Technology in non-Violence Culture: Gandhian Philosophy & Strategy

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Abstract

Obviously, it is imperative that the technological process be brought within the moral domain of non-violence. The issue of rural diversification, in particular rural industrialization has attracted considerable attention in recent years as a critical component of rural transformation in the developing economies. Hence, the main purpose of this paper is to examine the role of technology in a process of rural transformation and Gandhi's view of technology that who was by no means anti-technological. The paper concluded that Technology can be at the service of humans only in a non-violent culture because there it has to recognize fundamental human rights and respect the dignity of the human person. The many technological inventions expected in the next millennium must be judged according to whether they contribute to the development of the human person as truly free and creative. Absolute preference should be given to the alleviation of human suffering, to the eradication of hunger and disease, to the fight against social injustice and to the struggle for lasting peace. As in a society without love technology can become a monster, we are called upon to seek love above all else. In this, Gandhi, with his common sense approach to technology, can be relied upon as a sure guide for the forthcoming millennium

Key words: Non-violence, technology, philosophy, Chlorofluorocarbons, Socio-Economic Impact, Sarvodayas

1. Introduction

The issue of rural diversification, in particular rural industrialization has attracted considerable attention in recent years as a critical component of rural transformation in the developing economies. Hence, the main purpose of this paper is to examine the role of technology in a process of rural transformation. It is imperative that the technological process be brought within the moral domain of non-violence. Failure to do this will spell chaos and tragedy. We confront technology everywhere. Technology has come to stay largely and permanently the modern person is homo technologic. At the beginning of the 21st Century was astounded by how technology has changed the face of the earth and how it has revolutionized modern living. Science and technology are the new religions; they do wonders and perform miracles. If a person from a primitive society were to visit a modern techno polis, would believe that they were in wonderland. Very ordinary things of everyday use which we have taken so much for granted with a vanishing sense of wonder would appear miraculous to the primitive person. For example press more and more buttons, more and more buttons, more and more things turn on and go zooming from domestic appliances to spacecraft. Rejoice, hopefully we will have many exciting technological inventions in the third millennium.

2. Experience of Technology

The first sentence of Aristotle's Metaphysics reads "All men by nature desire to know". Our innate curiosity has resulted in the advancement of knowledge in the arts and sciences. Our knowledge of the world has helped us to gain greater control over nature and to use nature for our purposes. Beginning with the Industrial Revolution in the West, life has become very comfortable as more and more goods are produced. Time-saving, labour-saving devices have increased out comfort. Technology today has entered every field of human activity. The immense benefits of technology have been a boon to humanity. The use of electricity, petrol, nuclear energy and so on has been the soul of modern industry and technology. Modern transportation and communications have accelerated the growth of

technology. Jet-age travel and satellite communications have made the world shrink. Even an ordinary thing like moving around on a two-wheeler has tremendously contributed to faster, independent, personal mobility. The entire world has become a global village due to ultramodern transportation, communications media and computer global networking. Medical technology has contributed to the eradication, control and healing of diseases and to longevity. Biotechnology offers a host of marvelous and unprecedented opportunities in terms of human health and reproduction, agriculture, poultry, dairy, fishery and so on. The benefits bestowed on us by technology are numerous that it would not be an exaggeration to call technology a miracble worker. But at the same time we cannot desist from asking: At what cost have these miracles of technology been performed? In other words, given our experience, what is the negative impact of technology on human beings, nature and society? Therefore, we shall now turn out attention to the adverse effects of technology[1].

3. Impact of Technology on Environment

Technological growth has resulted in environmental decay and degradation. Excessive exploitation of nature threatens the environment. Poisonous gases emitted from factories increasingly pollute the atmosphere. In certain highly industrialized cities more than half the population suffers from respiratory diseases caused by pollutants in the air, if a person lives in a city like Calcutta for a long period they develops a lung disease called locally, 'Calcutta lungs', consisting of tiny holes in one's lungs caused by the pollutants. Added to the industrial pollution of the air is the pollution caused by the motor vehicles which emit deadly carbon monoxide into the atmosphere. In a city like Bombay, half the pollutants in the air are emitted by motor vehicles owned by urban citizens.

