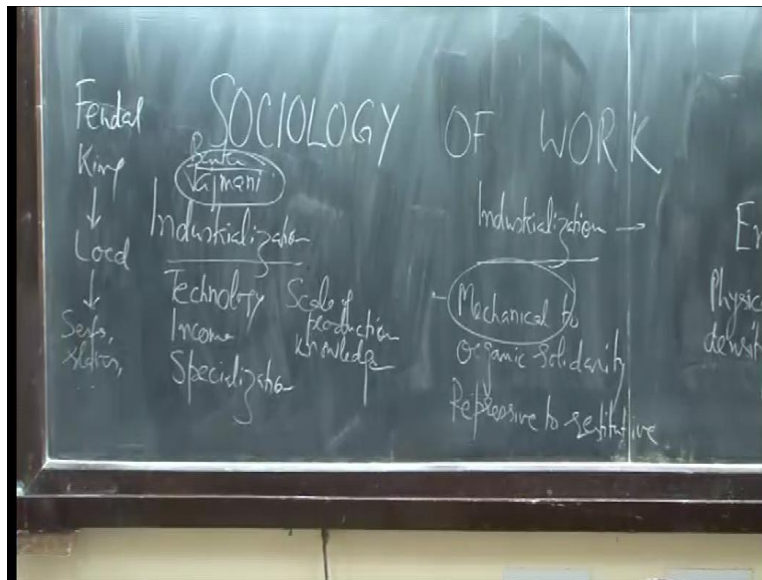


**Introductory Sociology**  
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**Lecture - 12**  
**Sociology of work-II: Social change and work**

So friends, let us now look at what kinds of changes have occurred, in the nature of work, and how sociologists have theorized them. Sociology of work is a vast area, and I will not be able to do justice to the entire field, it is an entire field, but just one or two concepts.

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We have industrialization, at some stage society started industrializing, and Gisbert's book gives you, a number of bullets, specifying the characteristics of industrialization. The main characteristics are development of science and technology, technical advancement, increase in knowledge, increase in the size of production. Earlier our weavers, our artisans, potters, goldsmiths, blacksmiths; they produce things in limited quantity for the satisfaction of local needs. Now industry, one industry can produce so much, that it can satisfy needs of populations, in several countries to rise in the scale of population, big production, manufacturing, big production, we can produce too much. Also it produces division of labor, specialization. So, industrialization affects technology

more advanced technology, income. It raises scale of production, knowledge; there is a connection between technology and knowledge, division of labor and specialization.

Emile Durkheim said that in pre-industrial society, there was a kind of mechanical solidarity, for any society integration or solidarity is must. If there is no solidarity, if there is no unity, untidiness, and integration among members of society. If there are no common beliefs and values, and no common desire to adhere to norms of society, society cannot survive, so we need solidarity. But this solidarity was mechanical; this is in the European context. These people wrote in European context, but we can to some extent apply these notions to our own country also.

We can say that the society of India was divided into four major Varnas, and peoples work, rights, obligations, duties, beliefs, practices were part of their Varna, Brahmin, Kshatriya, Vaishya, Shudra. And as far as we know, at least for five thousand years or more, this kind of system has been going on. Although that system is not exactly like a feudal system of Europe, till 12th century in Europe, they had a feudal system. In feudal system, at the top is a king, below that lord, below that serfs or native peasants, and slaves and others, and there are in there are some people who have some kind of free staters; traders, artisans, blacksmiths, millers.

They are not as much tied to their land, as the agricultural workers peasants, tenants, or slaves, they are free, relatively free millers, traders, artisans, they could not be bound to any particular land any particular village, because the nature of work of these people was such. They had to be given freedom, freedom to move from one place to another, one village to another, one village to city, because their services will be required in the city also. Kings will also need them, lords will also need them. Proprietorship over land is not individual, but the lord is responsible, for the maintenance of the state. In India you will be surprised to know this, that in India, this concept of individual proprietorship or ownership of land in rural areas, is hardly 300 years old. In Hindu India, whether you go by the writings like Manusmriti or other writings, or records of travelers, from outside china, other parts of the country, the land belongs to the community, to the village.

