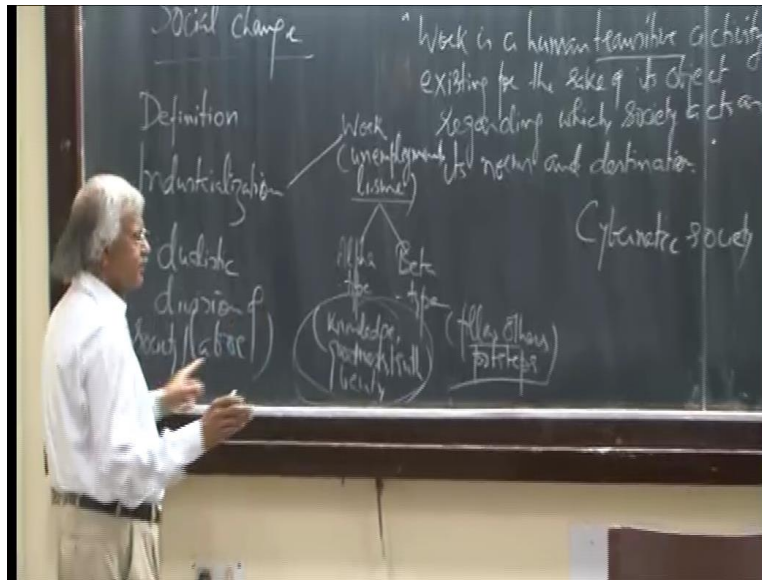


Introductory Sociology
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Lecture - 32
Social change-III: Social change in industrial society

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So friends, we are discussing social change, and to recapitulate, what we have done yesterday. First I wrote the definition of social change, and I said that there are two types of definitions of social change; a narrow definition, and a broad definition. According to narrow definition, social change would be defined as change in social structure. No other type of change, such as economic change, technological change, cultural change, religious convergence, can be called change, social change, strictly speaking, because there may be causes of social change. They may lead to change in social structure, but unless there is a change in the structure of society, social structure, means some total of normative relationships, we will not call them to be, a type of social change, they are causes of social change. And according to the broad view of social change, any type of change, in social order, cultural symbols, beliefs, and also practices, social practices, can be covered under social change.

Then I said, that there are varieties of theories of social change, there are linear theories or evolutionary theories, there are cyclical theories, there are dialectical theories, Karl Marxist theory, dialectical theory, and then I discuss, the impact of industrialization, on various facets, various aspects of Indian society. Industrialization has changed the world, industrialization has many ramifications, industrialization changed the nature of work, division of labor. In Gisbert's book, work is defined in a particular manner, and it is important to see, the definition of work, because he wants to make a distinction between work, unemployment and leisure. According to Gisbert, unemployment is the involuntary absence of work, which means that a person is available for work, but there is no work. In Indian census, we define work in a very standardize sense, that we divide the whole population of the country into two parts; workers, and non-workers.

There is a definition of work as such, but the census enumeration, say that there are some people, who have worked, during the preceding year, for any part of the year; that means work may be done for one day, or work may be done for entire year. Then we divide workers into two categories; main workers, and marginal workers. Those people who have worked, for six months or more, they are called main workers, and those who have worked for less than six month, they are called marginal workers. Then certain categories of population; such as old, children, students, prisoners, beggars, they are classified as non-workers.

Now this kind of classification tells us, what is the condition of employment in the country, and what are the differences between different socio economic categories, according to regions, according to age, according to education, male and female, religion and social status, scheduled caste, scheduled tribe and others, regarding employment situation. A better definition of work, in India is found in national sample survey, and the planning commission of government of India, uses national sample survey definition for work, and it is on the basis of that definition N S S definition, that analysis of employment, unemployment etcetera is done.

I thought this definition of work even in Gisbert, very simple, and brief, it worth noticing. It says that work is a human transitive activity, existing for the sake of its object, regarding which, society acts as its norms, and destination. Since this is a definition, I

thought that I will just write down the definition on the board. Work is a human transitive activity, existing for the sake of its object. Here the meaning of the work transitive is, that anybody can do the work. You know it is not one or two persons, one or two workers specific, it is not a specific workers, anybody can do the work, agricultural work, industrial work, insurance, banking, anybody can work. It is not that one particular person only has to work, it is work, it is objective, anybody can work, existing for the sake of its object, there is some purpose of work, and regarding which society acts as its norms and destination. Associated with all kinds of work, there are norms, professional considerations, ethics, values, certain social expectations, and in that sense work, is an institution, working hours, for how long you will work, rewards, qualifications, exactly in what manner you will work.

