularized by Alvin Toffler, namely “... the effect that immersion in a strange culture has on the unprepared individual or group—when the familiar psy-

Referring to the grouping of youths we could see many interesting things. They usually gather in *warungs*, alley corners and other "strategic" spots, often listening to the radio. Discussion within the groups are active and intense—unlike the mass media and films that only enable the communicant to listen or watch passively—where the participants discuss various informations they received from outside: about love and sex, fashion, marijuana, friendships or fights within or among other groups and about other crimes committed. It could be concluded from the styles, methods and behavior, that the influence of films and television affects their vicile actions or sadistic behavior that are sometimes overdone and tending toward elements of so-called "juvenile delinquency." As we have mentioned it is of course difficult to distinguish which is influenced by the mass media, which by the radio and which by the television, although it can be said that almost everything has been influenced by communication and interactions in its broad sense with "cultural" elements from outside their kampongs.

Whatever the case, the obvious phenomenon is that emulation is often done on its superficial aspect and in a simple form without being digested or even out of the media context supposed to have influenced them. From an observation on the limited number of youths, it is apparent that a gap between the communicant and communicator does exist—in this case among the audience of TV films. In general they are films with protagonists and contexts way beyond the reach of the kampong youth: foreign films in foreign languages (English) that are not understood by the kampong youth with their low education levels. Introductions offered by the announcer about the synopsis is usually ignored or not heard—in the case of the crowd of audience observed—owing to the distance from where they are watching to the television set. It is of course more difficult to comprehend the theme of "truth will prevail" often implied in the films. What they perceive are only how a fist fight is carried out, how a rape is performed, how the bandits rob or torture; and the response to the morality that at the end truth will vanquish is negligible—this is partly due to the way the story unfolds. In the popular Italian and American Westerns, the moral is indeed the victory of virtue over evil: but this morality is often uncovered only at the very end of the picture, after all the cruelties dominated the entire film. This fact may have contributed to the emerging new forms of violence among the youth. It is rather difficult to compare this with the youth of the rich group—whose delinquencies closely relate to their possession of power and riches—but from the surveyed group it is apparent that the poor youth tend to be isolated from their wealthier contemporaries. This might have been caused by the latter's better economic position or their higher aspirations and relationship or their milder reaction toward the outside community owing to of their relatively higher education.

In order to underpin this socio-psychological approach, a number of our correspondants at the Institute for Education in the Third World in Frankfurt, were contacted. I sent them a short questionnaire and requested of them statistical material or their own estimations. (see annex) In the very short time that I had at my disposal, I received responses from Singapore with most valuable statistics of the "Survey Research Group" under contract with the "Asian Mass Communication Research and Information Center", Singapore. It is resumed in a "General Report, 1982, on Cinema and Television". It covers Singapore, Malaysia and Indonesia. Another response came by telex from Jakarta with short, but most significant data, answering to the questions in our inquiry. Finally, we received data from our Senegalese correspondant. The latter gave a short comment concerning the general aspects of television and video in Dakar. For Latin America I relied on two publications of Mattelart's and the personal accounts of contacts in Peru and Columbia.

The preliminary results gathered from the bulk of this material indicate that television as well as video are distributed throughout the urban areas and that their presence is increasing at a high rate. The progress of telematics largely exceeds that of any other productive activity in the Third World at least in as far as urban areas are concerned. A brief scanning of the statistics, however, shows that this rapid expansion of the television and video market is out of proportion with the increase in national and per capita income. The following is a sample of this data:

The cost of a color television set compared to monthly income:

in Indonesia:	20 month's wages of a peasant
"	10 " " " a teacher
in Senegal:	24 - 30 month's wages of a peasant
"	12 - 14 " " a teacher

The cost of a video recorder compared to monthly income:

in Indonesia:	30 month's wages of a peasant
"	15 " " a teacher

The distribution of television sets and video equipment:

in Indonesia:	1 TV for every 25 inhabitants in urban districts
	1 TV for every 80 inhabitants on the whole population
in Senegal:	1 TV for every 12 inhabitants in Dakar
	none in the villages
in Indonesia:	100,000 video recorders
in Senegal:	80,000 " "

Regarding the rate of increase in the distribution of television sets and video equipment:

in Indonesia:	yearly official increase in registered TV sets: 100,000
in Senegal	No statistical data, but "the interest in owning such apparatus is very strong and increasing rapidly."