Untreated industrial effluents are diverted into streams, rivers and the sea, which in turn are poisoned. Aquatic life is the worst hit by;

industrial wastes, so much so that some species are becoming extinct. Industrial effluents affect the land too, damaging soil fertility and turning fresh water into salty water unfit for consumption dioxide into oxygen during the day, there is a limit to this capacity, beyond which they perish. As a result, we have noticed the extinction of some plant species. In some places excessive pollution causes acid rain, which in turn causes great havoc. In certain mining areas children are born with irreparable genetic damage caused by pollution. Industries and transport cause excessive noise leading to noise pollution beyond the acceptable level. Excessive noise harms people, causing deafness, blood pressure, hypertension, nervous disorders, irritability, headaches, insomnia, restlessness and, in some cases, even heart attacks.

Chlorofluorocarbons (CFC) emitted by refrigerators in millions of homes goes up in the air and cause holdes in the ozone layer. The ozone layer is a protective layer in the atmosphere and prevents the ultraviolet rays of the sun from reaching the earth. Due to ozone depletion ultraviolet rays of the sun have had harmful effects on humans and animals. Ultraviolet rays' causes' skin cancer in humans and it is reported that some animal species like frogs and turtles are vanishing in some countries due to depletion of the ozone layer. Oil tankers which spill oil into the sea destroy marine life. Mechanized deep-sea fishing too ruins marine life. Mercury has been found in the fish sold in the markets of some Countries.

Forests are disappearing at a faster pace due to the indiscriminate felling of trees. Environmental scientists tell us that the forest cover which is the source of rain and oxygen should be 30 percent of the total land mass of a Country. The Amazon forests are known as the lungs of the world, as they supply 70 per cent of the oxygen to the World. Deforestation causes both floods and drought. Soil erosion caused by deforestation leads to floods. Trees in the forest prevent soil erosion as the roots of the trees tightly hug the soil. With soil erosion, rain water flows down from the tops of the mountains without resistance and floods the plains. Drought in the summer, too,

is caused by deforestation. Trees in the forest soak up the rain water in the bosom of their roots like a sponge and keep releasing it gently and gradually. That is why there are streams and brooks flowing even in the summer, in the absence of trees in the forests, nothing else can soak up water and release it gradually for the benefit of humans, animals and plants.

Hit by deforestation and pollutions, some species of fauna and flora have already vanished from the earth forever. The use of chemical fertilizers has robbed the earth of its fertility. Pesticides and insecticides have killed many animal species. Through the consumption of food grains chemical pesticide enter the human body to alter it genetically. For millions of years solar energy has been stored in coal or fossil fuels. Modern technology especially in developed nations' uses colossal volumes of non-renewable fossil fuels. It is feared that the oil wells of Arabia will dry up in thirty years. At present there is hardly any evidence of the judicious use of fossil fuels, which are known to be highly polluting. The environment is threatened by untreated waste. Heaps of garbage chokes the environment. Empty cans and polygene bags litter the area. Mountain-climbers all along Mount Everest leave behind garbage which threatens the fragile ecosystem of the mountains. Even in outer space, garbage in the form of about 30,000 disintegrated parts of spacecrafts life rockets and satellites orbit the earth and occasionally hit it. Nothing is beyond our reach to pollute: space air, water, soil, the mountains and oceans.

As technology advances, out habits, too, keep changing. For instance, instead of eating healthy food, people go for junk food with high chemical contents detrimental to health, Millions of gallons of soft drinks are consumed daily which do not contain even a single drop of natural fruit juice. Fast food is becoming more popular with the urban population who may not realize that fast foods are not equivalent to healthy wholesome food from the poison in the air, water and soil harmful chemicals have been detected in the milk of mothers though which it has enters human to cause genetic disorders.

The existence of nuclear reactors is a matter of great concern for those who care for the earth. They produce cheap and abundant energy, but the problem is with nuclear waste. It is highly radioactive, and so far no safe method has been found to dispose of it. Nuclear waste from some developed countries has been dumped into the sea or soil of some poor nations after bribing their political leaders. The Chernobyl nuclear reactor accident is a great warning to humanity about the hazards of nuclear energy reactors, it is said that the nuclear reactors in India are already leaking, and the surrounding neighborhood is being affected by radioactivity.