There is a Hindi saying (( )) Gopal stands for God. So the whole land, the whole nature, all agricultural resources, all resources, raw material resources land, water, sky, air, the

resources, nature belongs to Gopal or God, and they have the tenures, agricultural workers, peasants, they have the tenures, they are working. Who has control of what resources, that is decided by the customs and traditions of the community. So potters will have customary rights, over use of earth, or earth belongs to potter, may be certain, at least in certain areas where cultivation is not done, and you have fallow land or that land can be used for earth. The potters have the right over use of that land for earth. Today things have changed; today our blacksmiths do not have right over iron ore, wherever it is, because iron ore would belong, either to some individuals, who are the proprietor or the owner of the land or to state, so our blacksmiths have gone jobless. Our in many villages you find that there is still a demand for pottery, but our potters are not able to survive, because if they engage in pottery, they have buy earth.

And if they buy earth, then the work of pottery is not cost beneficial. The cost of earth will be more than the value, of their produce of pottery, so they will die hungry, at many places our arts and crafts have vanished because of this. In feudal system, things do not have any individual proprietors. So according to Hindu law, there was no owner of any land, there was no class of land owners as such. During Mughal period also, though Mughals tried to systematize land records, and proprietorship, but only at a limited scale. It was first time during the British period, that the concept of individual proprietorship came, and some people became owners of the land, before that land belong to God, and depending on one's caste of Varna, one was expected to take up certain kinds of activities, and his other needs were satisfied by people belonging to other Varnas or other castes.

So throughout the year, you know this in India this system was called Jajmani system, throughout the year, people will keep on working, according to work ascribed to them, according to customs and traditions of that place, that you are a barber, or other services there were some special rituals, to be performed by barbers, their wives or children at the time of marriage, birth, death, religion, economic activities, social activities, they were all combined. If you are a carpenter throughout the year, you it is your responsibility your duty to meet the needs of carpentry of the whole village, and when agricultural produce comes there are farmer there are carpenter there are oily spillers, scavengers, leather workers, all people throughout the year, they keep on working. When the agricultural

produce comes, means during the time of harvest, the production is distributed among all sections of society, according to customs and traditions who will get how much. How much of the wheat will go barbers family, how much to blacksmiths family, how much to carpenters, how much to potters, how much to leather workers, how much to scavengers, because everybody had a right, there was no individual owner of land and everybody had a right.

This was Jajmani system Jajamani system became decade and later that's a different thing before that there was perhaps a barter system, not in India so much but in Europe, it said that feudalism came to Europe around fifth or sixth, and remained they are up to say 13th century by in the heyday of feudalism this was the arrangement king at the top, then certain lords, feudal lords, and then workers agricultural workers other workers. Lords would receive a share of their produce, and what will they receive from Lord's protection. If some other lord attacks the land then serfs ,slaves, artisans, traders millers, they have right to be defended by lords and their army, sometime they will have to work for lords army also, this was the system. So there was. Initially there was food gathering, hunting, shifting, cultivation, dependence on animals, huts, feudal system, and then comes industry technology, high income, surplus, more production than needed, and so specialization, different types of people or different people specializing in different things, scale of production is enhanced and knowledge, this is what industrialization means.

Emile Durkheim also thought that in this time, there is solidarity for mechanical region, because all are alike, all are serf there is one or two lord, in one small region there is one lord, but otherwise all others are under tenure, they are farmers workers, and so they are united by common belief systems, and there is a mechanical, automatic mechanical solidarity integration, this integration deriving from likeness, so mechanical automatic, now you have this. Emile Durkheim justified division of labor, not only on the ground of economic efficiency, but also on the ground that with time, with industrialization, or with development of civilization, population density is started rising more people. Some million years ago we must have started with one couple, one man, one woman, by eighteen twenty A D we became one billion, and by now more than 150 billion people have ever lived on this planet earth, and seven billion are alive, of 150 billion people who

have ever lived on this earth, seven billion or roughly 5 percent are alive, such the rising in population. When physical density increases, Emile Durkheim knew about interaction, if  $n$  is the number of persons, and  $N^2$  is the number of interactions, one to one interactions, then the moral density rises further;  $N^2$  into  $N$  minus 1 by  $2n$  square.

If  $n$  increases in some manner, then moral density, which is proportional to  $N$  square, increases at a still fast rate, very fast rate, exponential rate, and in a small village in a small area in a small community, when this happens, there is a chaos, utter confusion. Too much of interaction leads to too much of confusion, how to divide work then. We do not need now so many farmers, so many artisans, so many potters, so many barbers, so many scavengers, we do not need them, what do we do then. And then conflicts, this chaos will also mean conflict, conflicts in interest of people who are rising, at such a fast rate and their interactions are also rising, at a fast rate, actually faster than this. So at that time, when there is a danger to survival of society, because of this. Then people invent division of labor, that let us not fight with each other, let us divide the work. So work gets divided, and it leads to specialization. In India some kind of specialization was present for thousands of years, we had already divided our, actually this Varna Vyavastha or division of society into Varna; that was also some kind of division of labor.

