TECHNOLOGY, USES AND ABUSES AND VALUE SYSTEM: DEBATE AND DIALOGUE

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Introduction

The problem of implementation of technology leads to uses and abuses of it and so the need for value system is felt seriously. My contention in this paper is –

1. The relevance of the issue;
2. The extent to which philosophical reasoning can contribute to our discussion to find a way out of this jargon; and
3. A reappraisal of value system governing science and technology.

According to Peter Singer, "Some people think that morality is now out of date. They regard morality as a system of nasty puritanical prohibitions, mainly designed to stop people having fun."[1] Is it so?

Value system, that is the intrinsic part of Ethics/Morality, therefore has to be re-examined, re-furnished and re-investigated for our topic of discussion; and I am making an attempt to do the same in this paper.

Values make life worth living, provide meaning, direction and self-evolved authority for guidance in life. So, life without values, especially community life would be a chaos. But Wittgenstein says about values in the *Tractatus* that is very drastic, " 6.4 All propositions are of equal value……6.41 …….If there is any value that does have value, it must lie outside the whole sphere of what happens and is the case; for all that happens and is the case is accidental what make it non-accidental cannot lie within the world, since if it did it would itself be accidental."[2] So can we make value-judgements? Well, for him at least in *Tractatus* values seem to be a terrible business. He further says that we cannot talk about or discuss about them clearly; at the most we can stammer. But, it is high time we stammer at least keeping in mind the technology aspect of this scientific – industrial – corporate world. Like many other terms – say, 'justice', 'freedom', 'truth', these different values – to define them in a paradigm format is nearly impossible. But contextually speaking (as *Syādavāda* theory of *Jainism* says) they can be discussed. We have to be very careful while defining values. As Swami Gautamananda mentions A. Cambell Garnett in his book *The Key to Meaningful Life*, "The term ('values') is almost hopelessly ambiguous and should be avoided except where the context makes its shade of meaning perfectly clear, or where vagueness is an advantage in covering a broad field, as when one speaks of 'the general theory of values.' (The Moral Nature of Man, New York, 1952)"[3]

The ambiguity of values is to be taken to our advantage as it covers a very broad area, I will squeeze it in the world of technology, which is our immediate concern, as it poses challenges in this post-modern era.

According to Bertrand Russell, in relation to technology and its implementation, at this juncture we can discuss about "intrinsic value" – i.e. the property of a state of mind which is enjoyed or which, having been experienced, is desired.

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[1]Singer, Peter. *Practical Ethics*. Second Edition. Cambridge University Press, 2003. Pp. 1
[2]J. Fogelin, Robert. (Edited by Ted Honderich). *Wittgenstein: The Arguments of the Philosophers*. (Second Edition). Routledge, NY, 1999. Pp. 96
[3]Swami Gautamananda. *The Key to Meaningful Life*. Sri Ramkrishna Math, Chennai, India. 2015. Introduction

The opposite of this is "intrinsic disvalue"; and "right conduct" – i.e. conduct which maximizes the balance of value over disvalue or minimizes the balance of disvalue over value, the choice being among acts that are possible.[4]

Implementation of values becomes quite dubious and controversial issue as human being is neither completely gregarious like bees and ants, nor completely solitary like a sage or a monk/nun. But human being is 'semi-gregarious' in nature. When an individual person is living in a social realm and suddenly s/he is quarantined, this comes as a punishment. And when the individual person is living a private life, obviously social gathering and attention comes as a punishment. Therefore the need for introspection is seriously felt as talking of values and its implementation seems to be quite relative in nature; and the issue at hand is a sensitive one to be handled with care.

Science and technology, being private and social aspect of human nature respectively needs to be redefined, especially in recent years, a re-appraisal of value system governing science and technology is urgently required that leads to a critical reassessment of their role in human life.

