Sociological theory and the knowledge society

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Abstract

Globalisation and its knowledge society are bringing about a major change in the entire social system and this, in turn, is creating several discontinuities in the social order in many parts of the world. In some countries, the traditional economy has been thrown out of equilibrium, in some others the political system has been destabilised and in all countries the existing social order based mostly on conformity has been dislocated or de-railed. This paper examines the prospect of sociological theory in the wake of Information Technology (IT) and Knowledge Revolution (KR) that are overtaking societies the world over and that are changing many of the traditional values and norms of behaviour of individuals and organisations in society. It tries to habilitate sociology and its theoretical underpinnings in the matrix of the Knowledge Society built on Information Technology.

Keywords: Globalisation; knowledge society; information technology; knowledge revolution; sociology; social theory; social system; social order

Introduction

Information technology has provided sumptuous food for those who want to question the sanctity and usefulness of many precepts in the social and behavioural sciences, which have assumed man as being conditioned and regulated by certain socially established parameters. In so far as IT and KR have generated and popularised new values and norms for humans to behave, there is no a *priori* reason to assume that conventional sociological theories of human behaviour, and the social processes based on them, would work as smoothly and uncontested as before. In fact, their relevance is being increasingly questioned and their usefulness as tools for analysis and interpretation of social dynamics is getting increasingly devalued at several quarters.

Sociological theories are in a state of stagnation today. Grand theories remain intact but with reduced halo. They continue to be respected because of their intrinsic worth but sparingly used by

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practitioners. Middle range theories also have survived many attacks and enjoy the same fate. But this cannot be said about micro level theories, their number being legion. Because the subject matter of sociology has proliferated into many areas and sub-areas and sub-sub areas, theories at micro level do not have similar appeal and are little attempted by researchers or approved by peers. Even if one attempts to build a theory, its applicability will be circumscribed for several reasons. Further, in the prevailing volatile social situation, a new theory will not have long life and may become redundant the moment it comes out of the testing ground. However, there are sociologists who believe that sociology could survive without new theories. Gosta Esping-Adersen (2000) argues that present day sociology should not worry about being "theory-less" since we have ample number of theories to start our enquiry.

There are several obstacles to theory building. These may be divided into three groups: (1) obstacles from within the science of society, (2) obstacles created by IT and related factors, and (3) obstacles created by Knowledge Revolution. The dividing line between 2 and 3 is very hazy and there are several overlaps between them. Only a summary of the factors from within is given here because the focus of this paper is on the other two.

Because of the all-comprehensive nature of the science of society and flexible boundary lines, scholars have a tendency to include everything under the sun as coming within the purview of sociology. As a result, a unified theory embracing all the heterogeneous elements in the discipline becomes difficult. This is true of meta theories and more true of micro theories. Commercialisation and corporatisation of sociological research has made theory a matter of convenience in research: Funding agencies are not interested in theories as such, they want evidence-based findings. This assumes importance since even the traditional funding agencies, government and research institutions, have set their own research agenda and give funds only for earmarked themes. This means that a sociologist theoretician who wants to engage in research of choice and to build up new theories will find little support for their endeavour from institutionalised funding agencies and even if they manage to do such research, their theoretical findings may have few takers.

Fragmentation of sociological knowledge by professional disciplines such as social work, business management, engineering and medicine which need and use only parts of sociology for their work has made theory a dispensable item in their intellectual pursuits. In such circumstances, theory building is a luxury and even application of theory in research may not find favour with many

intellectuals and professionals. If building new theory in sociology has been affected by internal factors, there are at least two major external factors that are threatening the validity of older theories. They are new trends in biotechnology on the one hand and information technology on the other. Genetic engineering has made possible human engineered organisms. Cloning and organ transplant may result in new species of humankind, which may not always behave in socially expected ways. Nano technology is developing fast and its capacity to implant or modify cells that would restore or accelerate intelligence will soon become a reality, given the momentum gained in this field of research. Computer controlled human brain also could be seen as a possibility though remote.

There are manifold ways in which human behaviour can be artificially maneuvered in the manner desired by the users. Given the incredible power of the new technologies, the question will be how to fit our existing theories of human and social behaviour with the genetically engineered new brand of humans and the totally computerised human surrogates that will not only influence but may compel humans to alter and adjust their behaviour vis-à-vis the new species. Biotechnology has reached a stage that would alter the property of genes and, through it, the very nature of human behaviour, creating new problems for the social order. Human engineering, coupled with human cloning, could fundamentally alter the physical and mental characteristics of the human being, and this may challenge not only the accumulated knowledge and wisdom in sociology but those in all human and social sciences.

