

# Three Paths For Hope

By  
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*Let us enlighten ourselves with ecological principles  
and understanding for the sake of the continuation of our  
kind in our only biological home, the Planet Earth.*

The 1980's brought to us the realization that the disharmony between human activities and the long-term sustainable integrity of biological communities is real, serious, global and multipling. It also brought to us the realization that modern industrial societies have contributed enormously to progress - but at a cost to the environment and the quality of life that we have only begun to recognize. Indeed, in our saga of ever-improving living standards, we have all contributed toward that end. For example, farming, logging, and mining activities have all done their share in producing a scarred landscape. Scientists and technologists have failed to warn the public about the side effects or the social consequences of scientific discoveries and chemical use. Most have forgotten that this is one of their basic obligations to society. Educators and philosophers - in a period of enormously rapid development in science and technology with a heavy dependency on chemical compounds in our daily lives - have taken survival and the rights of future generations for granted. Most have forgotten that for our species, only life is a natural gift, and everything else is acquired through learning, including how to survive. Experts from government agencies issued permits for products which were later found to be dangerous. Industry has dumped tens of thousands of toxic substances into rivers, seas, and oceans, damaging the immune systems of marine animals that can be used as food. Politicians, with virtually no education in or about science, technology, or the environment, are making decisions regarding our lives and our health without consultation with informed professionals.

For years, schooling has left our children ignorant of the sources of our food, water, air, shelter, as well as our whole relationship with the environment in which we live. And finally but not least, as Nathan Bolls indicates in 1988, our society, which maximizes individual freedom, instead of educating us to restrain ourselves in favour of a balance between the needs of self, society and the ecosystem, trains us, in fact encourages us, to vandalize the same earth that we happily supposed is being guarded for our children. Most have forgotten (using Roderick Nash's (1984) words) that "the individual freedom we prize cannot connote freedom to abuse the earth any more than it does freedom to abuse other people." Because of such discordant attitudes and disharmonious cultural factors, environmental problems are increasing at an alarming rate.

And the question becomes not how many of us will die, but how many will survive. How many will survive without brain damage, cancer or other horrible disease; not how many trees will die, but how many will survive without producing contaminated fruits; not how many lakes or rivers will dry up, but how many will remain without containing polluted water and contaminated fish; not how much farm-land will be eroded or converted into cities for an over-populated earth, but how much will remain without producing chemically saturated vegetables and grain. To die might not be enough reason for human beings to do something about our environmental madness since we all know that we are going to die one day. But, we all wish to live in an environment rich and safely supplied with our survival needs (air, water, food, shelter, etc.). We expect to be able to safely handle and use such resources. Yet, today, increasingly, we find we cannot utilize them because they are poisonous, surely this is the worst psychological threat human society has ever had to face. The plenty might still be there and North American's abundant food supply might continue, but as many Newspapers and Magazines have very recently reported, more and more "apples, beef, chicken, eggs, fish, milk, popcorn", etc., have become containers of pesticides and other materials that can be hazardous to our life and the whole planet Earth.

Many of us are aware of the growing concern with environmental problems which spread throughout the 60's and 70's, but as Nathan Bolls (1988) said, many times "we listened politely to the warnings and continued our drive to capture that ideal cost-efficient, time-efficient life style". Today, the crisis is getting bigger and our defenceless planet Earth is getting smaller and raw materials are getting thinner. Today, we are also faced with over-population, uncontrolled industrial development, vandalism of irreplaceable natural resources, nuclear and toxic waste disposal, acid rain, the greenhouse effect, as well as damage to the ozone layer. And as these crises increase, "environmental refugees", many believe will be added to the list of things we will have to deal with.

If the situation sounds hopeless, we don't want you to think so. because as Warren Johnson (1985) said, "to be without hope is to be defeated, and ultimately this is a crisis against the human spirit,... against our children", and it is also against the rights of future generations. Yet, hope is only useful when coupled with rational action especially when we have no choice. And that is exactly what we are trying to

communicate to you in our search for how to deal with environmental problems. There are three approaches that we (the citizenry) could utilize; the legislative approach, the educational approach and the personal approach.