So division of labor which came, with industrialization in Europe, always existed in India. Emile Durkheim, and these people are commenting more on the situation of Europe, not on Indian situation, but here in the context of industrialization, modernization, there is now a division of labor and specialization, so much of specialization; Specialization, super specialization. So initially developed separate class of philosophers, when food was scarce, and the whole community was involved in food gathering and hunting. There was no chance of developing a separate class of philosophers, they did not require philosophy, (( )) but now that, they can produce more, and they need less, so some people can be freed for other things. So some people must have started watching stars, some people sat in meditation, some started thinking, some started sketching, division of labor. And in work also now, there is a division of labor. So in modern industry, there is division of labor, and different people do different kinds of things.

Nobody produces the whole thing. In a car manufacturing company, nobody actually produces a car, and in production of car, several types of works, specialization, expertise, several types are required. You require researchers in metals, one extreme, you require ordinary workers, you require their supervisors, you require suppliers, some people who will bring raw materials, from other places, so transporters, so drivers, cleaners, you require accountants, chartered accountants. You require engineers, you require designers, you require some people specialist in management, and now the specialization has gone so much, that in management also there is sales management, there is human relations management, there is. There are so many kinds of financial management, operations research, management of resources, management of human resources, promotion policies, technical managers. People we require people with b tech degree and management, B tech and MBA. There is so much of specialization. In medical field, there is specialization is very extreme today.

At some point of time, there was nothing like a doctor, nothing like vaidya, nothing like hakim, nothing like Ojha, but at some stage in development of human society, came the concept of doctor or Ojha, or magic man, or witch. Some of them, which also does something positive for society otherwise, which would not exist. So witch doctors Ojha medicine man, traditional healers, spiritualist they come into exist, then allopathy doctor. Now their specialization is that, there are child specialists, there are heart specialists, there are HIV specialists, ENT doctors. If you go for ENT purposes to a dentist, he will say this is not my job. I am a dentist, I am not ENT expert. You cannot go to a dentist for diarrhea, or typhoid, there is so much of specialized. Some time back, the concept of teacher may have emerged, somebody who has lot of wisdom lot of knowledge, and that knowledge is to be imparted to the next generation, so teacher or guru. Now their specialization is so much, that there are varieties of gurus.

There are primary scheme primary school teachers, there are middle school teachers, there are intermediate school or college teacher, there are degree college teacher, there are teachers for arts, there are teachers for sciences, there are teachers for management, and even further down, in sciences, physics, chemistry, math. In chemistry a few days back, I met an old professor of IIT Kanpur, who was associated with IIT since the beginning, and he was telling (( )) When we used to teach here, we used to teach the

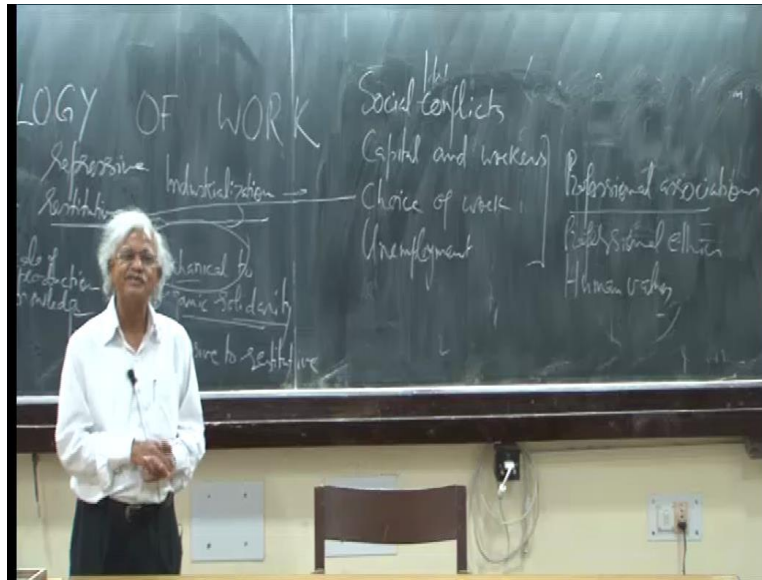
whole chemistry to the whole class, whole chemistry was. Today it is unimaginable, but the subject of chemistry was taught by one single professor, professor Dixit (( )), an old professor of chemistry, and he told that, he taught chemistry to the entire batch of B tech and MSC students, but today, a teacher who is teaching organic chemistry, will not like to teach inorganic, and one who is teaching inorganic, will not teach organic. Specialization; it is like dentist can refuse to take up cases of E N T, so inorganic chemistry teacher, so much of specialization, not only that sociologist cannot teach chemistry, or chemistry professors cannot teach sociology or psychology.

