The biological need to speak a language is joined today with the social necessity to read and write. Literacy may not be in the genes, but it has come to be central to the processes of cultural transformation in all societies—developed or developing. When viewed collectively within an evolutionary perspective, those who are literate are better fit for survival than the illiterate. Literacy is a matter of life and death. Without literacy—the portal to all education—worker-citizens are confined to the lowest rungs of the economy and are consigned to the underclass, doomed to go through life mystified by the structures that oppress them. In the United States alone, there are some 25 million people who cannot read the labels on the things they buy. To combat illiteracy, the governing classes must understand that the allocation of resources to literacy promotion will bring high economic, social and political returns. On the other hand, illiterates must do something for themselves. They need to dream, to commit, to sacrifice, to practice immediate self-denial for later collective good, and to be self-reliant and inventive. (HOD)
LITERACY: DESTINY OF THE HUMAN SPECIES

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The keynote address presented July 7, 1985 at the session "A Literacy Potpourri," organized by the Office for Library Outreach Services (OLOS) as part of the Annual Conference of the American Library Association (ALA), Chicago, Illinois, July 6-11, 1985.
Let me begin by stating the essential message of this presentation. It is this: Literacy is the destiny of our species. Universal literacy is inevitable. The challenge before us is not simply to drift with the flow of history, waiting for a thousand years, or for a hundred, or even for ten. The challenge is to design our own destiny, and to make our own history. The concrete task we face is to make the inevitable, immediate -- as immediate as possible within the historical context of each country or region.

There are those who will tell you that time is not right for literacy. They will tell you that there are other more urgent needs to be met first. Let me remind you, however, that in social change, many interactive processes are involved, and those processes do not follow each other in neat order, with measured steps. Many things have to happen at the same time. For literacy to play a generative role in social change, that is, in the fulfilment of all other social, economic and political needs of the people, literacy cannot wait. Let me assert that almost everywhere in the world, the time for the total eradication of illiteracy is now.

The dialectic between literacy and culture

Origins of human language are perhaps more than a million years old. Literacy, the ability to read and write, however, may not be more than 5,000 years old. "Indeed, until the past
century or so, the majority of the world's cultures had no
writing system, and the bulk of the world's population lived and
died without the benefit of literacy" (1).

This should not, however, hide from us the fact that there
has come to be a dialectical relationship between literacy and
culture. Once cultures invented literacy, literacy reinvented
cultures. New ideologies, new technologies and new forms of
social organization became possible. Everywhere in the world
today, in the developed and in the developing regions, literacy
has come to be the essential instrument of both modernization
and democratization. Illiteracy has become a severe disadvantage.

Language and literacy. Professor Sylvia Scribner, co-author
of the well-known work, *The Psychology of Literacy* (2) recently
reminded a group of literacy workers who had gathered for an
international conference on literacy in Philadelphia (3) that
"literacy was not in the human genes". The implication of her
remark, as I understood it, was that speech (the human ability to
use a language) was not the same thing as literacy (the human
ability to read and write) and, therefore, there was nothing
biologically deterministic about human beings becoming literate.

It is, of course, important that we do not confuse the
innate human capacity for speaking a language with the ability to
learn literacy skills in that language. At the same time, it is
important to realize that the human species today is undergoing
a "gene-culture coevolution" (4). The genes and the "memes" (5)
are working together. Nature is confounded by nurture. The
biological need to speak a language is today joined with the
social necessity to read and write. Literacy may not be in the
genes, but it has come to be central to the processes of cultural transformation in all societies --developed or developing.

**Literacy, a matter of social and physical survival**

Let us not assume even for a moment that these discussions of "literacy and culture" and "literacy and evolution" are only for professors of cultural anthropology, of socio-linguistics and other academic disciplines; or, that literacy is concern of the evangelist abroad and the philanthropist here at home. Literacy is directly concerned with our own lives. Literacy is a political matter: it is about power and powerlessness. Literacy is an economic matter: it is about bread and butter. And everywhere in the world, and especially in the Third World countries of Africa, Asia and South America, literacy is a matter of life and death.

