Module 4 : Science and Technology, and their Human Roots: Philosophy of Science and Technology

Module 4. LECTURE 24

Social Shaping of Science and Technology

For Edmund Husserl, the founder of phenomenology, 'human 'intuitions' of reality are constituted, not given. ' Phenomenology needs to be redefined as analyzing people's relationships with the world. For that is what classical phenomenologist actually did.Husserl, Heidegger, and Merleau-Ponty did not describe the world but our relationship with it, be it in terms of 'consciousness', 'being-in-the-world', or' perception'. Our world is interpreted reality' and our existence is 'situated subjectivity', but it is an interpretation that needs both the interpreter and the relation between the knower and the known. What the world 'is' and what subjects 'are', arises from the interplay between humans and reality.Re-interpreting Hermeneutics phenomenologically, Van Manen holds the two approaches - hermeneutics and phenomenology - in a dialectical relationship, wanting to 'let things speak for themselves' while recognizing that (social) phenomena need to be interpreted (through language) in order to be communicated to others. Van Manen puts special emphasis on the hermeneutic-phenomenologist participating in the research in the interests of acting out a set of pedagogical values: "When we raise questions, gather data, describe a phenomenon, and construct textual interpretations, we do so as researchers who stand in the world in a pedagogic way...pedagogy requires a phenomenological sensitivity to lived experience...a hermeneutic ability to make interpretive sense of the phenomena of the life

world....(and)...play with language in order to allow the research process of textual reflection to contribute to one's pedagogical thoughtfulness and tact. (1990, pp.1-2)

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Phenomenology of science,technology and its human roots

Husserl's phenomenology was later developed into technology by Heidegger. Both have remained perpetual begeinners in philosophy in their attempt at describing phenomena as it is ,not being distracted by conceptual baggages . Heidegger uses the word technology in many ways. Historically, he is referring to the mass mechanicazation which began in the eighteenth century and cites concrete examples such as hydroelectric power plants, radar stations, and jet aircrafts. This is a matter of using external instruments as a means to an end. In addition, Heidegger uses technology to define a mode of thinking, and a way of revealing. This definition of technology is not limited to external machines we use, but has roots in a way of thinking which goes back to the ancient Greeks.

For Heidegger, technology is a method for calling forth and transforming the stock of reality according to our will. Technology facilitates a control over reality, rather than openness to experiencing it. For Heidegger, technology in its essence is an extension of metaphysics -- and is grounded in the history of metaphysics as a mode of revealing.

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Phenomenology of science,technology and its human roots

Can this be an alternate approach from a feminist philosopher of science who has all the ingredients in her for combing successfully both these roles, a woman and a scientist, an woman of reason, and an woman who cares and loves. Sandra Harding looks for a wider horizon that can accommodate both enlightenment needs and post modern concerns in the interest of acting out a set of pedagogical values as well. She writes: These projects are incomplete –we have not yet figured out how to escape such limitations. Most likely, we are not yet in an historical era when such vision should be possible. At this moment in history, our feminism need both Enlightenment and postmodern agendas-but we don't needs the same ones for the same purposes or in the same forms as do white, bourgeois, andocentric westerners.[4]

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The sociology of scientific knowledge:

Humans as homo sapiens share biological identity with other members of the same species. In this regard there is not much difference between humans and other animals : one can use similar devices to identify human bones as one does in identifying bones of other animals. But the term person has a valuational impact, it is much used in law and in morals. Instead of entering into the human person dichotomy in more details . Iwould prefer a very simple definition of 'person' which has direct bearings on information technology. Person is one who has a sense of privacy, who can exercise his free will to some extent regarding controlling information about oneself so that not all informations are made publicly known.

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The sociology of scientific knowledge:

This has direct bearing on the common sense meaning of these expressions,‘ being alone’, no one bothering me‘ etc. As S. Muthuchidambaram gives an apt description of the need for privacy in any meaningful interpersonal talk : “....The meanings for the adjective private include ‘away from public view’, secluded’, not known publicly or generally known,” secret confidential’ (a private matter) , or intended to be known publicly”., and’unsuitable for public use or display”. All the above expressions and meanings make reference to separation from others through control over information, space or access, including simply being alone.” Through the new technology intrusion to our very intimate and private dimension can be done in a new and increasing scale, which is,‘ According to Wade Robison,

an “appropriation of a person‘s identity which is to treat a person as an object”.[1]

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Social Shaping of Science and Technology

We are fascinated with new and exciting possibilities that the new technology has bestowed on us .As anonymous anyone, we can do almost anything that we sometimes secretly wish for and as virtual reality we can do anything that we want without taking risks. With our God like perfection, we do live in a virtual world where we can meet our virtual friends, go to virtual places and communicate with people who are strangers to us. Besides all the possibilities, the Internet also influences us in re defining ourselves in diverse ways.What are the new issues that confront us in this globalised world? From mobile phone to human genome, from cyber crime to crime against humanity with atrocity of violence and weapons of mass destruction at our hand, ethics is facing a dilemma what to include within its scope and what to exclude.