In order to adequately judge this data we have to remember that in Indonesia the yearly per capita income is \$450.00. In Senegal for the year 1981 the per capita income was \$436.00. The cost of a television is about \$1,250.00. Calculating very roughly, this would mean that the yearly increase of color televisions in Indonesia is equivalent to the combined yearly income of 6,000,000 peasants, representing about 5% of the national income from the agrarian sector. In Senegal, with a much lower rate of industrial production, the ratio is still more frightening. These statistics support the thesis presented above, regarding the revolutionary transformation in the so-called hierarchy of basic needs.

The second striking revelation produced by this information was the fact that household income and the extent of education are not determinants of television and video consumption.

The Singapore statistics point out that in regard to Malaysia, Indonesia and Singapore, on the average 60% of television and video viewers watch their screens from 5 to 7 days a week for 1 to 4 hours, which means that when they are not working this is their major passtime.

Finally, our Senegal correspondent reports that 40% of the programs available are of an informational, documentary or educational nature, most of them coming from foreign trained producers. 45% are films, serials, plays, Westerns and gangster movies. 60% of these are imported from Western producers. 35% are produced in Senegal and 5% in other African countries.

Further evidence supporting this thesis came from another series of data from Singapore. A report on the "Frequency and Recency of Viewing Network Programs" in Malaysia shows that amongst women in low income households, there is a greater rate of television viewing than amongst women coming from high income households. Only among the 15 to 24 year olds in the \$1,000 annual income bracket is the rate of television viewing lower than in the \$1,000 to \$2,000 annual income bracket. Between the \$1,500 to the \$2,500 annual income range, the rate of television viewing among the 15 to 24 year age group drops to less than half. From 25 to 29 years of age the rate of television viewing is more than twice as frequent as among the same age group belonging to the next higher income bracket and nearly three times that of the highest income level.

The corresponding table for men between the ages of 15 and 24 years of age shows no deviance from the general rule applied to women. For all ages the frequency of watching television decreases with the increase in income. The difference that does exist in the amount of time spent in front of the television set between the 2 sexes in this age group are due to the patriarchal base of Third World society. Within the poor income bracket young women are too busy with household duties to reach the same viewing rate as their male counterparts.

The statistics for Singapore, comparing women and men, are slightly different. This is because the population is almost exclusively urban and the average household income is much higher than that of Malaysia. For all ages and all income brackets, the frequency of viewing is more or less equally high and in comparison to the viewing habits of Europeans and North Americans, it reaches

1. Orly S. Mercado and Elizabeth B. Buck: "Media Imperialism in Philip-
pines television"
Orly Mercado is Head of Communication Arts Dept. Maryknoll College,
Philippines. Elizabeth Buck is Research Associate, East-West Commu-
nication Institute, Hawaii.

"General Report," detailed statistical analysis of Indonesia
discloses slightly different results than those for Singapore and
Senegal. For both sexes of all ages and income brackets the type
of programs which are preferred are fiction (40%) and home and world

"In terms of programming, television schedules
tend to be heavily weighted toward entertain-
ment programs (70 to 75%) at the expense of
more serious programs such as news, documen-
taries and talk shows (25 - 30%)."

Two Philippine experts on the subject state:

of his condition and its exigency.
the spectator be saved from having to face the miserable reality
doesn't matter what the message is, the essential thing is that
watches when the opportunity is available." In other words, it
dionnaire read "TV runs permanently." and to number 12, "Everybody
Our Jakarta correspondent's response to number 11 of the ques-

need of fictive gratification.
firmed: the poorer the real situation, the more it produces the
poor kampong youth towards the programs, my thesis is entirely con-
ings. Recalling to mind the information about the attitude of the
by sports. The same ratios apply to bought or borrowed video show-
and science fiction. The remaining 10% of television time is filled
theater and folklore. 20% are films of crime, westerns, spy films
informational and educational shows. 35% are better action films,
in Jakarta read as follows: 35% of the programs are documentaries,
The statistics that I received on the type of programs watched

viewer and his social group.
more a source of pleasure corresponding to the tastes of the
as to what they'll watch. Television becomes less of a drug and
people of different income rates and education become choosier
need for television as an escape from poverty becomes less urgent,
Western standards. One reason for this could be that once the

news (47%)! If one contemplates the distance separating the censored and ideologically intended home and world news broadcastings and the average viewer's daily uncensored existence, one is led to conclude that what he seeks when watching the news is the kind of thrill that he could just as well derive from a Western or a crime film. The "reality" which he sees on the news is nothing else than the glamour, the horror, the "action" of a universe to which he doesn't belong, but yearns to join.