Even within you find, and within chemistry organic, inorganic, in sociology also, somebody who is specialize in sociology of religion, will not teach demography, somebody who is specialize in demography, will not be able to teach sociology of religion specialization (( )) problem. Now, how to maintain integration in that society, solidarity, so there is differentiation; hyper-differentiation, division of labor, division of labor is a kind of differentiation. The division of labor or differentiation, that can produce chaos, but actually it produces another type of solidarity or integration, which Emile Durkheim calls organic solidarity. Interdependence, society gets united through interdependence, through collaboration, interactions, between people, engaging in different, or in specialized activities. So society remains integrated, and there is more production, more advancement of knowledge, somebody who is specialization in fluid dynamics, can do much better in fluid dynamics, than if we had to do everything including sociology, so society advances at a fast rate, and through interdependence, and recognition of interdependence, society advances.

Emile Durkheim used two terms for the nature of work, that in stage of mechanical solidarity, there was, the work was of repressive kind, there was no alternative, repressive. You have to do this work, you have to do farming, you have to maintain a state, you have to engage in trade, you have to engage in oily spilling, there is no escape from that, work was repressive. Today, work is restitutive, he calls it restitutive, we work, because we get compensated for work, and the compensation may be in the form of money, restitutive, but then Emile Durkheim also recognizes, that in this stage when, work becomes restitutive, rather than repressive, society will have lots of conflicts, what will with be types of conflicts. There will be lots of conflicts in this stage, industrial

society is not as harmonious as agricultural society was. Yes it is not harmonious, there is lot of chaos, and this chaos has to...

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The conflicts specialization and restitutive work, there is no compulsion on you, to do some particular type of work. You do some work, and you get compensated for that. It is a kind of contract between you and society, you can do any kind of work, like you can do any kind of work, and get the same salary, work is compensated by salary. In this restitutive work however there will be lots of conflicts. One conflict will be between capital, and workers, and society has to find some way, to manage this conflict between capitalist or burjuvazi, owners of land, raw material, money, and the workers. Another conflict is, that you may not have so much work, this restitutive work, is related to choice of work, but you may not have so much of work. Everybody wants to become a civil servant, but you do not require so many civil servants, you also require other types of people, you also require teachers, you also require (( )), you require coolies, you still require health workers.

Then how will you do it, how will society ensure, that all works get done. There is a conflict; some people may remain without work, because they may not be so much of work. And another problem that, if you say that work is by choice, everybody is free to do whatever he or she wants to work. Then how to allot different types of work to



different people, that will produce conflicts, unemployment, this will also be produce unemployment, and unemployed people could be dangerous to society how will you allocate different roles, different works, to different people. This is an issue which we will take up, when you talk about social stratification, and the functional theory of social stratification, allotment of work. These conflicts have to be resolved, and Emile Durkheim thought, that these issues will be resolved through professional association, associations of doctors, association of engineers, association of scientists, social scientists, knowledge workers, is their association's debates, discussions, introspection, brainstorming, development of values, and ethics for their profession.

So, society will control people engaging in different types of work, in different specialties and super specialties, through the institution of professional associations, ethics, professional ethics. Emile Durkheim was hopeful, that by building professional ethics, human values, and giving more importance to professional associations; associations of people engaging in similar kind of vocation, specialty, job, work, and discussion and debate among them, what is right, what is wrong, how much of natural resources be exploited, what kind of research be permitted, what kind of research should not be permitted, how far we can go in production, or development. There must be a limit to production of everything, generation of knowledge, generation of wealth, we cannot permit a situation in which, a handful of persons produce so much, that all others become unemployed, and once they become unemployed, then they are deprived of valued resources, required for their survival.

Actually this was one ground on which, Gandhi was against industrialization, people think that why. People often asking questions why was Gandhi against industrialization, and there is never ending debate, that Gandhi himself used watch, Gandhi was a highly westernized person, very efficient person, he will never go late to any meeting, why did he use watch. Some people will say that even charkha is a tool, is to be against industrialization, also not to be against charkha, what is the difference between charkha, and a loom, or a textile manufacturing company. Gandhi's point was, that he is not against industry, but you have to ensure two things; that what the industry produces, meets the requirement of the whole society, what is happening that due to profit motive, or due to the organization of industry, industrial production or economic development, is

producing several classes, and people belonging to the top class; one class of people, capitalist, middle classes maybe.