The dictionary meaning of 'value' is "the beliefs people have, especially about what is right and wrong and what is most important in life, that control their behaviour,"[5]; so in a way it means 'that which is worthy of esteem on its own basis.' (This is – value being intrinsically right). Moral philosophy defines values as a belief system that affects the behavioural pattern of the individual that is socially worthwhile or desirable. Different approaches to the term value are - say for St. Augustine, 'value is based on the will of God.' For Immanuel Kant, 'value is to be based on reason aided by categorical imperatives.' According to David Hume, 'value judgements are based on human nature, sympathy or selfishness'. Hedonist like Jeremy Bentham says that, 'value is based on the calculation of the greatest happiness of the greatest number of people.'[6]

Though all these definitions differ from one another, but the crux remain the same, that human values are 'a mixture of emotion, self-interest, reason, religious belief, and the experience of people in human society.'[7]

Science/Technology and Value System: Debate and Dialogue:
The core concern here is – do value system and science and technology – go together? Or is there a blow to value system because of the advance of science and technology in human life and in this nature? In fact Edmund Husserl, the father of Phenomenology, believes that before asking the question – 'What is phenomenology?' we should ask, 'What made him invent phenomenology?' Husserl's philosophy grows out of his strong belief that, 'Western culture has lost its true direction'. Husserl's mood is reflected in his book *The Crisis of European Sciences and Transcendental Phenomenology: An Introduction to Phenomenological Philosophy*. The crisis consists of the departure of philosophy from its true goal. This can be said about our lives also. He described this crisis as 'the seeming collapse of rationalism. He set his purpose on saving human reason. According to Husserl phenomenology provides that element from which we have to save human reason. Therefore it means to save human sanity. The key to the crisis of Western human person is the progress in natural sciences. Husserl was really impressed by the progress and success of natural sciences but according to him the natural sciences have developed a wrong attitude in the Western individual regarding nature of the world and how best to know the world. The natural sciences believe in this prejudice (or dogmatic view) that 'nature is basically physical and the field of spirit or soul, the field of knowing, judging and understanding values, that is the field of culture is based upon corporeality. So everything is weighed in the scales of 'physicality'. The possibility of formulating a self-content science of the spirit is rejected by the natural scientists. According to Husserl this rejection of the importance of spirit explains the 'crisis of modern human being'. Though Husserl is completely impressed by the successes of natural sciences (and so also with technological development), he insists that the field of spirit must be understood after understanding the physical environment through the study of natural sciences. The manner of the physical sciences reflects modern or 'naïve scientific rationalism'. The basic assumption namely that 'physical nature includes everything', makes this scientific rationalism naïve and so called 'modern'. To illustrate this, all psychology is psycho-physical, all knowledge and truth are objectively based upon a reality beyond the self.

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[4]Russell, Bertrand. *Human Society in Ethics and Politics*. Routledge, London, 1992
[5]*Cambridge Dictionary.*
[6]Swami Gautamananda. *The Key to Meaningful Life*. Sri Ramkrishna Math, Chennai, India. 2015. (Article by N. V. C. Swamy, '*Values in Science and Technology*', Chapter 24.)
[7]Ibid. Chapter 24.

Human being's spirit is also considered as an objective fact founded upon physical nature. Hence all the explanations of the spirit involve the physical existence. For this reason from the attitude of natural sciences, there can be no pure self-content search for the spirit and explanation of the spirit. There cannot be purely inner oriented psychology or theory of spirit beginning with the ego (that which is subtle entity). We are told that we should understand the spirit in the manner of physics and chemistry. Husserl concluded that there cannot be any improvement in our understanding of mankind through purposes so long as naturalistic sciences look upon spirit as something which exists in space and time relation (that is physical) and study spirit according to the methods of natural sciences. Husserl formulated his phenomenology because he desired to develop a proper method for understanding the essential nature of the spirit and to overcome naturalistic objectivism. (So in his methodology too, he begins with 'presupposition-less philosophy'.)