We are concerned about another serious problem the greenhouse effect. The continuous emission of pollutants into the air increases global temperature. As global temperature increases, ice melts in the Polar Regions which in turn cause the sea level to rise. If the sea level rises, the sea will devour the land. About thirty Island nations of the world face the threat of being submerged in the sea after some years. It is said that at the present rate of rise in global temperature the Island nation of Maldives will disappear in to the sea within some thirty years. The Association of Island States has appealed to the industrial states to scale down the level of pollution, but one wonders whether such an appeal will ever be needed. The greenhouse effect alters the seasons in the World, and the rhythmic functioning of nature is seriously impaired or interfered with so that the world climate is adversely affected.

Cities with a technological base attract more and more people from villages. The exodus from the rural to the urban areas results in the heavy pressure of the population in the cities. Consequently, in the cities of the developing countries we find overcrowding, sanitary chaos, and garbage, slums and shanties, polluted drinking water, and so on nearly half the population of these cities lives in slums under subhuman conditions. We are unable to check the exodus from villages to townships and cities.

The greatest threat from technology comes from highly sophisticated nuclear arsenals. The best brains of the World are pressed

into the service of military technology. Huge quantities of deadly weapons are heaped upon the earth. Nations compete with each other in obtaining the most sophisticated arms. Humanity today is capable of global suicide be the entire human race can be wiped of the face of the earth anytime any day. The threat of nuclear holocaust looms large before us.

4. The Socio-Economic Impact of Technology

Technology has increased the wealth of the industrial nations; the more sophisticated the technology, the greater the accumulation of wealth. As the Industrial Revolution spread from England to the rest of Europe, those nations were in dire need of raw materials to support their industries. Colonialism was the outcome of such a need. Nations in Asia, Africa and Latin America were plundered for the sake of capitalism in the home countries of the colonial powers. This resulted in mass poverty in the colonies. Economic exploitation of the colonies was coupled with political ruthlessness so that the nations reeling under the yoke of colonialism had to struggle for decades to be freed from the shackles of slavery and oppression.

Even after Independence from foreign powers these nations are still bleeding from the wounds of colonialism. We witness mass poverty, unemployment, illiteracy, malnutrition and subhuman living conditions in the so called developing nations, which are really poor nations. The wretched of the earth are found in these poor nations. With the globalization of economy these days there is a fresh threat of neocolonialism due to superior technology which is the key to greater power and wealth. Marxists are right in their observation that the owners of the means of production would have their welath multiplied even in their sleep. Technocrats rule the world today. Multinational corporations, backed by their governments, are the most powerful force in the world of today, and run the world as they deem fit.

5. The Psychological Impact of Technology

In the rich nations the technocrats have created techno polis in which the most important question

regards the quality of life. In techno polis the ruling monarch is technology, which is soulless and faceless; hence automation, the mechanized characterize the life-style. The danger that the people will be uprooted from the soil, alienated from fellow humans, devoid of tenderness and joy, and steeped in drudgery and melancholy. This is due to being estranged from the healing powers of nature, from the warmth and simplicity of the people, from the ordinary and enriching pleasures of life which abound in social intercourse with good-natured people who love the smell of the earth, the feel of the air, rain and sunshine, and are passionately in love with the world. Techno polis can create psychopathic killers, nihilists and terrorists: excessive technology can ruin human nature and the joy of living just as, for example, themes media can enslave the masses by destroying their capacity for thinking.

The Northern Hemisphere with its excessive technology takes its toll in the Southern Hemisphere. Exploitation and unfair global trade practices leave their victims in perpetual subhuman conditions, devoid of dignity decency and self respect. Life is an eternal nightmare for those condemned to live in utter misery. But can we blame technology for its negative impact, or are we to blame ourselves for the abuse of technology? What would Gandhi say about technology?

6. Gandhi's Views on Technology

The focus of this research paper is Gandhi's view of technology. Given his views, how would he visualize the role of technology in the next millennium? In some circles Gandhi is portrayed as an obscurantist, anti-technological and outdated. But a careful examination of his view falsifies such a portrayal. The ensuing passages have been gleaned from his writings. Industrialism is, I am afraid, going to be a curse for mankind. Industrialization depends entirely on your capacity to exploit, on foreign markets being open to you, and on the absence of competitions[2].

True, industrialism has not banished poverty. Millions of people go to bed hungry and in conditions of incompatible with human dignity. Added to that, even life sustaining

eco-systems have become fragile due to excessive and thoughtless modes of industrialization. Such industrialization can be termed a curse for humanity. Therefore, Gandhi maintains. "The future of industrialism is dark"[3] and in the third millennium could reach the height of darkness unless priorities are rearranged.