If there are any values or ethics associated with work, that is all social, work is a social activity. Why does he say so, because Gisbert distinguishes work from unemployment, and leisure. In case of leisure, work cannot be disassociated from the worker. It is like, if in the leisure time which is at your disposal; leisure means, the time at your disposal, when you have finished your work. So in leisure time, if you find happiness, in painting, then you only have to paint. See work can be done by anyone, but leisure activity of painting has to be done by you, if someone else the make the painting for you, you will not derive that much happiness; you will not derive happiness perhaps, no happiness.

If you like poems, then if you like to write poems, compose poems, then you compose poems. You cannot ask anyone else to compose poems for you, and in that sense work is transitive, and leisure is, leisure demands your own involvement. The main reason why Gisbert is making a connection between industrialization and work, is that in industrial society, industries will produce so much that they can meet the requirements of a very large population, and perhaps a time will come, when so much work will not be required, working hours can be shortened, a small number of persons can work for the entire mankind, for the whole world, a few factories is located in one part of the world, in one country can meet, the industrial requirements, of a specific kind of the whole world, and in that situation then there will be more leisure.

And when needs of the entire mankind can be met, by work of a small number of persons then perhaps, work will also not be associated with maintenance of people, or sustenance, or rewards, then rewards will be based on something else. And I like this part of Gisbert very much, which I do not find anywhere else written in this manner, that that the future of mankind then we depend on, how this leisure is utilized, what do people do in their leisure time, and there will be two kinds of people; for one category he says alpha, alpha type, alpha men, and beta, beta type or beta men. Alpha men will use their leisure, for the sake of knowledge, or truth, goodness, beauty, and beta type people, will follow others footsteps. Normal people will be like beta type, they will follow others, and these are the type of people on whom, management research will be done, because their behavior can be influenced, through advertising, they are more of consumer type ,clients ,consumers, and the future of mankind depends more on, this kind of people, who they are not forced to work, there is no reason why they should spend their time in these thing, but these are the people, who will decide the future of mankind.

Because on their own, they have an intrinsic motivation, to pursue what they want to pursue. Let me read one paragraph from here, and he say that this industrialization in that sense, leads to dualistic division of labor. There is a dualistic division of labor, not division of labor in the sense of work; there is division of labor in work. According to Emile Durkheim and his contemporaries, who have written on industrialization, they term division of labor, was used for division of various types of occupational activities. Now, this dualistic division of society, since labor is not so important now, so he feels that society is a more appropriate term, so dualistic division of society into two types' alpha and beta. I am reading if the situation were essentially such, as has been fore shadows in these pages. It is quite probable that the cybernetic society, cybernetic could be roughly divided into two kinds of men; those who use their leisure, in activities, conducive to the stability and progress of society. Some people whose activities will lead to stability, and progress of society, who could be called the alpha men, and those who spend it, in serving to their own comforts and conveniences, the beta men.

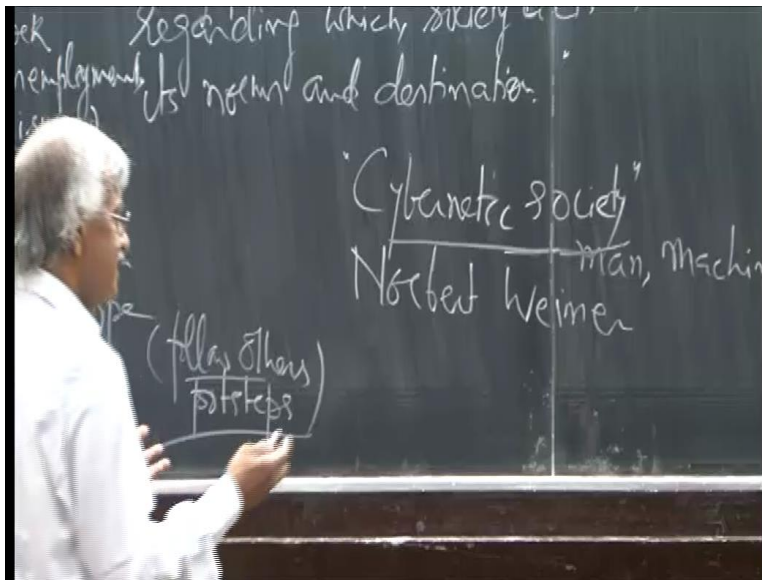
So beta men, look for their convenience and comforts, alpha men are from inside compel to go for higher aims, higher aims of life, or they contribute to society. The former would be those persons, who would devote most of their lives to the search for knowledge, truth,