A recent "Backgrounder" to literacy education issued by Unesco (6), points to the correlations between literacy level and the Gross National Product (GNP) of various countries. In 1980, the average per capita GNP in countries with literacy rates of less than 34 percent was $622. With a few exceptions, countries with literacy rates of 66 percent or more had per capita GNP of $2,590. Thus, as literacy percentages increased from 34 to 66, GNP increased four-fold. Of course, it cannot be proved that literacy caused increase in GNP. What we should note is that literacy is almost always a part of the pattern of development, and illiteracy almost always a part of the pattern of poverty.

The literate are more fit for survival. As we have suggested above, the human species, in this epoch of human
history, is undergoing a gene-culture coevolution. Surely, the illiterate are not in physical pain; and they are not visibly bleeding to death. Yet, when looked at collectively, within an evolutionary perspective, those who are literate are better fit for survival than the illiterate. Literacy is a matter of life and death.

In Mali, illiteracy was estimated at 90.6 percent in 1976 (7). According to World Bank figures for 1982, infant mortality in Mali was 132 for one thousand births, and life expectancy at birth was a mere 45 years (8). In Tanzania where illiteracy percentages had been brought down to 26.5 in 1978, as part of a continuing mass literacy campaign (9), the infant mortality rate in 1982 was 98, and life expectancy at birth was 52 years.

The pattern is repeated in Asia. Nepal, with an illiteracy rate of 80.8 percent in 1975, had an infant mortality rate of 145, and a life expectancy at birth of 46 years, according to 1982 figures compiled by the World Bank.

South American countries show the same correlations between literacy on the one hand, and infant mortality and life expectancy at birth, on the other. Mexico with an illiteracy rate of 17.3 in 1980, had an infant mortality rate of 53 and life expectancy at birth of 65 years, in 1982. Socialist Cuba which virtually eradicated illiteracy from the country by 1979, in 1982 had an infant mortality rate of 17, and a life expectancy at birth of 75.

These correlations hold for the U.S. populations as well. U.S. Government’s official statistics do not always report data
separately for Hispanics. Yet, a lot can be learned about the relationship between literacy and sheer physical survival from a comparison of data on white and black populations in the U.S. For example, with the median of 12.5 for years of school completed (1983 figures), the white population had an infant mortality rate of 10.5 per thousand live births, and life expectancy at birth of 74.8 years (1981 figures). Compared to this, the black population had a median figure of 12 for the number of years in school, an infant mortality rate of 20, and a life expectancy at birth of 68.7 (10).

The size and scope of the illiteracy problem

Illiteracy is not the problem of the Third World countries alone. It is the problem of the industrialized countries as well. In fact, the illiterate and the semi-literate living in the print-oriented cultures of the industrialized world are at an even greater disadvantage. Before going on to catalog the woes and miseries of the illiterate and the semi-literate in the industrialized world, two related points need to be made.

In the midst of the technological revolution of the last quarter century, some social analysts came to believe that the new electronic media of radio, television, and the computer had rendered print literacy obsolete. This has not happened at all. In any thing, the level of literacy skills required of participants in modern industrialized societies has been going up and up. From the requirement of a "literacy of alphabets", we have now come to recognize the necessity of a "literacy of marks". This new "literacy of marks" can be defined as "the
ability of a person to code and decode, with understanding, the living and growing system of marks, both linear and non-linear, including words, numbers, notations, schematas and diagramatic representations, all of which have become part of the visual language of the people" (11).

Most of us today have come to understand one of the roles of education as the great sorting machine. Without literacy -- the portal to all education -- the worker-citizen is confined to the lowest rungs of the economy; and is consigned to be the underclass, doomed to go through life mystified by the structures that oppress him. Many, depressed by their social isolation and their general sense of worthlessness have committed suicide (12). Literacy has indeed become an essential social tool for survival in the industrialized world. In the Third World, illiteracy is already an invitation to domination and oppression by the ruling classes, and exploitation by buyers and sellers, by contractors and employers, and even by family and friends.