Further, Gandhi holds: "Machinery has its place; it has come to stay. But it must not be allowed to displace necessary human labour"[4]. Gandhi rightly recognizes that we cannot do away with machinery, but it should not put people out of jobs and rob them of the dignity of labour, without which human beings cease to be human beings. This is what Gandhi calls necessary human labour. "That use of machinery is lawful which sub serves the interest of all.[5]

The use of machinery becomes unlawful when it is solely meant for increasing the profit of the owner of the machinery at any cost. Gandhi would reject anything that does not fit into his scheme of sarvodayas (welfare of all not of a few of many). "would favour the use of the most elaborate machinery, if thereby India's pauperism and resulting idleness could be avoided"[6]. Gandhi has a practical approach as he favour compel technology aimed at the eradication of poverty and the creation of employment. "Are you against all machinery?" Gandhi's answer to this question is an emphatic 'No'. "You are against this machine age". To say that is to caricature many views. I am not against machinery as such, but I am totally opposed to it when it masters us. "You will not industrialize India?" and would indeed, in my sense of the term. The village communities should be revived.[7]

Gandhi was by no means anti-technological. But, at the same time and unlike Nehru, he not bewitched by ties power. He opposes the indiscriminate multiplication of technology, an obsession of the modern person, the technocrat the citizen of a teach polis: What I object to is the craze for machinery, as such. The craze is for what they call labour saving machinery. Men go on 'savings labour' till thousands are without work and thrown on the open streets to die of starvation. I want to save time and labour, not for fraction

of mankind, but for all, I want the concentration of wealth, not in the hands of a few, but in the hands of all. Today machinery merely helps a few to ride on the backs of millions. The impetus behind it all is not the philanthropy to save labour, but greed. It is against that constitution of things that I am fighting with all my might[8].

Gandhi is too correct in saying that machinery helps a few to ride on the backs of millions, as is true today of multinational corporations (The New Indian Express[9] reports under the heading Microsoft bigger than India). The market value of Microsoft Corp touched $507 billion, about Rs.21,268 core on Friday, the first time ever any company has passed the half trillion dollar level. This value is much higher than India's Gross Domestic product (GDP) of labour Rs.17,70,000 core," Gandhi would relentlessly fight such a state of affairs. I am personally opposed to great trusts and concentration of Industries of elaborate machinery". I opposed to machinery, only because and when it concentrates production and distribution in the hands of the few? "You are right. I hate privilege and monopoly. Whatever cannot be shared with masses is taboo to me. That is all.[10].

Gandhi was rudely shocked by the exploitative use of machinery by the English capitalist. He wrote in Hindi Swaraj: "It is machinery that has impoverished India. It is difficult to measure the harm that Manchester has done to use. It is due to Manchester that India handicrafts have all about disappeared."[11] In pain and anguish at the starvation and death of many villagers caused by British exploitation[12]. Gandhi wrote in Hindi Swaraj: "Machinery is the Chief symbol of modern civilization it represents a great sin". A major component of his vision of Sarvodaya is preservation of the villages: The revival of the villages is possible only when they are no longer exploited. Industrialization on a mass scale will necessarily lead to passive or active exploitation of the villagers as the problems of competition and marketing came in. Therefore we have to concentrate on the village being self contained: manufacturing mainly for use. Provided this character of the village industry is

maintained, there would be no objection to villagers using even the modern machines and tools that they can make and afford to use. Only they should not be used as a means of exploitation of others.[13]

7. Alternative Technology

Alternative technology is very much in keeping with the spirt of Gandhi ever since E.F.Schumacher's classic, small is Beautiful, was published[14] and should becomes more relevant in the next millennium. Many people are dissatisfied with the technology we have, and would like to replace it with another, called "alternative", more viable, appropriate, careful, frugal or participatory. Small group initiative than on societal mobilization it presents radical challenge to contemporary technological practice. Examples energy devices, agricultural practices and tools, transportation vehicles, and building design in which the emphasis is one hardware, but the attempt is to transform the organizational arrangement whereby technology is developed, controlled and delivered. They include cooperative organizations for medicine, farming, food delivery, marketing, financial credit, communications, insurance, banking, and so on which, to banish the anonymity of city life, emphasize a re-emergence of neighborhood identify by tapping the artisan skills of various members of the community through "sweat equity" exchanges of services.[15]