and goodness, in all aspects, truth, goodness, knowledge in all the aspects. This would amount to a modern version of good life, to use an as for the ideal of the sages, of the old. Gen is one form of Buddhist philosophy which was, and is still prevalent in Japan. These would be the men, on whom the future of society would depend; among them we would find eminent philosophers, educators, and humanists, as well as scientists, technologists, juries, and statesmen. Their degree of eminence would be defined by society, through the institutions design adhoc. Beta men on the contrary, would be the ordinary citizens, devoted to the ordinary pursuits of life, more intent on enjoying the fruits of the tree or progress, than on helping it to grow. In practical life, they will be more likely to follow the lead, even by others than to initiate action, to assimilate readymade opinions by the press, and mass media, of communication, than to think for themselves, though they will talk discuss and vote, on these concepts, as if they were their own.

They will pretend as they are expressing their own views, but actually their views are all found by the media. So the in the in industrialization, the future society will be divided into two types of men, and what will happen to society, will depend on the activities of alpha type, rather than beta type. There are some people will go for convenience, comforts, and their action will be determined by information media, (()) understanding of what others feel do? Believe. Yesterday I also tried to link industrialization to other institutions of society that, industrialization will affect education, industrialization will affect gender relations, industrialization will affect family, etcetera. Now whether there is any effect of industrialization on religion, on that matter our research is inconclusive, and Gisbert first gives study some (()) studies, in which it shows, that industrialization has actually, increased religion in India, contrary to they believe that industrialization will lead to secularization. In case of India, you find more religion among industrial workers, than outside industry, and then he also gives example of youth, students, more educated people, who are less religious than others, but there he says, that the reason may have nothing to do with the industrialization, but if uneducated youth students, they are less, then the reasons for being less religious are atheist, will have to be somewhere else; may be in change of values, may be experiences, may be the milieu, condition total milieu, total conditions, social conditions in which they operate.

So he says that the relationship is inconclusive and sociological literature. This is one sociology of religion is one very important area of research, and research in this field has shown that contrary to beliefs of sociologists; Emile Durkheim, Karl Marx everyone. At one time everyone thought that industrialization will lead to secularization, but this has not happen. The nature of religion may have changed, and in some countries church attendance may have declined, and religion may be taking a much more spiritual or personal dimension, but people do believe in religion, and in that context I would say that Talcott Parsons, explains this much better ,than other found fathers of sociology, because for Talcott Parsons, religion is the search for meaning, religion is men's response to conditions of anxiety, uncertainty, unpredictability, and men was to find reason behind unreasonable things, behind injustice, behind, exploitation, behind poverty, and religion provide some kind of meaning. Then religion makes people, fight or bear the tensions, or stresses of modern life much better. So like this industrialization affects various institutions of society. Now in this context Gisbert also Says, that industrialization will lead to a cybernetic society. The concept of cybernetic society was given by Norbert Weiner.

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And used this concept to characterize society, made by use of man, machine, and computers, a cybernetic society depends on combined activities of man, machines, and computers. People have used different terms for more advanced society, like affluent

society, knowledge society, service society, post-industrial society, post-modern society, and this concept of cybernetic society, may be seen in that light. It is an advance society, in which man, machines, and computers work together. Society guided by artificial intelligence, its one society is governed by artificial intelligence, it is a very different society, it will change the relationships.