They are reaping all the fruits all the benefits of development, and others are becoming unemployed. This industrialization, which is creating enormous way, affluence, enormous wealth, in one class of people, and making all other classes of people vulnerable, marginal, unemployed, worthless, dispensable, was the danger that Gandhi was opposing. So if you can develop a model of industrialization, or any knowledge, or any production, if you can develop a model, in which the chief motive behind development of technology or creation of more wealth, or knowledge, or anything, is to help the mankind, the whole of mankind. This is the meaning of morality, for all. If you indulge in something, for the benefit of all, mankind, and the benefit of that development, is equally available to all sections of society. Then Gandhi has no opposition, Gandhi will accept industry.

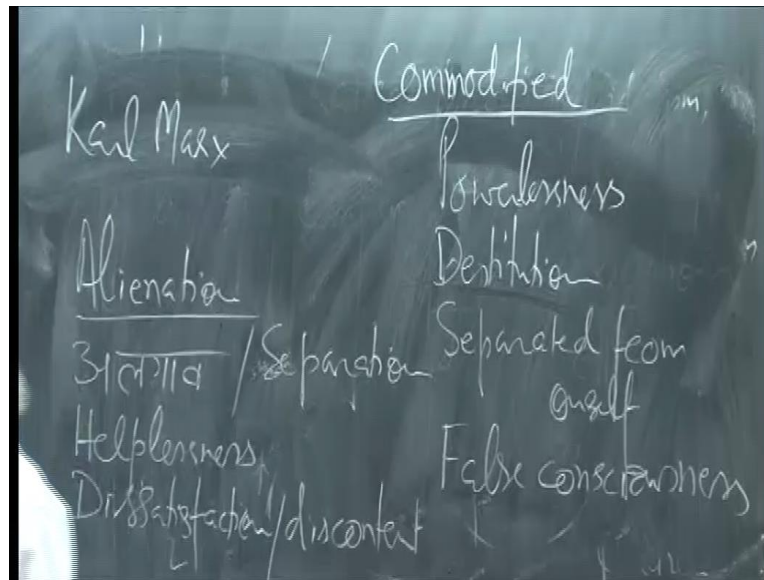
Gandhi will not only accept charkha, Gandhi will also accept industry, provided the developments of industry, take place because of, humanitarian, humanistic considerations. So when after graduating, you develop some project, proceed be or something, you create a new company, a new industry, a new technology, a new innovation. The issue that separates Gandhi from industrialist, would be why are doing so. If you are doing so if you are engaging innovation, if you are engaging in innovation, in knowledge development, wealth creation, industry, for your personal benefit, and you become oblivious of your acts adverse consequences, on the rest of society or the developments which your innovations will produce, will create wealth in one class of people, and make other classes of people marginal, vulnerable, unemployed, dispensable, do not worry about them, then this is immoral, so industrialization from Gandhi's perspective was immoral.

Now Emile Durkheim thought, that this situation can be redeemed, by building professional association, professional ethics. So the associations of various types of associations, there will be groups, in industry, in educational institutions, in different fields of expertise, among doctors, among scientists, chemists, physicist, social scientist, very strong associations, where people will meet more frequently, talk more frequently,

assess the consequences of their activities, develop self imposing ethics or laws or moralities, for themselves, then professional ethics will come. So government of India will not decide what should chemist do, but the association of chemist will develop professional ethics for chemist. Engineers association will develop ethics for engineers. Lawyers a, association of jurist will develop values or framework of action for jurist.

Similarly parliament, parliament will develop a framework of action for parliamentarians; that is what professional ethics means. Today what is happening that parliamentarians are deciding, what IITs should do, what jurist should do, what others should do. They are not developing a framework for their own moral action, so there is chaos in society. Emile Durkheim thought that this chaos will not exist, if the professional associations develop professional ethics, revolving around human values. So this was Emile Durkheim, that society changing, from community to society. The term community for pre-industrial, mechanical solidarity, society for a more differentiated complex developed. Society characterized by division of labor, here integration will be maintained by organic solidarity, or interdependence, and the framework of interdependence will come, from professional ethics, which will be developed by professional associations, and which will revolve around the issue of human values. So scientists will decide how much nature should be exploited, the issue of renewable, non- renewable resources, should be decided, how much of this, how much of that, should be decided by scientist, like that professional life's is.