Alternative technology groups insist that technology should follow two design norms: sustainability and democratic patterns of organization. The concept of sustainability leads to the selection of only practices that can be confined into the indefinite future. Some current industrial practices which proved air, water, fertile land and a stable climate now are recognized as interferingly with the regenerative capacities of the earth's life-sustaining process will have to be drastically modified. Since the stock of fossil fuels and other materials is very limited, we need to develop an economic philosophy which would treat this scarce resource as capital, rather than as raw materials. Artifacts of the future should be made renewable materials that can be grown, not made from finite material stocks. The emphasis

is on conservation and curtailing the flow of materials from manufacture to consumption.

Democratic management of technological enterprises is the second design norm of alternative technology groups; this call for decentralization of productive facilities into small, relatively autonomous units, which could be the only way to the realization of demorcratic self-management. Technology can be made more democratic in an additional way: "When technological tools and products are intelligible to the user, a new form of power results. The user is no longer at the mercy of a mysterious, alien object, but instead can adapt, repair, and thus preserve it. In this light the produce of flimsy, disposable objects becomes both irresponsible and politically suspect. "Finally, proponents of alternative technology hold "That in fashioning a technology the character of work it must be included as a design constraint, rather than a mere afterthought." Schumacher has proposed that every job be required to meet three desiderate 1) a means to attain an appropriate existence: 2) the enhancement of human skill: and 3) overcoming ego centeredness through joint participation in common asks. By these criteria a humanly repressive workplace is clearly immoral. Schumacher distinguishes between moral and immoral apparatus, with the distinction turning on whether the pace of production is under human or machine control.

The advocacy of alternative technology has come under severe attack. Some consider alternative technology as impractical since it aims at restructuring industrial practices which are deeply embedded in socio-political philosophies which define what reasonable goals of technology are. Others think of alternative technology as "an ill formed ideological movement, a kind of radical chic for generally well-educated dropouts from the integrated, capital-intensive society". Yet others dismiss it for lack of feasibility. Alternative technology cannot be dismissed as a mere fad or impractical and impossible venture. Small is beautiful, especially when the local communities can look after and manage their needs on a co-

operative basis rather than being recipients of consumer goods and services corporations, as huge heavy industries are the global sources of their income. If small is beautiful, electricity, for instance, can be produced through the use of biogas for every village, for which a centralized Electricity Board is not necessary. Through alternative technology, human sanity and ecological balance can be preserved, whereas large-scale industries and consumerism may eventually create a sick world.

8. Technology Assessment

The search for an appropriate normative basis for evaluating technology is conditioned by type of policy analysis known as technology assessment. This aims at a comprehensive picture of the factors involved in technological choices and directs attention to the broader social context that is affected, often unintentionally, when a new technology is introduced, or an existing one modified. Technology assessment is not a critique of technological means or ends, but a search for strategies for mitigating unwanted side effects.

Within the past quarter century, concern about the undesirable features of modern industrial technology have taken new forms. These challenges have gone beyond the already painfully obvious fact that twentieth-century technology, in concert with evil human intensions, has developed the capacity to obliterate our species. Instead, what is now being questioned are certain systemic properties of industrial technology itself, properties which, despite the good intentions of human actors, lead to unwanted and unanticipated results that are the threatening the species. Technology assessment originated in the U.S.A. and initially was concerned with the environment.[16] Technology assessment reflected the fact that while technologies based on market economies were responsive to short-term consumer demand, some long-term results were beginning to be recognized which ultimately threatened life. Technology assessment was proposed as a new form of political analysis that would assist in the separation of negative impact that might occur when a new

technology was introduced or an existing one was significantly modified.

Technology assessment certainly reflects disappointment with the contemporary technology of the industrial nations and is supposed to be neutral. Impact analysis performed by such technical experts as economists, scientists and engineers assumes that the identification of impacts is basically an exercise in scientific prediction. It is expected to predict what effects the introduction of a particular technology may produce through economic, legal, environmental, social political and technological means. Though it faces the danger of manipulation in as much as it is funded and potentially influenced by industrialists, legislators and policymakers, technology assessment has a proper positive role to play in the contemporary industrial world. Technology assessment and legislation are extrinsic to the intrinsic moral imperative; we must turn to the realm of values for further and more decisive understanding and handling of technological issues.