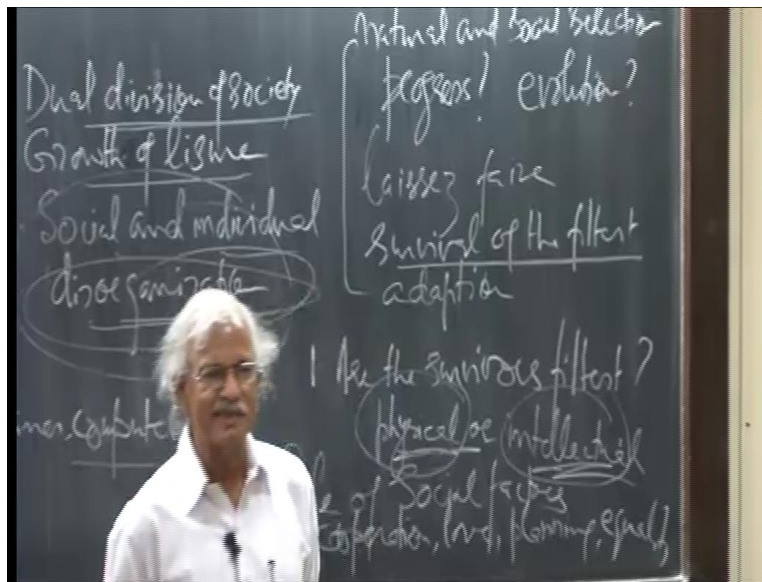
The relationship in cybernetic society between say; a man, and a doctor, will not be of the type it was, in a traditional village society. A doctor was, in India quite often doctor was a purohit, doctor organize ritual, religious, ceremonial activities. He was also a custodian of norms of society. Now with the artificial intelligence, now your computer has become your doctor. You feed your data into computer, and through artificial intelligence, computer tells you exactly this is the problem you are suffering from, and computer will also prescribe you medicines you can take them, this is cybernetic society, computer aided society, in all respect, in industry, in insurance, in hospitals, in banking, in university, there is an increasing use of computers.

So, you can see the change over from, a nomadic wandering, gathering, food gathering hunting kind of society, to a society based on, raising animals, then a society based on horticulture, then a society based on agriculture, then machine industry, and then in post-industrial society, there is an increasing use of computers, and whenever one mode of production is replaced by another mode of production, one technology is replaced by another technology. When there is a progress, in terms of tools and techniques, there is a corresponding change in social relations. Karl Marx expresses this more powerfully than any other person. In cybernetic society, in which you are making more use of computers, the traditional type of rules and relationships, will change very drastically. Even classroom I do not know, classrooms may continue, but in cybernetic society, in more advance society. In say an educational institutions like IIT, 20 25 years from now, I do not know what will be the utility of class, because the lectures by faculty members of IIT Kanpur, and also lectures of, the best universities and institutes Harvard, and Chicago, and Cambridge, will be available on You Tube.

If you want to study social change, yesterday I sent you one link, in which professor Yogendra Singh, who is one of the most eminent, professors of sociology. He taught in J

N U now he has retired, he is speaking on social change. Now I think you should see that lecture, when such lectures will be available to students on YouTube, or may be on much more improved varieties of space, why should they come to class, the nature will change, then the nature of organization of educational institutions will have to be changed. I do not know what that will be, a post-modern, post-industrial cybernetic society, is becoming much more unpredictable ,we cannot say what will happen in the future, but yes there we are moving in that direction.

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Now this cybernetic society, is also leading to three things; one we have seen dual division, dual division of society, the dual division of society, in terms of how people utilize their leisure time. Some people utilize, alpha type people utilize their leisure for knowledge, goodness, truth, beauty. Then there is growth; that is because for everyone, there is growth of leisure, and third; social and individual disorganization, social and individual disorganization, so this is, growth of leisure. Since with the help of machine and computer you can produce, a very large quantities of all necessities; consumers goods, producers goods, services, hundred times, thousand times, lakh times, what a man could do otherwise, productivity of man can be raised with computers. A computer makes new possibilities possible, with computers. If we did not have computer, it was not possible to go to moon, or other planets, it was not possible in simple machine is. In the age of manufacturing, a man could not have thought of, going up to moon, or mars. Now

people are aiming at other planets. Computers have revolutionized knowledge, and production, in various fields, in genetics, in biology, in medicine, in space research, in energy; everywhere you find use of computers.