Technology, in Platonist philosophy, would be the result of "ideas". So to say, 'the praxis' of 'ideas' ('ideas' intended here as pure sciences) is technology. According to Martin Heidegger, from Plato onwards the ontological issue 'to be' was never ever taken into consideration before either philosophical or scientific (and in contemporary context - in technological) analysis. This led to utter 'nihilism'. So he furthered Husserl's ideology by demanding a retrospection on 'being' which was and is lost in this technocratic world. According to Heidegger, we see nature and her elements, as well as human beings as they are, just a raw material for our machines. Are we then to eliminate technology completely from our lives? Heidegger says 'no'. We are only to perceive the dangers lurking on us because of technology. "…….Heidegger observes that because of technology, "all distances in time and space are shrinking" and "yet the hasty setting aside of all distances brings no nearness; for nearness does not consist in a small amount of distance."…….Everything approaches us merely as a source of energy or as something we must organize. We treat even human capabilities as though they were only means for technological procedures, as when a worker becomes nothing but an instrument for production. Leaders and planners, along with the rest of us, are mere human resources to be arranged, rearranged, and disposed of. Each and every thing that presents itself technologically thereby loses its distinctive independence and form. We push aside, obscure, or simply cannot see, other possibilities."[8] Indeed in his book *The Question Concerning Technology* we find that by questioning technology, the crisis of modern man, if not solved, at least leads to the mysteries of art of living. As he says, "The closer we come to the danger, the more brightly do the ways into the saving power begin to shine and the more questioning we become. For questioning is the piety of thought." (1977, Pp. 19)

One finds a necessary connection between the philosophy related to technology and value system of Heidegger and M. K. Gandhi. Gandhi is often portrayed as obscurantist and anti-technology like Heidegger. But as seen in Heidegger's philosophy, so one finds in Gandhi's philosophy, he is not anti-technology. He believes in - that knowledge of science and technology is necessary, but one has to have introspection on how to use this technology, to what extent are we to implement the praxis of pure science. He therefore believes that because of technological revolution we have industrial revolution; and how far this is "good" is really the question. Therefore, we need to turn to value system to learn more about the implementation of technology. Therefore, "However as alternative technology, technology assessment and legislation are extrinsic to the intrinsic moral imperative, we must turn to the realm of values for further and mere decisive understanding and handling of technological issues." (*Technology in the Third Millennium: A Gandhian Perspective* by J. I. Fernando)[9]

According to Robert Merton, in his book *The Sociology of Science*, approves that scientists involved in scientific research, that very much incorporates technology, accepts four principal values – namely –

1. Universalism
2. Communalism
3. Disinterestedness, and
4. Organized Scepticism.[10]

(Merton, Robert. *The Sociology of Science*. Chicago University Press, 1973)

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[8]Blitz, Mark. Understanding Heidegger on Technology. The New Atlantis – A Journal of Technology and Society – No. 41.Winter, 2014.
[9]Pandikattu, Kuruvilla. (Ed) Gandhi: The Meaning of Mahatma for the Millennium. (Indian Philosophical Studies, V). The Council for Research in Values and Philosophy, 2001. Pp. 130
[10]Ibid. Chapter 24

According to Merton, scientist in general respect these values, not because of their intrinsic righteousness; but because if they do not accept them (these values) they will have to confront the rejection from the scientific community.

One can illustrate the concept of implementation of Universalism by quoting the example of Adolf Hitler rejecting Albert Einstein's discovery as nothing but 'Jewish Science', above all this, Hitler's attitude was lauded by Nobel Prize winner in Physics Dr. Phillip Lenard. This has to be avoided at any cost; and the concept of Universalism has to be maintained. Science and technology has no religion, community, and race or gender bias. It is secular and this attitude of Universalism has to be upheld.

If there is a question asked to a lay person what do you think of science? Centuries ago (at time of Isaac Newton) few knew about scientific activity who considered it as a pastime of the rich. Some 150 years ago, the 'comfort' aspect was introduced in science, so also improving one's material standard in human life. This is spoken in relation to the 'uses' of technology. But today the answer would be different, yes, because neither the use nor the abuse of technology can be underestimated. In fact there has been a sort of disquiet in human individual with regard to implementation of technology in our lives as the extent to which the development in technology is 'happening' in jet speed. Due to its abuses technology cannot necessarily be said to be really good for expansion of human knowledge as it can be said about 'pure sciences'.