## Legislative Approach

In the legislative approach, we as citizens, can and should use our right to ask for strong laws to protect the environment in which we live from pollutants, mass-clear-cut forestry (Deforestation), using Chlorofluorocarbons (CFCs), and Polychlorinated biphenyls (PCBs), etc. We should demand that all environmental regulations be reviewed and up dated. We should demand that all chemicals used in or to produce a given product be written clearly as well as pointing out the short or long term side effects to our health or the environment. We should make clear to those who run for public office that we will no longer elect those who have not shown their commitment toward protecting the environment and in turn our own lives. We should demand from all our government officials that they inform the public about anything that could cause damage to our life; for example ships carrying nuclear material, importing irradiated food, etc. This is important and easy to achieve because we live in a democratic society and our elected people are happily willing to listen if we talk to them and demand strongly that our life be protected, our food, air, water and shelter be safe and thus usable, and that our environment be healthy. Cancer for example, is one of the horrible diseases that human beings have been struggling with for years, yet there are many things we are doing to the environment that cause cancer such as CFCs, pesticides and irradiated food. Such things must be cleaned up or prevented by legislation. Pesticides should not be approved for use before scientists and researchers have tested their toxicity and whatever is still on the market should be pulled. As David B. Hunter (1988) said, "the laws of nature cannot be changed by legislative fiat; they are imposed on us by the natural world." Therefore, whatever law we legislate should go side by side with the natural laws, even if we have to legislate laws that restrict our freedom of conduct and choice. Policies and laws alone, however, cannot be a major force of change. They do not educate us so that we will understand, for instance, that the solution to acid rain, the greenhouse effect or the ozone layer might be a total change in economics, life style, and energy policies. Our children should receive a new kind of education, and this is the second approach we should follow to protect our life and our environment.

## Educational Approach

Education can make a difference because we (the human beings), are the most adaptable creatures with most flexible and trainable minds on the planet. This is why education remains the best hope for planetary survival, welfare, and development. Human history testifies that education (either formal or informal) has been the key, not only to human progress and civilization, but to the development of the individual. If one of the root causes of our environmental crises is our life style which we choose by our act of will and

which can be altered by our conscious choice as many believe then education may help us understand the need to adapt a style of living that harmonizes with the environment. In making appropriate decisions, one must have both a productive understanding and specific knowledge. Institutional education can provide the knowledge, understanding and skills necessary. However, this must start in the early school years. After all, as A.D. Pasquino and H.A. Peelile (1975) explain, "there can be little doubt that understanding ecology is of critical importance today...nor could there be a clearer challenge to education, for survival certainly hinges upon an informed citizenry".

Thus, education is crucial. The conclusions of many reports are that the world in the year 2000 will be more crowded, more polluted, and less stable ecologically. Yet, with the exception of Project Wild which is sponsored by the Ministry of Environment and Parks to instill children with appreciation of the interdependence of all living things share the same Earth", only a few schools have a planned program aimed at developing ecological awareness and understanding among all its pupils and little that might serve to alleviate these problems is being taught or learned in the schools. Even Project Wild has approved only as a reference resource for elementary science students rather than as core subject. Indeed, according to Dr. Milton McClaren - a vocal and well-spoken critic of Canadian science and environmental education from Simon Fraser University -, in our province, while some environmental topics do appear in prescribed curriculum, "there is no course, or even a course unit within the entire provincial curriculum that is actually titled 'Environmental Education'."

We as citizens should demand an education that can develop insight, understanding, and values appropriate for survival at the world level. We should demand education with appropriate goals, aims, and objectives to meet the general educational concerns of developing the educated mind as well as to contribute toward providing students with facilities required for life in a world increasingly influenced by scientific technology; education that can develop a sense for the responsible use of science and technology, and according to Jacques Cousteau a sense of knowing when and "how to act or behave in difficult situations".