So they are good things, this enormous rise in the volume of production per person, because of machine and computers, has done many good things. So it has increased leisure, but leisure is causing a dual division of society. So it is interesting to see here, we have discussed for quite some time the nature of social stratification, how society gets divided, into different ranks, which can be arranged hierarchically, on the basis of wealth, prestige, and power. And in social stratification product contribution to production, or they of the status as a worker, has been an important determinant of your class position, but in post-industrial cybernetic society, social stratification will have to do more with the dual division of society than alpha types and beta types. In the coming age, this signify that in the coming age then society will have a two class model, but this class is not based on once contribution to production. This class is based more on, the division on the basis of how people utilize their leisure. Sir do not you think the profit making motive of the capitalist society will suffer here, in this growth leisure and old division of society system, and as we have, this seems more of a communist paternal society, and if were.

Since we usually think it is not arriving anytime soon, the communist system, so here, yes that is my. Yes it is an interesting question, that in knowledge society or in cybernetic society, whether economic classes will become redundant. This is true that more and more our classes are, formed on the basis of credentials. If we look at the nature of social stratification in market economies of the west, then middle class is expanding, and as for as ownership of property is concerned, virtually by having shares in industries, mutual fund, shares. A very large percent is a population has become capitalist, so middle classes are also capitalist, and this joint presence of joint stock companies, and share holding has spread so much, may be in knowledge society of tomorrow, without getting transformed into a communist system. It will be some kind of communist system, in which shares of industries, or shares of productive organizations, are held by the entire population. So the market economies are also moving.

Two very important features of change you can see in market economies of the west; one, expansion of middle class, based on certificates, degrees diplomas, education credentials, achieved characteristics, not ascribed achieved, what they achieved in life, and it is very large, number of capitalists who earn only from profits, and who do not have credentials, is very small now, middle class is expanding. And this also means that, ownership of capital is separated from decisions about capital, owners are not important, because the, those people who take decisions, in expanding capital are not same as the owners of capital. Ownership itself, has not remain confined to five or ten or fifty or hundred families. The whole society has become owner of the capital, anybody can buy shares, when shares are sold in the market. When a company sales its shares in the market, anybody, and although the number of people having shares in major industries in India, may be restricted, but we cannot say that this will not happen in India, we cannot rule out the possibility, of a large number of Indians. At least the, at least the majority of urban people, and a small proportion of rural people, having shares of major industrial companies, and in that case everybody will become owner.

Decisions will be taken by those who are M B A's from IIM Ahmedabad, Bangalore, Calcutta, they will take the decisions, and money will belong to a large number of people, thousand, lakhs, may be crores of people, who are in principle owner of the company, owner of the company is not one person, we are moving in that direction, even market. So in one sense, even market economies, are moving in that utopian direction of communism, which was conceived by Karl Marx, through a process of revolution. So but the problem is, that this the cybernetic society, is also producing some ill consequences, and is leading to social and individual disorganization. The disorganization means, that so far, mentality of individuals, and norms of larger society, work governed by conditions of old times. Situation has changed, this combined use of man, machine, computer has changed the situation, and this has produce enormous changes in industry, in politics, in society, in family it must produce, but for the transitional period, there will be, what we called maladjustment yesterday, using the language of Ogburn, that when different institutions, or different parts, components, or groups in a society change at different rates.

Some change at a very fast rate, some change at a slow rate, so there is a problem of strain, between two or more institutions of parts or groups, or regions of society, which are correlated, and which are changing at different rates. So same thing is happening here, that individual norms, and one can empirically then analyze what are the norms of society, by what norms and values our individual life's are governed, by what values and norms the whole society social organization is governed, and one can find that many of these norms and values, which were ok, five hundred years ago, are not appropriate in the changing circumstances, and therefore when society, when man, machine, computers have made your society, a cybernetic society, we are not living in agricultural society, we are not living in early industrial society, we are living in cybernetic society. And if we want to run our life or if we want to run our whole society, according to norms of agricultural societies, then there will be problem, there will be disorganization, conflict, distrust, disintegration, violence, disharmony, alienation, or dissatisfaction for a large section of population.