Even apart from genetic engineering, psychologists are engaged in developing techniques to reformulate human behaviour. Liberalisation has contributed an economic dimension for destabilizing the existing social order. The unequal and unethical competition for capturing global markets resorted to by global MNCs and TNCs aided and abetted by their national governments has resulted in transforming the human being into a marketable commodity through aggressive sales promotion and manipulation of consumer behaviour. Sociology will assume a new meaning when social man, the unit of its study, is manipulated by human engineering and acts not according to established and commonly shared social norms and values but on the basis of engineered norms and values that are geared to the needs of the MNCs and TNCs.

Social and family mores are being changed by biotechnology. In Asia, son-preference and large-scale use of amniocentesis are tilting the sex ratio against women and the consequent shortage of women in the marriage market may result in wife hunting and in the restoration of fraternal

polyandry in society. Again, large-scale organ transplant has contributed to a booming racket in kidney transplant in metropolitan cities and with unethical international and touristic overtones.

Yet another threat to the established social order is Information Technology (IT). Its offshoot, knowledge revolution, has become a major factor of profound significance in the new millennium and it has revolutionised society in a manner that has no parallel in history. It has unfolded scenarios that have long standing implications for the humankind. What is more intriguing from the point of human society is that new information and new knowledge are coming in such amazing abundance and with such terrific speed that no reasonable estimation of what all these would lead to in terms of the social order is beyond meaningful prediction or reasonable calculation. The entry of nano technology in this field is another factor to be reckoned with in the years to come, as this would make most of man's present achievements redundant. Nano technology will have multiplier effect on all sectors of human life and may lead to an entirely new social order of unpredictable nature and magnitude. Never before in the history of humankind has so much happened in society in such profoundness and within so little time.

Thanks to information technology, data is now transformed into information and information into knowledge. But there are two limiting factors here. The human mind will not be able to work as swiftly as the computer, so there is always a time lag between availability of knowledge and its application. Secondly, computer aided information, however sharp and precise, cannot provide wisdom to select the most appropriate piece(s) of knowledge. Unless knowledge is converted into wisdom or applied wisely, application of knowledge to situations, however sophisticated and apparently rational the knowledge is, will be of no use. As wisdom varies from person to person, the advantage in the use of knowledge will be in the hands of those who possess superior wisdom. One can only say that those who control knowledge will also control wisdom. But one cannot say for certain that its possessors will use knowledge wisely. The consequence of an unwise decision can at times be catastrophic and disastrous as some recent international decisions and courses of action based on them have shown.

Knowledge is power. Knowledge societies are arguably to be a source of human development and empowerment in that access to knowledge will *ipso facto* contribute an element of power. UNESCO (2005, p.27) suggests that the revolution in new technologies and the new phase of globalisation that accompanies it will add a new source to the third phase of Industrial revolution. However, UNESCO's fond hope that this will strengthen peoples and countries all over the world does not

seem to agree with reality. The fervent hope behind the UN Declaration of Human Rights 1948 is a case in point. Knowledge revolution assumes that knowledge societies will be able to enforce human rights with ease because with the availability of knowledge to everyone, things will become transparent and the fundamental rights of the individual will be known to everybody and will be enforced. However, studies have shown that the fact is otherwise and violation of human rights has continued even in highly developed knowledge societies. If it has achieved anything, it is on the negative side: Human rights violation has only increased after knowledge revolution. Large-scale violation of human rights in many parts of the world, under whatever excuses, has become a scandal even in UN Circles.

Computer and internet facilities are a *sine qua non* of knowledge societies, as knowledge storage and retrieval depend on these facilities. Here, UNESCO, which is itself a proponent of knowledge dissemination, admits that this is a privilege that is still in the hands of the countries of the North. According to UNESCO, only 11% of the world's population has access to the internet. Ninety percent of people using internet come from industrialised countries. Indeed, while we speak of a global information society and of a World Wide Web the fact is that 82% of the population account for only 10% of internet connections in the world. This d*igital divide* is first and foremost a question of access to infrastructure. Some two billion people are not linked to an electricity grid - the precondition of mass access to the new technologies. Furthermore, there is a problem of affordability. Computers are expensive. The provision of internet services constitutes a very considerable investment in urban areas and is in short supply in the countryside. In addition, familiarizing oneself with the computer requires computer literacy that is also unaffordable to the poor (UNESCO, p. 29).

In this paper, I have dwelt at length on the computer and internet because they are the backbone of knowledge societies and they are a major factor in changing human behaviour and social relationships. The high tide formed by new inventions and discoveries culminating in the knowledge society are going to sweep away part of man's innate characteristics in at least two directions – the biological and the social. In turn the new biological aspects will result in further changes contributing to perhaps an entirely new social order. Already, one of the outcomes of the knowledge society is the new cultural behaviour patterns   A specific web culture is built up by a process of distribution in which there is a radically new cultural behaviour patterns particularly as regards personal projection through the web pages (UNESCO, p. 53).

