Social Effects of Industrialization

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In discussions of economic growth perhaps most attention is paid to measurable quantities, and the problem, quite rightly, is treated as one of creating more of the material means of satisfying human wants. The great aim of programmes of industrial development is to provide more and more of the goods and the good things of life. While this aim is quite proper, in fact essential to national well-being and social stability in the modern world, the process of industrialization has side-effects, by-products which change the whole tenor of life and thought. Industrial society is inevitably different from pre-industrial society, and the differences are not merely differences in the quantities and kinds of goods and services available. The citizens of an industrialized community will have different values, different ways of thought, and different ways of living their everyday lives.

Generally, these non-economic effects of development cannot be measured in a meaningful way, although it is possible that some aspects or trends can be measured, such as the number of people in a new social class, the disappearance of an old group in the society, or the number of people living permanently in an area other than the area in which they were born. It is not possible, however, to attach quantities to new modes of thought, or to new attitudes toward the family, yet such changes are of the greatest importance to the people involved and can give in the west have given—rise to tensions and conflict.

Often Regretted

These changes in the ways of life and thought are often unforeseen and as often regretted. People who were born and bred in a different atmosphere will never be completely happy in a changed society, and there is much harking back to the "good old days". In its extreme form this harking back takes the form of romanticizing the past until the, reactionary picture of the "good old days" would never be recognized by those who lived them. A danger to, and a measure of the success of, planned industrial development is the society's ability to adjust to and accept the qualitative changes which follow it the wake of a new economic system and to relieve and control the tensions and conflicts which arise because of these changes.

The world's experience of industrialization has been rather limited, and so one hesitates to read the past of Christian Europe into the future of civilizations resting upon a very different past. There are enough differences between the societies of the United States, Great Britain, and Germany to warn us that an industrialized India will look very different from an industrialized Britain. However, despite our expectations that the process of industrialization will affect different societies differently, one can perceive in the process certain essential elements which must have similar effects, no matter what the social context in which they operate.

Way of Thinking

These common effects will stem from the scientific and mechanistic character of industrial operations, from the technical requirements of organizational techniques used to keep an industrial society running.

Let us take first, the effect, of industrial development on the way of thinking. The industrial process is mechanical, and the thinking needed to set up and manage a factory is scientific. It has been said that the man who works in an industrial establishment lives in a "world of matter-of-fact" or of cause and effect. His daily activity, whether on a fairly simple level of manual operations or on a much higher level of design and organization puts him face to face at all times with the results of his actions. Frequently almost no time elapses between the taking of an action and the result. Even when the time lapse is appreciable, there are not likely to be many extraneous circumstances interrupting the process. This constant realization that certain actions lead inevitably to particular results, and that particular results cannot be achieved except by specific actions creates a habit of thought which can be called scientific, mechanistic, or matter-of-fact, and this habit of thought is naturally carried over to other spheres of life. In fact, the man who has run a die press or set up a production line will never think in the same manner again.

The point can be made by comparing the industrial process with the kind of life led by men engaged in agricultural pursuits. Whereas the cycle of events in a factory may take only moments, the cycle of events in the countryside takes at least a season, and in some respects extends over the years. In the factory most elements of the productive process are directly under the control of the people working in the factory. In farming very few of the processes are completely controlled by the farmer. The growth of plants is a botanical matter. The farmer can help nature along, but much of the burden is hers, not his. Furthermore, many events can intervene to upset expectations. In India the quantity and timing of rainfall is extremely important. Other elements, such as the fertility of the soil, are partly under the control of the farmer, but the period over which fertility deterioration may be so long that cause and effect are never brought home to the farmer. It is easy to understand why the industrial man says that "this causes that" while the farmer regards events as the will of God.

Industrial Worker Vs Rural Craftsman

One may ask why the attitude of the industrial worker is not also the attitude of the rural craftsman, and to an extent they no doubt have something in common. The craftsman knows his materials and controls them directly, so that he knows whom he starts the product which he will have when he is finished. Nevertheless, it remains true that the craftsman is not made so fully conscious of the cause and effect character of his work. The craftsman goes through a series of operations which could make him look at the world as all cause and effect but for two facets of his life. On the one hand he lives among a vast majority which do not have the immediate matter-of-fact experience of controlled production—and neighbour's thoughts are our thoughts, and on the other hand his craft is apt to be traditional and highly stable. This stability means that he does not have to worry about what he does; he knows all about it to begin with. But the industrial worker is constantly seeing changes in the productive process taking place. This used to be done with such-and-such results. Now a new process is introduced, and
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the results are somewhat different, or he is called upon to do a somewhat different job. In consequence he is made aware that the world-of-matter-of-fact can be changed and directed. Of course, if he is a technologist much of his effort is devoted to just this problem of scientific control and change.