There remains still another aspect of the contradictory impact of television and video on the Third World. As fictive as the heroes of the United States, European and Japanese films and newsreels may be in comparison to the daily reality of the masses in the Third World, they represent earthly men and earthbound situations rather than mythological men and women in fantastic places. Their dwelling places, their fast-moving cars, the glamour and despair of their love affairs or conflicts over money, the influence and power that these heroes of the industrial world command is real to them because they witness it with their own eyes in the streets of their towns or villages every time a political or military figure of some importance makes his appearance in their neighborhoods.

In traditional cultures the heroes and the masters were supernatural, heavenly gods and goddesses, clearly beyond the human experience. The characters of Gilgamesh, of the Trojan War, of the Mahabharata or the Ramajana were looked upon as possessing super human faculties. They fought with magic and invincible weapons, they moved swifter than any living creature, flew higher than any bird and could watch sights far beyond their eyes. The tales created around the deeds of these extraordinary beings procured a sense of deep satisfaction amongst the spectators, who were able to share in the magical mood of the accounts not just by listening and watching, but by actually partaking in the religious beliefs and rituals of their heroes.

1. Obviously video recording will never cover the news the way television does. Developing along the same lines as television minus the news coverage, video is bound to accentuate the trend of contemporary fiction.

The heroes of the modern world, as they appear on television, are endowed with very human characteristics and at the same time with the powers of the deities of traditional societies. They love, they fight and kill and they succeed in gaining power over nature and other men. The tales of their bold exploits, however, allow for no other route to success other than by way of individual or collective effort. The fiction which comes over the TV screen blocks out any possibility of spectator participation. There is no hope. There is no ritual to join in, other than that of imitating the manner, the dress and the habits of the white hero.

The active communication between producer and spectator that was aroused by traditional media in the form of figurative art, story-telling, theater, dance and music was a very efficient means of maintaining socio-psychological balance. As such, traditional media was a stabilizing factor in a world pervaded by misery, cruelty, ignorance and oppression.

To the contrary, modern media, especially the audio-visual kind, induces an ever-increasing socio-psychological imbalance. Not only does the compensatory escape fail to provide an occasion for participating in and acting out one's needs, it adds to the feeling of frustration and craving. For this reason modern media is an enormously powerful instrument in disrupting the traditional course of social interaction and of intruding upon the class structure and the relationship between the generations as well as of the sexes. Audio-visual media destroys traditional values and norms. It dismisses the social hierarchy. Finally, it nullifies all ethical and moral beliefs and robs its victims of any religious consolation.

With each television set or video recorder that we export via the one-way path to the Third World, with each show or cassette that we sell in these parts, we transport the germ of unrest, of instability, revolt, delinquency and violence because along with the fictive goals that the media delivers the practical means of attaining them are missing.

Nevertheless, there is perhaps one redeeming aspect to the

impact of telematic imperialism which is of great importance and which is certain to become even more significant in the near future. In order to counteract the catastrophic predicament of 2/3 of the human race, I am convinced that the only effective weapon is creative thought, not only and not even primarily from the centers of science and technology, but from the workers and oppressed masses all over the world. The new media, the latest devices in communication and information technology are, in fact, capable of opening up this opportunity for creative thought among the poor. Which isn't to say that we mustn't remain very critical admirers of the wonders that these modern means of communication are opening up to us every day.

First of all, we have to ask ourselves, what are the positive effects which could come from the diffusion of television programs bought in the United States or Europe. One outcome is the emergence of a mythology which is neither local nor tribal nor national, but of cosmopolitan origin and orientation. The United States and European cultural industry produces the same feelings, goals, hopes, attitudes and behaviour all over the world. The same rhythms of music, a certain standard in clothing fashions, identical status symbols are gradually being spread on an international scale. From Lima to Rio, from Lagos to Nairobi, from Bombay to Jakarta and to Manila an international language is being spoken. It is a tongue communicating identical notions from the centers of imperialism to the farthest corners of the earth. The propaganda that is a good part of this idiom is responsible for transforming the traditional norms and values.