According to the classic work of Manuel Castelles (2000), the society of the 21st century will be a "network society". A fundamental feature of the social structure in the information age is its reliance on networks as the key feature of social morphology. While networks are forms of social organisations, they are now empowered by new information/ communication technologies so that they become able to cope at the same time with flexible decentralisation and focused decision-making.

The knowledge revolution contributes to the stratification of society from both within nations and between nations. At the global level, this will further strengthen those who presently control knowledge and to that extent bring a cleavage between the rich and poor nations. Within a nation, the gap between the rich who can afford the internet and the poor who do not have access even to a telephone line is gong to widen.

Knowledge is not innocent. The power that it gives to those who have access to it could be used for good or evil. Neo-colonial governments can use it to promote their hegemonies over weaker nations, terrorist groups can use it to streamline and sophisticate their anti-establishment activities: The more of knowledge, the more of its use in these directions.

Many people believe that education will be the first social institution to be invaded by IT since giant corporations know the big advantage that will await them if they make education their handmaid for business promotion. Around 75 to 80 percent of the IT world now uses education as one of its major inputs. With the growing use of computers and multimedia technology in education, there will be commensurate change in the traditional mode of acquiring, storing and transmitting knowledge. Computers, CD-ROM and Videotapes will increasingly replace school textbooks. There will be a radical transformation of the structure and dynamics of the school system and with it in the concept of the institution of education.

With the commercialisation and marketisation of educational institutions, schools will be re-engineered in much the same way as business corporations and they will form part of gigantic multinational agencies which will prepare the needed software for the new era education. These new technologies will not be adding to the curriculum, they will be transforming it if not replacing it completely. According to Anthony Giddens (2000), all traditional means of education will change with the growing use of computers and multimedia technologies in education. He warns that the effect of such invasion of educational field by the new technology will be reinforcing the already

existing educational inequalities by adding a new category of "information poverty" to the material deprivation that currently exists in a big way.

The crisis that has struck the university system with the entry of IT and KR has been brilliantly discussed by David Beckett (2008). With virtually all orthodox grounds and the justification for their once elevated position either gone or considerably reduced, universities now need to re-think and articulate a new role in a world which has no use for their traditional services and sets new rules for the game of prestige and influence. Emeritus Professor of Sociology at the University of Leeds, Zymut Bauman, speaking of education in the post-modern era, says that both the entire range of multimedia provisions of courses and subject materials and the pedagogy by which these are meant to advance learning will be globalised and converted into broad banded multimedia technology.

In the new setup, knowledge will be separated from the teacher and transferred into online material and pedagogies. Knowledge in computerised societies is becoming "externalised" from the knower; in the new setup education will be marketised and knowledge will be commoditised – the offshoot of privatisation which is the offshoot of globalisation. In this scheme of things the teacher becomes redundant, the old books become redundant, old methodologies become redundant, in fact, everything old becomes redundant. I made this elaboration on the impending change in education (a familiar ground for all of us) because you can easily visualize the changes that would come to the ontological, epistemological and metaphysical base of education in the years ahead.

According to Feabin (2001), there is a major impending threat to human beings from the new technology. This is the flooding of the labour market with robots. He quotes Sun Microsystems's co-founder and chief scientist Bill Joy that uncontrolled self-replication by robots with artificial intelligence could pose a serious threat to human beings in the coming decades. Computer scientists predict that by 2030, computers will be ever more human, conscious and intelligent. Computer capacity will be a million times greater then and computerised robots will be much smarter than human beings. Given the incredible power of these new technologies, should we be asking how we can best coexist with them? According to Stuart Hall (1988 p.528), in the process of changes brought about by new technologies, our world is being re-constituted and re-shaped. In the new world, our identities, our sense of self, our subjectivities, all are being transformed.

In conclusion, information technology has given birth to the knowledge revolution and this in turn has created knowledge societies. Knowledge societies while bringing many benefits of huge

magnitude to mankind also offer new and serious threats to mankind because they can place at the disposal of everybody knowledge update on all fields of human endeavour that fundamentally affect human behaviour and social relationship. The cumulative effect of all these is to create a new human being – social being if you please - who may not always be guided by conventional values and normative social patterns. If this happens, the values enshrined in the social order and the norms and rules of behaviour built on them will be transformed and this will result in the theories based on them becoming redundant.

While the changes portrayed above may not happen immediately, it is likely that many of the elements of change will be experienced in the coming decades and by the end of the 21st century, especially with the entry of "nano" technology, things may take a faster turn. One thing seems to be certain: Old values and norms are going to change but it is difficult to forecast the effects of info-knowledge challenges on micro level social relationships and macro level social network relationships.

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