[1] Gobal Information Ethics, **in Collste (ed.).** ***Ethics in the Age of Information Technology*****. Studies in Applied Ethics series, v. 7. Linköping: bpt-TRYCK AB, 2000. Pp.17-18**

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Technology shaping society

Rather, how best to define ethics in the present scenario? The present lecture will draw attention to the need or new ethical code with reference to one particular aspect of our life world, the changing nature of en environmental questions and our need for addressing environmental questions from a nuanced perspective that can do justice to many other inter related areas of our life, from vulnerability of economically backward and deprived ones of our society to succumb to being instrumental for assisting criminal acts ,from war to terrorism ,and other similar pro-death and pro destructive acts that may re direct our attention to some such related issues also taking into consideration differences in our socio cultural backgrounds. However, before we address new ethical demands for areas like war, terrorism, and environmental degradation along with our attitude to others, including animals, our concern for bio ethics, feminist ethics etc. definitely keep room for areas that are beyond the domain of so called traditional ethical perspectives.

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Technology shaping society

Besides all the possibilities, the Internet also influences us in re defining ourselves in diverse ways.

Technolisation is changing the familiar patterns of doctor-patient relationship and the medical ethical scenario. The rapid advances in medical and biological sciences have raised new bioethical questions. The involvement of society at large through the mass communication media, courts, legislators,has created the necessity to redefine the social parameters of the physician patient relationship. Commercialization of medical services and the greater sense of consumer criticism discloses the fact that medicine is now seen as a a profession more for career, self fulfillment, and income not as a service to the sick, needy with humanity, honesty. There are facets of dehumanization and medicine shown this trend too. Unlike in previous occasions modern medicine has traced disease causation to a multitude of processes in individual organs, tissues, even cells. The diagnostic and therapeutic approaches focus primarily on the illness , less on the patient

and his embodied and integral persona. This has led to changing relationship between the physician and the patient.

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Technology as Knowledge : need for ethics

Given the ever-increasing demand for global responses to ethical issues, traditional medical ethics has changed greatly in the last century. In the contemporary setting, medical ethics does not merely present the admirable character of physicians or represent the rules of etiquette in the field of medicine: on the contrary, it is a practical discipline that provides a structured approach for identifying, analyzing and resolving ethical issues in clinical practice. Medical ethics is an applied branch of ethics or moral philosophy that attempts to unravel the rights and wrongs of different areas of health care practices in the light of philosophical analyses.

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Technology as Knowledge: need for ethics

Marketability of human body parts and increased atomization of medical zed body is in rise. Persons are transformed into valued objects through their involvement in medical research. At the growth of expanding market for human tissues, there is increase in commercialization of body, and the demand for genetic testing, gene patenting, is growing when body is reduced to ‘source of raw materials for salable products’. We are witnessing the global expansion of human body shop.

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Technology as Knowledge : need for ethics

Medico-clinical dehumanization assumes a host of forms, where even living bodies are quickly fragmented and transformed into scientific work objects. van Kammen(1999) illustrates, for example that male & female bodies are regularly reduced to their perceived reproductive capacities and limitations in the context of fertility drug testing. In turn,Sered & Tabory (1999) uncover how patients in an Israeli breast cancer clinic are routinely dehumanized and thus experience a medicalized form of "social death'(See Patterson 1982),their names (and thus identities) transformed into mere umbers on a chart. In their attempts to preserve the sense of humanity patients generate "treatment" rather than illness narratives(Sered & Tabory 1999;cf Kleinmann 1988).

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philosophical approach

Philosophy is now addressing debatable issues like body ownership, in terms of one's the whole body or their tangible parts and the legal and socio cultural perspectives of issues of surrogate's right, have added much to the body-ownership debate at times leading to complete reductionism of human-person to the DNA, and the genetic information code etc. This leads to feminist critics of science and male centric rationality and there is attempt at re reading medical ethics from feminist perspective. Questions which incorporate these perspectives of women need to be focused, i.e., about the unequal treatment of women in health care, about the roles of physicians and nurse and about relationship issues other than power struggle.