Let us elucidate the first two of the four principal values and analyse how in technology they stand on a fragile ground. The value of 'universalism' demands that knowledge be truly international. This is not true of technology. The commercial exploitation of science and the related *Intellectual Property Rights* has made technology the property of individuals or corporations. So, it is no longer the part of public knowledge. That means it goes against the second principal value of communalism. With the growth of military science and defence research, many technological developments have become classified and closed to the international community. This was found particularly during the Cold War, when industrial and military espionage was at its highest. To site an example for this is during some international conferences in science – where former Soviet Union's scientists, though spoke excellent English, were accompanied by interpreters.

Instead of speaking of introducing value system in technology, keeping in mind its use and abuse; I would prefer to talk on how value system is affected by science and technology. Science, since the Cold War is not free of ideology. For example, the Russians launched the *Sputnik* and claimed their superiority to all in the world in matter of science and technology, but more specifically to Americans. To be on par with the Russians, Americans in 1969 saw to it that they are the first to land on moon. Even countries which cannot afford to provide the basic necessities to their citizens are in a rat race to procure and develop arms and ammunition of latest and of more destructive capacity – slick and catchy!!! To have this 'cool' attitude even in matter of mass destruction, how best, in less time, with absolute perfection one can achieve the goal of mass destruction is a matter of pride and prestige. The victim in the whole process is our 'value system' that makes life worthwhile. According to Sri Aurobindo, the great mystic, "Even the discoveries of physical science have been elevated into a creed and in its name religion and spirituality banned as ignorance and superstition, philosophy as frippery and moonshine. And to these bigoted exclusions and vain wranglings even the wise have often lent themselves, misled by some spirit of darkness that has mingled with their light and overshadowed in with some cloud of intellectual egoism or spiritual pride."[11] Even Isaac Newton feared that too wide an application of sciences in form of technology would 'disenchant' the world by reducing or substituting the need for God.

For the last two principal values – 'disinterestedness' and 'organized scepticism', without these values, one will be inclined to have prejudiced mind and will suffer in 'dogmatic slumber'. So there is a need felt for 'disinterestedness' and 'organized' respectively.

Here, one thing is to be kept in mind that let us not confuse science with technology. Therefore the concern is not 'pure science' that solves the riddles and tries to answer the questions – 'how' and 'why' of and in this universe; but the concern is technological aspect of science. Again the dilemma is, though we are aware that science and technology are distinct from each other, but it is really hard to make that distinction in practical life.

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[11]Sri Aurobindo. *Essays on the Gita*. Sri Aurobindo Ashram, Pondicherry, 1997. Pp. 3

It is aptly put by N. V. C. Swamy, "There is a joke that if some major venture succeeds, it is called a 'triumph of science', but if it fails, it is called 'failure of technology'!"[12] So to find solution for betterment of human life and this environment is the need of the hour. Can it be done? John Zerzan and M. K. Gandhi introspects on it and solution though seems to be difficult is not impossible.