All national responsables of cultural politics regret and resist this development. They try to preserve the traditional principles of their respective cultures. Their struggle is, however, to a large degree hypocritical and futile. I call it hypocritical because when all is said and done, the government, its military and civil servants are in fact the economic agents of the large transnational companies. Even if they make an attempt to include ele-

ments of tradition and folklore into their programming, in truth those in power seek to eradicate the traditional mentality in order to insure for themselves political and economic supremacy. This is so because their own education shaped them into people who must calculate everything in terms of input and output. No longer do they trust in the magic cosmical powers of their traditions. In order to secure their position the national elite depends on schools, universities, industrial technology and know-how. Further, they rely on the power, arms and concepts of their former colonisators. Hence, while these agents of the industrial centers claim to be fighting for an autonomous culture, in reality they support the dissemination of the standardized profit-making culture of technological rationality. This is the hypocritical aspect of their "fight". The reason why their pretended combat is futile is because the masses have already adopted the new mythology of the industrial culture and have placed their trust in its gods. The gods of coca-cola, of Suzuki motorbikes and of the Denver Saga have replaced, to a large degree, their own indigenous deities.

How can anyone possibly refer to these terrifying world-wide changes which are rapidly destroying thousands of years of old cultures and upsetting the delicate balance between frustration and compensation as being positive, the reader must be wondering. Are not the Third World's hungry peasants and jobless urban youth simply being handed over to the manipulative power of the transnational companies and their cultural industry? The answer is yes, but there's something else besides that the changes could bring with them.

A fundamental idea, however perverted, transported by modern media is making its way into the hearts and heads of the Third World masses, the essence of which is that the general conditions of individual and collective life are not shaped in the heavens, off limits to human endeavour, but here on earth in human hands. There is no doubt that the needs and expectations of the Third World population are being manipulated to suit imperialist motives.

Invariably though, the oppressed of this world will be forced to ask themselves the reason for the harsh contradictions between the happy faces that appear to them on the television screen and the desolation which is the reality of their surroundings. It is only a matter of time before they become convinced that the misery of their lives is not a matter of fate, but of the human potentials of good and evil. The result of this realization could be creative thought. It is precisely the most advanced devices in communication technology which could open up such progressive perspectives. For instance, closed-circuit television and cable television allow the spectator to act out the feelings and thoughts experienced during the viewing of a pre-selected piece of reality. The filmed reactions give way in turn to group-learning, group-dynamics and to finding new solutions. The latest technological innovations in communication enable viewers geographically or socially separated from one another to see a common sight, to hear the same information and to even feel similar emotions. In this way, people have the possibility of together experiencing new and tentatively better ways of thinking, feeling and behaving. In a word, the new media hauls the spectator out of the isolation and hopelessness which is inherent in the contradiction in which he lives between reality and manipulated dreams.

If this opportunity for creative thinking, brought on by the new media is to be taken advantage of, then the power structure of production and the diffusion of cultural industry must undergo far-reaching changes. A change would require that the seat of know-how in the technological production of hardware and software be shared with the Third World. Scientific as well as economic cooperation must evolve on an equal footing between the metropolises and the peripheral nations. Not the short-sighted, profit-seeking interests of competing companies or government agencies should determine the goals of research and its technological outcome, but rather the long-range perspectives for development.

If, with the help of low-energy running media on a local and national scale we are able to join the Pakistani peasant with the

young inhabitant of a Brazilian favela in coming up with new solutions to satisfy their needs, then the market for new technology could turn out to be the most promising branch of industrial production.

This perspective is more than just the dream of a European "egghead" in search of utopian solutions to world problems. It is an actual occurrence going on at present in the Third World. Allow me to cite 2 final examples from Mattelart and Schmucler:

"Within the alliance between technicians and different representatives of popular movements and organizations let us take the example of the initiative of IBASE (Instituto brasileiro de analisis sociais e economicas). A group of researchers in Social Sciences with assistance from engineers of informatics and with the help of a mini computer, have tried to 'systematize and disseminate the basic information on the Brazilian and international reality.' This information is spread and addressed in particular to base movements and organizations, such as trade unions, professional associations and local voluntary groups. But at the same time, it is meant for institutions like the universities, the political parties and the churches which are all linked to social development and to the transformations of society. IBASE in its pledge to aim for the "democratization of information" tries to "collect the socio-economic information produced by already existing agencies and by popular currents or movements. "We aim", they declare, "to integrate, generalize and transform such information into practical know-how. We will translate it into accessible language in order that it be made available to base movements who can use it in seeking political alternatives and in guiding action..."

Some Venezuelan engineers in the professional movement, Antonio José de Sucre, reflected in 1976 on the attitudes of professionals towards society and the state. "We believe that the scientist and the technician can adopt a style of life, in which money is not the parameter of success and where administrative corruption and the distortion of values - so rampant today - are absent. We believe that governmentally run enterprises inside an economic and social system which tends to accord them quite a new importance are able to and should demonstrate their technical as well as administrative efficiency. Finally, we believe that a scientific and technical development that responds to the real needs of humanity and to all humans is possible."