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Philosophical approach

The treatment of women patients, women physicians, and people in traditionally female occupations such as nursing and social work should be examined. On the whole, medical ethics now centers round more debatable issues that in turn might throw new light to age old philosophical problems like the problem of redefining life and death and the issue of defining what makes us distinctively human, personal and interpersonal and moral, of one is permitted to use these terms for humans-persons.

It may so happen that ethics is needed to assess not some kinds of interpersonal dialogue but monologues only. That we may interact with virtual realities only in a virtual world. In the mobile scenario perhaps it would still be good to talk but instead of the 'roar that lies on the other side of silence', of George Eliot's Middlemarch, it may be the silence that lies on the other side of the messages. May be there are others in that other side, but it is better to let the message reach the 'other' that the time for talking is past, the people on the other side must expect to receive a message that should clear the messiness of the open ended dialogue.

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Technology shaping society

Modern communication technologies affect not only grand issues of civilisation, of meaning, as well as cultural values and consumption habits, but also specific arenas such as our sense of travel and tourism. Although one can not ascertain what is the exact nature of this particular turn to ethics, is it ,"A Right turn? A Left turn? A wrong turn? A U-turn?,"for Nicholas Pagan at least, this much is certain that, **"**Ethics is back in literary studies, philosophy, and political theory. Where critiques of universal man and the autonomous human subject had, in recent years, produced a resistance to ethics in many fields of scholarship, today these critiques have generated a crossover among disciplines and led to theories and practices that see and do ethics otherwise. The de-centering of the subject, the contributors to this volume suggest, has brought about a re-centering of the

ethical. "[2]Computer ethics is a part of this "contemporary turn to ethics" in literary theory and the humanities that challenge the legitimacy of the old order, "seeking emancipatory focus of life."

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Technology and Life world

Technolisation is changing the familiar patterns of doctor-patient relationship and the medical ethical scenario. The rapid advances in medical and biological sciences have raised new bioethical questions. The involvement of society at large through the mass communication media, courts, legislators,has created the necessity to redefine the social parameters of the physician patient relationship. Commercialization of medical services and the greater sense of consumer criticism discloses the fact that medicine is now seen as a a profession more for career, self fulfillment, and income not as a service to the sick, needy with humanity, honesty. There are facets of dehumanization and medicine shown this trend too. Unlike in previous occasions modern medicine has traced disease causation to a multitude of processes in individual organs, tissues, even cells. The diagnostic and therapeutic approaches focus primarily on the illness , less on the patient and his embodied and integral persona. This has led to changing relationship between the physician and the patient.

[2] Nicholas O. Pagan,*Ethics and Subjectivity in Literary and Cultural Studies*. Co-Editor with William S. haney II.Bern : Peter Lang ,2002.

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Technology and Life world : Bio Ethics

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Technology , Life world,and Ethics

Michael C. Brannigan, ed., Ethical Issues in Human Cloning (2001 echoes some of the "new ethic" rhetoric—he talks about "a critical crossroads" for human beings, and says cloning "may pose the ultimate challenge to our notions of family" (p. 3)—but what is most remarkable about the book is that it brings together a very traditional spectrum of philosophical and religious reactions to the possibility of cloning humans (whole humans or only parts). Even in a section supposedly devoted to the science of cloning, Brannigan includes a contribution by a religion-based opponent of cloning, Leon R. Kass—who happens to be President George W. Bush's choice to head a new U. S. Commission on Bioethics.

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Technology , Life world,and Ethics

Need for New Ethics?

Questions from a deontological Kantian perspective that will always keep room for centrality of human agent to guide the direction of technology. Lucas D.Intrana suggests that ethical implications of technology are viable if we argue for de-centering of anthropocentric ethics. That our measure cannot be man. Especially with man machine dependence we are already more 'I-it' than mere I

Since our being in the cyberspace opens up new and exciting horizons before us we needs to address these issues ethically.

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Technology , Life world, and Ethics

Need for New Ethics?

The well-worn topic of ethics in military research has recently been reinvigorated by constructivist studies of scientist's moral frameworks in relation to military projects. Thorpe ((2004b), for example, argues that as Oppenheimer wrestled with the morality of authoring the atomic bomb, he was equally troubled by a more general shift in the scientific profession toward narrow and blinkered specialization, thus precluding moral deliberation and reflection and moving scientists away from their former role as "universal intellectuals". Other studies of the justifications provided by universities and scientists for engaging in military research and development activities have contended that it is too simplistic to view these justifications as involving the suppression or abandonment of a Mertonian normative framework that they should be regarded as part of the professional ideology and culture of the weapons laboratory (Balmer, 2002; Reppay, 1999; Gusterson, 1998).