Conclusion

John Zerzan (who first came into light as celebrity philosopher in 1995 after New York Times featured him as a supporter of the Unabomber's anti-technology doctrine) through his anthropological research argues that domestication of nature and domestication of humans go hand in hand and this is because of technology. According to Zerzan the technological – industrial 'machine' is already running the world, a world where individual humans are but insignificant little cogs, parts of a wheel of a machine that has hardly its own value. No single human individual, be it a so called powerful entrepreneur or a businessman or a politician has the power to rein supreme in the system. Inexorable grammar or logic of what has been produced by the technology; to undo what is already done by technology is beyond anybody's capacity. Modern civilization according to him is fundamentally anti-human and so called 'green technology' is nothing but "psycho"; and the only way out is 'go back to stone-age'. Zerzan in considered even language as product of technology that creates miles of problems. Therefore language is also disastrous. Zerzan says in an interview when questioned – 'You mean you're being literal when you say we have to go back to the Stone-Age?' His answer sums up the whole issue at hand, "Absolutely, otherwise it's just talk. We have to dismantle this whole mess, and start thinking practically, start regaining the skills we once had as people on this planet. We're just becoming more and more dependent on technology, which drains everything away – it drains community away, it really drains experience away, it drains meaning away."[13] Zerzan propagates 'green anarchism' and 'neo-primitivism'. And he seems to be a champion of these movements along with inspiring whole lot of activists and social reformers who are anti-globalization. Does Zerzan support technology in any form? According to Michael Becker in the introduction of Zerzan's book *Future Primitive Revisited*, "In that respect, if it is to remain anarchistic it is bound to remain open to at least the possibility of retaining some features of civilization. As its best what it provides is the basis for rejecting ideas and practices that will reintroduce what we are only now coming to sense and know as the structural determinants that breed alienation in many wide ranging form. So types of technology or modes of practice might be retained but only if they can be reconciled with human freedom and identification with Earth as the place of all Life."[14] Further he says, "For all of its problems otherwise, it would involve the maxim of Leopold's land ethic: "A thing is right when it tends to preserve the integrity, stability, and beauty of biotic community. It is wrong when it tends otherwise.""[15]

Of course keeping the contemporary times in mind, it would not be desirable to keep oneself aloof from technology and sever all relations with it. Coming back to Gandhi's views on technology seems to fit the present scenario. Gandhi opposed modern technology because it supported only the so-called 'well educated community' and the capitalists. Unfortunately according to Gandhi modern technology has always undermined cottage industries run by local craftsmen. So the wide increases between the 'haves' and the 'have-nots'. The widening gap between the haves and have-nots affects the political economy not only of one's country but also internationally it shows its repercussions. One thing is very clear from his philosophy that he was not anti-technology. But his was the firm belief that 'man must control machine and not otherwise.' Technology has to benefit the masses, but 'craze' of technology will ruin the life of millions. So Gandhi propagated the idea of use of *charkhā* (spinning wheel) and *khādi* (hand-made cloth) as a symbol of economic freedom. For this the best is for Gandhi is to incorporate in country's economy cottage industry, *Swadeshi* (home-production), handicraft industry and controlled technology that is beneficial to all.

So to conclude, I quote Gandhi (which he wrote keeping in mind India, but it has a global impact as well), "A country remains poor in wealth, both materially and intellectually, if it does not develop its handicrafts and its industries and lives a lazy parasitic life by importing all the manufactured articles from outside. There was a time when we manufactured almost all we wanted. The process is now reversed, and we are dependent upon the outside world for most manufactured goods.

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[12]Swami Gautamananda. The Key to Meaningful Life. Sri Ramkrishna Math, Chennai, India. 2015. (Article by N. V. C. Swamy, 'Values in Science and Technology', Chapter 24.)
[13]Newspaper DNA, Sunday, 20th December, 2009.
[14] Zerzan, John. *Future Primitive Revisited*. (Introduction by Michael Becker). Feral House. 2012. Pp. XXV
[15] Ibid. Pp. XXVI

The past year brought forth a remarkable awakening of the *Swadeshi* spirit. It has therefore become necessary to define *Swadeshi* goods. But in giving a definition, care had to be taken not to make the definition so narrow as to make manufacture all but impossible or so wide as to become farcical and *Swadeshi* only in name. We do not want to follow the frog-in-the-well policy, nor in seeming to be international, lose our roots. We cannot be international, if we lose our individuality, i.e., nationality."[16]

The whole exercise of Zerzan or Gandhi will be obscure if they did not accept value system as a pre-requisite condition for their philosophy. So it an obvious fact that both of them incorporated values, without which human life will be like a 'ship without a rudder'.

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[16] Gandhi, M. K. *Young India*, Issue: 20-08-1931.