And even without giving examples I can say, and I think you can understand this that, if you at look your norms, family norms, marriage norms, religious norms. These norms were created in situation of a very different kind, when these norms were created, by which our religious priest, and our dharma gurus, want our life to be conducted today, these norms were created in a very different situation, very different circumstances. And if you want to live your life according to those norms, not in society of that time, not in nomadic society, not in agricultural society, but in cybernetic society, then there are problems for you, and also problems for society; new norms will have to be created. What these new norms will be, still we are not very clear about that, but what these sociologists point out is that, cybernetic society is passing through a phase of, social and individual disorganization. Many of the problems of our times psychological problems, neurosis, psychosis, maladjustment ,alienation ,not finding satisfaction in life, conflicts, religious, caste, class, conflicts, weak governance, or decline trust in government in state.

They are indicative of some deep-rooted changes in society, and that is, that we are moving towards a new type of society, which will require, different types of norm. It appears, to Gisbert it appears, though one can debate, whether this is going to happen or not, that this new society, will be divided more on the basis of, how people use their

leisure time, not on the basis of anything else, and there will be alpha type and beta type. With this, we take up another idea of social change, and that is, what are, and related to alpha beta, but not completely confined to this aspect. What will the nature of progress in the future, what will be evolution, what kind of evolution will occur, and why does evolution occur at all, and here we can talk of natural and social selection. There are many concepts associated with this kind of thing; laissez faire, survival of the fittest, are some of these ideas, is still important; survival of the fittest, adaptation. In the past anthropologist, sociologist, looked at social change, in terms of some of these things, adaptation, yes adaptation is there, that for example those peoples, those animals, including human beings, who developed lungs, could survive better on earth, and those animals, fish and others, who developed gills, they could survive in water, we could not survive in.

We human beings cannot survive inside the water, and fish cannot live on earth, so there is a role of environment. Palms can be found in warm climate, and (()) can be found in cold latitudes only, so there is adaptation. And that means role of natural factors, natural factors, adaptation, environmental conditions, play an important role in selection, but then this raises a number of questions. One central, two central questions, which can be raised in this context, of natural and social selection and survival of the fittest, is are. Two questions are; one, are the survivors fittest, are the survivors the fittest people, how do you define fitness. Yes there is a struggle for survival, there is fight for survival, some survive, some do not survive, but how do you define fitness. Is this fitness purely physical, or intellectual, is this fitness only physical, when you talk about adaptation to natural environment. We are mostly talking about physical adaptation, but some sociologist; Darwin himself in whose name with we have the theory of social Darwinism, or social evolution.

Darwin thought, that acquired intellectual capabilities, can also be transmitted to the next generation, and he felt that, in survival of the fittest, inherited physical, as well as intellectual, or achieved kind of characteristics, intelligence, will play an important role. We can ask this question, whether, but this is a debatable issue, not everyone agrees with this, not everyone agrees with the position that, sons of mathematicians are likely to be better in mathematics, so physical and intellectual. And second, the role of social factors,

and the role of positive factors like cooperation, love, planning, equality, humanism etcetera, humanist. If society is a battlefield of some kind, and the best persons are surviving, then does this mean only those physical and intellectual trades, or power, or arms, or military techniques, warfare, gunpowder, through which you could win you could invade other territories, you could win your enemies, destroy them completely, or does in the progress of society, whatever be the meaning of your progress of society.

These things also play an important role, if there any role of equality, humanism, cooperation, equilibrium, empathy, justice, or virtues, values and ethics in the social progress. It is a difficult question to answer; Gisbert discussed that question, and gives some examples also. I was reading. Sometime back I thought that today I will read a paragraph from this book. Sometime back I read a book this title is Genghis khan, in Hindi this is Chinghis khan, then this is a book.