Is the problem big enough to bother? The illiteracy problem is big abroad and it is big at home. In 1980, there were 824 million illiterates in the world among the age group 15 years and older. In the U.S., Jonathan Kozol estimates, there are some 25 million people who cannot read the labels on the things they buy. Another 35 million are functionally illiterate, unable to function in the print-oriented culture of America without help from someone else. Some 2 million illiterates are being added to this tremendous pool of illiterates every year (13).

In Chicago, where we have all gathered together for the Annual Conference of the American Library Association, 39,500
students formed the Class of 1984. Of these, 21,000 failed to complete high school within the public school system that spends $1.5 billion each year. Of the 18,500 students who did graduate, only 6,000 were able to read at the national norm for those with twelve years of school. Some 5,000 were reading at or below the junior high level. Black and Hispanic students, who attended segregated, non-selective high schools, did even worse (14).

The National Adult Literacy Initiative

As most of us are already aware, a National Adult Literacy Initiative was announced by President Reagan on September 7, 1983 and is currently under implementation (14). Kozol in his work referred to above has analysed this Initiative. To his dismay, he found the initiative long on rhetoric and short on commitment. Of the eight proposals that constituted the National Initiative, five were restatements of current policies and programs. Hardly any resources were committed to implementation. The eradication of illiteracy from the land was left to voluntary effort. The Coalition for Literacy that is responsible for implementation includes some of America’s most respected institutions. But you can’t go out to dinner with only a dime in your pocket. Inspite of the best intentions, and the greatest efforts of the Coalition for Literacy, hardly a dent can be made on the illiteracy problem. Kozol estimates that the Initiative may be covering no more than 4 percent of the 60 million functionally illiterate now in need of services. His estimates for expenditure on literacy teaching per person annually is $1.60 (15).
The politics of benign neglect

What is the matter with America? Why are we not doing better in our fight against illiteracy? The lack of advancement on the literacy front in America cannot be explained by any lack of instructional theory. We know how to teach literacy. It cannot be explained in terms of any lack of technology. We have the best of print and electronic technology available, and are able to deliver lessons to all those who need them, when they need them and where they need them.

The problem is not even in the lack of motivations of the illiterate who, it is assumed, are disinterested in learning to read. Motivations, after all, are never spontaneous. Motivations are learned, and hence people can be mobilized to learn literacy. Madison Avenue has taught us a lot in the area of marketing and many of those insights can be transferred to the area of social marketing of adult literacy (16).

The lack of interest in literacy promotion in the US cannot be explained in terms of lack of resources either. After all, poor countries like Cuba and Tanzania, with very little economic resources, were able to launch highly successful mass literacy campaigns (17).

America does know how to plan and how to campaign. America’s Marshall Plan that achieved a successful reconstruction of post-war Europe, and America’s Presidential campaigns every four years are lessons in planning and campaigning to the whole world. Can’t the U.S. plan a literacy campaign for its own people? It
can, but it most probably won't.

The connection between political culture and literacy strategy. Literacy is a political act, as Paulo Freire has so correctly pointed out (18). In fact, adult literacy work is inherently radical. At the very least, adult literacy leads to a new distribution of educational goods. Those formally bypassed by the formal educational system can get some share of educational resources. At its best, adult literacy can politicize and prepare people to participate in their social, economic and political institutions and demand that these institutions be responsive to their needs and purposes. The most successful literacy campaigns of recent times (Cuba, Tanzania and Nicaragua) were inherently political processes.

Political actors understand the nature and function of literacy. Predictably, the political culture of a society determines the means-and-ends calculus of literacy promotion and the size and scope of adult literacy work in the society.

Elsewhere (19), I have differentiated between two models of development and social change: (i) the motivational-developmental model and (ii) the structural-developmental model.

The motivational-developmental model emphasizes motivations of individuals in the development process. Structures are assumed to be neutral. If individuals are not motivated to aspire, to learn, and to work for rewards, then nothing can be done for them and they have no one to blame but themselves.