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Now, Karl Marx said something different, Karl Marx, at the root of Karl Marx's theory, is the concept of alienation. Alienation a bit of technical concept in Marxist theory, and people has written several books on what alienation means. I will define alienation in some simple words; I will define this as, separation, a situation of helplessness, a situation of dissatisfaction, discontent, powerlessness, in extreme cases destitution, and to the extreme that you are separated from oneself. Initially you are separated from society; gradually you get separated from oneself, false consciousness, or ignorance. In industrial society, Karl Marx was more worried about this aspect of work, that work becomes a commodity, work gets commodified, work becomes a commodity, and commodification means, that work results in a thing which can be separated from work. What is the consequence of separating thing from work, that commodity can now be bought and sold in the open market. Initially when work was associated with worker, worker was important.

You need the services of barber, so barber is important, barber is indispensable. Society must ensure some minimal degree of safety, security, survival, prestige, self-esteem of the barber. You have to construct mythologies, in which sometime barbers are shown to be superior than Brahmins, because society needs barber. Now if the service of barber gets commodified, you do not require barber, this is what commodification means. Now

things, work, laborers work, gets commodified, product in industrial society things get commodified. Tomorrow you know we are moving in that direction, in which through artificial intelligence, you will be able to diagnose your health problems, and you will also get right solution, you do not have to go to the doctor. Yesterday, till yesterday, medical knowledge was closely associated with the doctor, you cannot separate the two, work and worker could not be separated. In pre-industrial society, or in the early forms of industrialization, work and worker are combined. In industrial society of Karl Marx's time, products are getting separated from the worker, work and worker are getting separated.

The moment you have artificial intelligence, and you suffer from a health problem, you remain in your room seated, go to internet, and go to the program, which diagnosis your problem, give your inputs, and immediately through artificial intelligence you know, that this is the problem you are suffering from, and they will also tell you the right prescription. Then you go to chemist shop, or who knows tomorrow science will develop to that extent, that the moment you remember a medicine. You just think of a medicine, and medicine is there in your room, this is commodification. In the stage of commodification then workers become useless, work have contributed, work have workers are produce something, but in the process of producing something, they have made themselves useless. The product the thing, the commodity become useful, and the workers become useless. No work is possible without workers, but interestingly, when the level of work is so much advanced, and when work gets converted into commodities, then we are not bothered about workers.

Here it is an obvious case would be, that our construction workers, are constructing buildings. If you talk to your grandparents, in their time, the work of constructing a house was community. In those days, the art of house construction was such, that for construction of a Kutchha house, the things that you will required, you will not be able to procure them individually, and the house construction activity was such, that the whole of the community whole of the village, will have to contribute to creation of a house in which you live. So everybody was important, and everybody was happy from a certain perspective. There were togetherness, and nobody was indispensable, nobody was dispensable. Today because workers have produced so much, and work is separated from

workers, so workers become useless, workers become alienate. When workers become alienated, it is not in workers hand to decide what to produce, where to produce, how much to produce quality of production, composition of production, they are just workers. They produce something, but they have no say in decision making, they do not enjoy the product of the labor, and they are dispensable.

IIT will not bother about what is happening to construction labor, once the houses have been constructed, beautiful houses, near the swimming pool, beautiful houses are coming, for research students, for faculties, six storey building is coming, beautiful houses are constructed, and they are constructed by workers, but once the houses are constructed. Institute will take no responsible, for institutes, now these workers may live or die, it is not institutes concern. The work of house housing construction is separated from the workers, and society is not responsible for the maintenance of workers. As long as that minimum number of workers survives, which is necessary for maintaining, the level of production this society wants, that's all. Society is not worried about the workers, so a kind of safety, that existed in all traditional systems.

Today you may say all kinds of things about your traditions, customs in India or outside Europe, feudalism, or casteism, or Jajmani or but one thing is there that, in all those system, there was some minimal degree of security, for all the groups and all the individuals, because the work was closely associated with the worker. Today work and worker are separated, and society focuses on work, and not on the worker. So there is separation, so workers are helpless, often unemployed, or in irregular employment, low income, without medicine, without food, without nutritional diet, without entertainment they are dissatisfied, discontent, unhappy, powerless. And when they are separated from themselves ultimately, separation from society leads to separation from themselves, then all kinds of psychological and religious problems arise. Actually Karl Marx will say that religion is a product of this separation from oneself, we will talk about this issue in the next class.