A very authentic research based book on Chinghis khan, or Genghis khan. In one paragraph says, Genghis khans only redeeming quality in Voltaire's play was that, he reluctantly, recognizes the moral superiority, of the better educated. The more I see Voltaire's quoted Genghis khan is saying, the more I must admire, this wondrous people great in arts and arms, in knurling, and in manners great, there are kings on wisdoms basis, founded all their power, Genghis khan ended the play with the question. What have I gained, by all my victories, by all my guilty (()) stained with blood, to which Voltaire answered, the tears, the size, the curses of mankind ,and with these words Voltaire himself began, the modern cursing of the Mughals, Mongols are...

First of all, what is fitness, and if you define fitness in terms of survival, Survival of the fittest, Darwinist, social Darwinist, or evolutionary principle. Then it is not clear what is the meaning of fitness, if fitness is only physical survival, or ruthless elimination of other tribes, or other countries, or other populations, is that really fitness, and does history show that, only ruthless people have survived, or ruthless people have won, and simple peace loving, cooperative, people living according to principles, justice, ethics, they have always suffered, and has there not been any rule of this positive ethics, or virtues, in progress of mankind. So social change must, any discussion on social change must answer some of these questions. When I was reading Gisbert's, many examples were

coming to my mind. His physical fitness, like you all have heard about, this may be you have read one or two books of this person; Stephen William Hawking. He was the director at the center of theoretical cosmology in Cambridge University.

He is completely paralyzed, quite early in life is completely paralyzed, and for thirty years of more he has been professor of mathematics in Cambridge, and then the director of the center of theoretical cosmology, and he is known for his first class original, and very valuable research on black hole. He is the person, who shows that black holes also, release some radiations, and his contribution to theory of relativity, string theory, that is very well known, completely paralyzed. So his physical fit. In the life of individual, or in the life of society, is physical everything, where shall we place the contributions of these people like, around 1938, when china was invaded by Japan. Mao Tse-Tung, on the request of Mao Tse-Tung, Netaji Subhash Chandra Bose, he was then the president of Indian national congress, organized a team of doctors, volunteers, on voluntary basis, and one of them was Dwarkanath Kotnis, may be some of you, if you have not seen, use your, what is that; d plus, d plus plus, d c plus plus, use your d c plus plus to watch Kotnis, and this man goes to China, and serve the wounded soldiers of China, in Japanese invasion, and he provides his services for nearly 5 years in china. Chinese people still remember his name, only sometime back, his graveyard was renovate.

Finally after spending five years there, he died of epilepsy. I do not know, we do not have records of, whether he carried epilepsy, before he left for China, or because of his hard work there, among the soldiers, he developed up, he died of epilepsy. Now is there any no role of such people, is there no role of Christ, or Buddha, or Mohammad Sahab, Ram or Krishna. People who talked of values, love, cooperation, peace is only, if only if survival means only physical survival, then the barbarian ruthless, cruel Mongols, or Mughals, or Sikandar, Alexander the great. For these people, must be respected, because these people understood the theory of the survival of the fittest, but the records show that they neither they themselves were happy, nor the societies or the countries were they went, were very happy. So what is then progress, if progress is defined in these term survival of the fittest, or laissez faire, it justifies laissez faire, it justifies exploitation, it justifies dominant, discrimination, it justifies wars, conflicts, because survival of the fittest.

Those who are fit, the world is like a war, war of all against all, and those who will only the fit people will survive. Then there is justification, for injustice, inequality, dominant, discrimination, prejudices ,wars ,heinous crimes, and you must seen the glory of Alexander, and Genghis khan, Mohammed Ghori. We must worship them, and we must be like them only. We must teach our children, our society, our students in classroom, to be like Genghis khan, because survival of the fittest, is the right perspective on evolution, but Gisbert seems to be on the other side, that this positive thing, virtues to contribute. What is more important for progress, or what will be found to be more important for progress of mankind subsequently ,whether these negative trades or positive trades only future will tell us, but the aim of this chapter was to reject the theory, evolutionary theory.

Evolutionary theory inevitably leads to the theory of survival of the fittest. So to reject this kind of evolutionary theory, and say that, in the progress of mankind, ethics virtuous life and values, will play, or should play an important role. The kind of progress, that will come, from application of such virtues, will be real progress. And other types of progress, or survival, even if it needs to survival, will lead to tears, size, and pain. Now in the next lecture, I will focus more on the second part of that social change, urbanization.