The structural-developmental model emphasizes structures, the operative rules of the political and economic game. If
structures are not modified, the exploitation of the powerless by the powerful, built into the existing structures will continue.

The two models are not completely exclusive of each other. If enough people are motivated enough, they can put sufficient pressures on existing structures and make them more amenable to their needs. On the other hand, once structures have been modified, people still need to be motivated to use the new structures for their common good. Yet, each society, depending upon its political culture, can be seen as operating under one model or the other.

It is quite clear that in the U.S. today, the motivational-developmental model of social change is predominant. Structural changes in behalf of the poor are not part of the political agenda. Anything that smacks of "distribution of income" is rejected. No wonder, the Government is satisfied with a generalized Initiative.

This does not mean, that the Government is not interested in literacy at all. It certainly is. It is interested in literacy when literacy will promote the professionalization of labor needed for the economy. The Government is interested in literacy when literacy will promote the professionalization of the army needed to fight its wars. It is not interested in literacy that liberates and empowers, and enables genuine participation in the social and political institutions of the society.
The challenge on both sides.

There are challenges to be faced on both sides, by the power elite and by the illiterate. The governing classes have to understand that the allocation of resources to literacy promotion will bring high economic, social and political returns to the Republic. It has been estimated, for example, that a 100 billion dollars a year may be getting lost to GNP because of the fact that some 60 million American workers are functionally illiterate (20). National security may indeed be in jeopardy as the new army recruits are unable to read and follow instructions to operate their high-technology weapons.

Cleanth Brooks, 1985 Jefferson Lecturer, National Endowment for the Humanities, was sorry for an America where neither reading nor writing flourished; where some 25 million Americans could not read or write; and some 40 percent of 17-year-olds could not draw inferences from written materials. He regretted the loss not only of functional literacy, but also of cultural literacy in a US where people sat mesmerized before their television sets and had sold themselves to the "bastard muses of propaganda, sentimentality, and pornography." In the hot pursuit of the good life, people had forgotten how to reflect on what life should entail (21). These are not professorial tirades. It is all real. History is being made around us. We may not be influencing it.

Challenge on the other side. On the other hand the illiterate must do something for themselves. I am not about to suggest that the poor should release the governing classes of all obligations towards them; should stop challenging the structures
that oppress them; or that they should no longer demand their share of political, social and economic goods. I do not want to be seen as coming back to "blame the victim." However, what I do want to warn against is the practice of infantalism. The poor and the illiterate should not feel helpless like infants. The poor and the illiterate need to invent new personal identities and new social visions for themselves. They need to dream, to commit, to sacrifice, to practice immediate self-denial for later collective good, and to be self-reliant and inventive.

**Concluding remarks**

As literacy workers and librarians, we have a historic challenge of our own. We need to deal both with illiteracy and aliteracy — that affliction of people can read but won’t (20).

Let me once again return to the theme with which I began. Let us remember that literacy, at this moment in human history, has become an essential human vocation. We are all products of the same universal process of gene-culture coevolution. While literacy is not in the genes, it has come to be the essential instrument of culture making and of social survival day by day.

The economic man needs literacy for higher productivity. Man as social being needs literacy for a more worthy social definition whereby he can talk to others man to man, literate to literate. As a political participant, again, the literate is empowered, while the illiterate stands outside politics (21).
NOTES AND REFERENCES


7. All figures of literacy and illiteracy quoted in this part of the paper are from Statistical Yearbook. Paris: Unesco, 1982.


11. The definition of the "literacy of marks" is adapted from H.S. Bhola. *A Policy Analysis of Adult Literacy Promotion in the*

12. Of interest here is a news item that recently appeared in a West German publication: Three Million Illiterates in the Federal Republic of Germany? Bildung und Wissenschaft, No. 1/2 (e), 1982. The news item reported on how illiteracy, with its accompanying sense of severe isolation had “frequently led to psychic problems such as depression, suicide attempts, drug and alcohol abuse and aggressive overreaction.” Pages 23-24.


15. Refer Kozol, No. 13 above.


17. Refer Bhola, No. 9 above.


20. Refer Kozol, No. 13 above.