Ornstein and Ehrlich (1989) who are calling for new education, for a new world and new mind, argue that "nothing should be more important to a society than the education of its children. But that is clearly not the top priority of a society that pays entertainers as much as a thousand time more than a teacher" who is poorly paid, not appreciated for his/her importance in society, and poorly trained professionally. They conclude that since the key to get the curriculum changed seems to be channing the minds of adults, then "...the key to getting new-minded adults seems to be training them early". They add, " ...clearly one can't be done without the other, which means that both must be attempted at once." And this is what leads us to the third path; the personal approach.

## The Personal Approach

The third approach and probably the most important one, for it supports the other two, is the personal. If we are to walk the path to harmony with our personal, social,

biological, and physical environment, if we want our children and grand-children to love us in a few short decades from now, instead of hating us, indeed despising us, then that path should start in our own homes.

There are a lot of things we can do. For example the Columbiana journal listed in its vol. 2 # 2 page 47, 102 green things that we can do and incorporate further into our own daily lives. Just a few of these are recycling of our paper, plastics, metal and glass instead of throwing all these valuable resources into the garbage. We can also avoid over packaged and styrofoam packaged products. As Roger Walsh in 1984, wrote in his remarkable book *Staying Alive: Psychology of Human Survival* :

*Perhaps we are buying, consuming, and discarding without regard for ecological impact. For example, perhaps we are using heat instead of insulation, a car even though good public transportation is available, or nonreusable goods rather than reusable ones. Perhaps we are making ourselves and our family anxious and tense by overworking to earn extra money for things that we do not really need. Perhaps we are working for investing in an industry that is harming the environment, creating dangerous products, or taking unfair advantage of underdeveloped countries. Perhaps we are buying from companies that sponsor particularly violent television programming or are not expressing our appreciation to sponsors and stations that show educational programs about global problems. (pp., 90-91)*

We can and we should do ourselves what we want our legislators to encourage and our schools to teach. Without our responsible environmental action and our good example, how can we expect anyone to take these vital issues seriously? With our involvement, our children and our neighbors will become involved and this will encourage the school system and the government to follow suit. Each one of us is the key to our survival. Thus, all three paths for hope will become the three paths for our survival in our only biological home - the Planet Earth.

In closing, we should realize that survival is everyone's business. Therefore, the whole biosphere which supports human survival is also everyone's business! In the fragile balance in which our earth exists today, survival, ecological consciousness, understanding and responsibility, and education are more than complementary, they are absolutely

indispensable! Survival today requires having sufficient knowledge and understanding of ecology and how to live within the carrying capacity of the Earth's ecosystem. It requires commitment from all of us to use this knowledge in our homes, to teach it to our children, and to put people into our government that will legislate environmental safety into the public and industrial sectors. With government, education, and personal commitment to the environment of our earth, these three paths for hope could become three paths for survival.

## References

- Bolls, Nathan J. (1989). The chemicals of half-life: Viewpoint. *BioScience*, 39(3):139.
- Cherif, H. Abour (1995). Toward a rational for recycling in schools. *Journal of Environmental Education*, pp.5-10
- Cousteau, Jacques (1989). Captain Cousteau - educating the public (an interview). *Calypso Log*, 16(1):4-7.
- Hunter, David B. (1988). An ecological perspective on property: A call for judicial protection of the public's interest in environmentally critical resources. *The Harvard Environmental Law Review*, 12(2):311-384.
- Johnson, Warren (1985). *The Future is Not What It Used To Be: Returning to traditional values in an age of scarcity*. New York: Doddy, Mead & Company.
- McClaren, Milton (1987). "The problem of curriculum infusion in environmental education". In John F. Disinger (Ed.). *Environmental Education Information Report-Trends and Issues in Environmental Education: EE in school curricula*. Columbus, Ho: ERIC/SMEAC. (pp. 23-3).
- Ornstein, R. Ehrlich, P. (1989). *New World New Mind: Moving Toward Conscious Evolution*.
- Pasquino, A. D. and Peelile, H.A. (1975). Teaching ecology with a programing language. *The American Biology Teacher*, 21(1):24-26
- Walsh, Roger (1984). *Staying Alive: The Psychology of Human Survival*. Boulder, Colorado: Shambhala Publications, Inc.

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