9. Revolution in Values

For Gandhi, without a revolution in values, humans will be ill-prepared to handle technology. We are already overpowered by our own inventions and lack maturity in our relation to them. One of the great problems of humanity is the wide gulf between our scientific progress and our moral progress. We have become materially richer, but morally and spiritually poorer. The human person lives in both internal and external realism: the former is expressed in art, literature, morality and internal and external realism: the former is expressed in art, literature, morality and religion, which the latter is the mechanical gadgets, techniques and instruments. Our problem is that the internal is lost in the external or, to paraphrase Thoreau that we have “improved means to an unimproved end”. The abundance of Western civilization has brought people neither peace nor serenity of spirit. Certainly science has been a blessing to humanity, but that does not mean we should minimize the internal and maximize the external dimension of our lives. Creative living in the modern world

demands re-establishment of the moral ends of personal character and social justice lest we be destroyed in the misuse of the instruments of our creation. As Arnold Toynbee said, in the rise and decline of some twenty-six civilizations on earth, the decline has been caused not by external invasions, but by internal decay. Self-centered, consumerist societies may collapse prematurely if the technological process is divorced from moral practice.

The stability of global living calls for a revolution of values to match the revolution in science and freedom in modern times. The present increasing tendency to love things and use people must be reversed: things are to be used, and people to be loved. When machines, profit and property are treated as more important than persons, the trio of racism, materialism and militarism cannot be overcome and a civilization can easily disintegrate due to moral and spiritual bankruptcy. A genuine revolution of values means that our loyalties must become universal, rather than parochial. Each nation must foster an overriding loyalty to humanity as a family in order to preserve the best in individual society. Moreover, the survival of human beings requires worldwide fellowship based on love of which all religions speak. As the supreme unifying principle of life, love is the key to understanding the ultimate reality and hence the fundamental reality of all creatures.

Love has to become the mode of daily life because we no longer can afford to hate or retaliate. History shows that hatred and retaliation bring only destruction. Arnold Toynbee remarks: "Love is the ultimate force that makes for the saving choice of life and good against the damning choice of death and evil. Therefore, the first hope in our inventory must be the hope that love is going to have the last world. There is a tremendous sense of urgency for humanity to choose between non-violent co-existence and violent co-annihilation before it is too late. This may be humanity's final choice between destruction and community because of the very real technological potential of a nuclear war.

Moral bankruptcy gradually is eating into societies all over the world; today materialism engulfs

humanity. Overemphasis on materialism in the form of a consumer culture weakens the moral and spiritual fabric of humanity. As materialism unchecked may swallow up our civilization there is an urget need to re-order our priorities. Life in its wholeness ought to be accepted and an integrated value system must assume its rightful place in society. Embracing a part, as if it were the whole, spells disaster. Clearly the physical is no substitute for the moral and the spiritual, for materialism certainly is not the whole of existence; hence, the need to restructure our priorities.

The essence of morality for a moral being is love through non-violence. The human person is neither merely a sensuous being of desires nor one of praxis, but a moral being. The human person is not a brute following the law of the animal kingdom the survival of the fittest. On the contrary, tolerance, the spirit of "live and let live" and ahimsa are bonds of love that bind people together. In a moral perspective, equality, justice and liberty are just political rights, but moral values which insist more on duty and obligation than on rights.

In the history of philosophy, there has been a glorification of the human being as rational animal, not only in contrast but in opposition to non-rational nature. The conception which views the human being as "lord of beings", rather than in truth the "shepherd of Being,"[17] implies a challenging and dominating attitude towards nature which is regarded as the more stuff upon which to exercise the human will such an attitude leads not only to the ecological disruptions we perceive today, but to a truncation of the human experience.

Affirmation of the primacy of the moral leads to a recognition that human beings are primarily moral beings and as such not the master of the world, but its caretaker, steward and custodian. This requires humility on the part of humans. As rational beings they cannot treat non-rational nature at whim, for non-rational nature takes shelter in humans as moral beings. Human beings are called to respect the unity of life including the non-human. They are the spokespeople for the world, certainly not its rulers: the

logic of domination has no place in the genuine thinking of the moral being.

Secondly, moral persons relate to the world with a great sense of moderation: they depend on nature for their livelihood and treats nature as finite and limited therefore, they exercise moderation in dealing with the world. As homo-technologies, they believe in science and the advancement of knowledge, they must use the world and do so with a sense of moderation. They do not run away from the world, or call for a halt to science and technology, nor do they believe in indiscriminate and endless exploitation of the world to satiate consumer greed guided by maximum consumption. Rather they believe in careful, guarded, moderate use of the world's resources. The principle of moderation must guide the moral person who cares for the welfare of generations yet unborn.

Thirdly, moral persons are deeply aware of the fact that there are irrational people who reject rational behavior, which is bound to a moral sense. Irrational human beings are guided incorrigibly by passions to which the rational makes no sense. When in control they turn the world into a hell, for they reject the rationality which is the "given" foundation for moral actions; when multinational corporations, power-mongers, chauvinists and racists pose a threat to the world, both physical irrational and immoral. This choice implies suffering and sacrifice without which nothing significant can ever be achieved. As "shepherds of being", moral persons must protect beings from technological predators. Leaders of movements for environmental protection and for a safer and cleaner world must be eternally vigilant against the enemies of nature and money-mongers. Non-violent resistance must be adopted for such protests without fear or favour.

Lastly, moral persons perceive the contemporary technological threat to be rooted in and to originate from violence. Having driven God the creator out of the universe, humans have no respect for creation and would destroy nature. Creation experiences brokenness, because human begins themselves are in a state of brokenness which they impose on creation. Moral persons understand that violence has crept

into the world in our thinking, in our attitude towards the other, in our interpersonal relations, and finally in our relations with nature, resulting in ecological catastrophes.

10. Technology and Non-Violence

Over powered by violence, the modern person has lost sense of justice, balance, respect and tenderness. Instead is filled with just for power, hatred, anger, ruthlessness and covetousness in a word, 'wickedness'. The moral person has the tremendous task of transforming everything on the basis of non-violent, universal, unselfish love which alone can guarantee not only the survival of the world and the species, but also and more basically a joyful, meaningful and rich experience of life for humans.

In our increasing confrontation with the abuse of technology by the rich and the mighty, we need a powerful means to achieve a just, rational and human use of technology. As stated earlier, our technological practice is already rooted in violence. To counter this further violence cannot be employed for violence to counter violence leads only to a vicious circle. Therefore there is but one strategy to adopt, namely, that non-violent resistance. It is imperative that the technological process be brought within the moral domain of non-violence: failure to do so will spell chaos and tragedy.[18]

One of the great virtues of non-violent resistance is that it reduces hostilities to a minimum. Non-violent coercion not only produces good will, but also offers the greatest opportunities for evolving communal harmony. It maintains moral, rational and co-operative attitudes amidst conflict; thus it increased moral forces rather than destroying them. Another important merit of non-violent resistance is its practicality, especially for an oppressed minority group. Non-violent tactics put enormous pressure on the governments and force those in power to act justly; they can be employed in all conflict situations. Moreover, non-violence is not merely a tactic but a moral imperative and way of life that seeks to restore the wholeness of a community by reconciling the oppressor with the oppressed. We need serious study

and experiment with non-violence as a philosophy and strategy.

11. Conclusion

Technology can be at the service of humans only in a non-violent culture because there it has to recognize fundamental human rights and respect the dignity of the human person. The many technological inventions expected in the next millennium must be judged according to whether they contribute to the development of the human person as truly free and creative. Absolute preference should be given to the alleviation of human suffering, to the eradication of hunger and disease, to the fight against social injustice and to the struggle for lasting peace. As in a society without love technology can become a monster, we are called upon to seek love above all else. In this, Gandhi, with his common sense approach to technology, can be relied upon as a sure guide for the forthcoming millennium.

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15) See M.L.King, where do we go from here: Chaos or Community? (New York: Harper & Row, 1967). See also M.L.King, Stride toward Freedom (New York: Harper & Row.1953).

16) In the U.S. the National Environmental Protection Act of 1969 and the Technology Assessment Act of 1972 made technology assessment and environmental impact analysis obligatory for technological project receiving government financing. Technology assessment policy is seriously viewed in Canada, Japan and Western Europe, with France, Germany and England taking the lead.

17) 'Shephered of Being' is a Heldegger an concept. See M.Heidegger. The Question Concerming Technology and other Essays. Trans. William Lovitt (New York: Harper & Row, 1971).

18) Martin Luther King. Why we cannot wait (New York: The New American Library of World Literature, Inc.1964)