Matter-of-fact Attitude

In pre-industrial society the dominant mode of thought is that of the agriculturist a world in which prayer may seem as efficacious as fencing, and in some years more efficacious, in which the cycle of the seasons and the mysteries of nature are always before him. In industrial society the dominant mode of thought is that of the technologist—a world in which prayer is obviously less effective than lubrication and tensile strength; in which each day is much like any other and in which there are far fewer mysteries and he knows how to manage them.

Now, this mode of matter-of-fact thought carries over into the rest of the industrial workers life. He is apt to become un-religious. Rather he no longer regards religious observances as important in many of the things he undertakes. He develops in the social sphere attitudes of doubt and inquiry which are satisfied only by a mechanistic answer. As he shapes a part with his machine, so he begins to feel that he can shape his life. As he asks "why" about the amount of power used for an industrial operation, so he asks why about the rest of his life: why should he support his ne'er-do-well brother, or why should he not smoke. Answers like duty and moral obligation carry less weight, unless he can be shown that there is a practical advantage, or that his acts of omission or commission will have effects he does not want. And the breakdown of the old standards comes when he says to himself he doesn't care about that brother, and doesn't in the least mind the results of his own withholding of help.

Class and family Structure

The technical requirements of industry also affect the class and family structure of a pre-industrial society. In each branch and in each job industry requires technical competence. There is no substitute for knowing how to do your job well. This means that there is constant pressure on the managers of industrial establishments to find the right man for the job regardless of his status in society. In India today there is still a strong tendency to hire a man of ones own family or caste, and one would hardly expect the traditional values to break down and disappear as soon as factories are erected. However, there must be constant pressure on managers to pass over brothers-in-law who know nothing of the technology in favour of strangers who can get the job done properly, and one expects that these pressures will become more acute as the need for technical competence becomes increasingly clear.

The size and complexity of factory establishments also tend to break down the lines of family and caste. When only a few people are needed, it is a fairly simple matter to keep the establishment in the hands of the "in-group", but when hundreds are needed it becomes increasingly difficult. In industrial establishments the margin between efficiency and efficiency is and the extra cost of maintaining traditional standards does not seem worthwhile. The industrial manager who wants to hire only members of his own community may find that there are not enough of them to man his plant, and so perforce the old values pass. Once the break is made it becomes difficult to re-establish the old forms.

Demarcation Blurred

In a fairly stable society clear lines of demarcation can be drawn between various functions, and these functions assigned to specific social groups. In industrial society the lines are not so clear; the content of jobs fluctuates; new functions arise uni old ones disappear. If the process takes long enough the class structure can adapt, but it is commonly the case in an industrial society that the changes take place too rapidly to allow for such adjustment. Locomotive firemen are dispensed by diesels; airline hostesses and chemical engineers suddenly arise; a decade or two can eliminate the wheelwright. Jurisdictional disputes among unions in the west, may be in part efforts to maintain stability in the structure of the work force ('they are certainly efforts to gain monopoly returns), but no union has maintained its character against changes in productive techniques.

Perhaps the most important organizational technique, so far as this discussion is concerned, is the payment of wages. Regular payment of wages in cash can be expected to have definite effects in breaking down the traditional family structure. It is not that twelve chips a week makes a man more selfish, or causes him to love his mother less. Rather, it is that it gives him new opportunities to be independent. In a closely knit agricultural society the son is dependent upon the father, the brothers upon each other. The women of the family have no means of support except in the cooperative venture of the family. But wages end these dependencies. The son is as capable of earning a living as the father; the sister as the brother. An unmarried or childless woman can leave home to work if she doesn't like the home atmosphere. The obverse of the coin is that the family dependent upon earnings in industry is no more secure than its individual members. On an agricultural holding there is, barring disasters, always work and food for the family, but if father loses his job at the mill, the family's
means of support is gone and the family will very likely look with favour on those of its members who decide to move out and off.

Greater Mobility

An industrial society requires greater mobility, both occupational and spatial. As people move up and down and across the frame of occupations and skills, the lines demarcating caste or community begin to go. It becomes harder and harder to keep track of a man’s social position. Furthermore, the social position begins to correspond less and less with a man’s income and his importance in the economy. As incomes and economic status become scrambled, it becomes increasingly difficult to take seriously the ancestral position of the citizens of the industrial world.

When movement from place to place is slow or infrequent, the society can keep track of each person’s traditional position, but when movement is rapid and widespread the fine gradations tend to disappear. In India today, in the large cities the caste position of each person is still definitely recognized, but I have the definite impression that the caste blocks in the cities are far larger and more inclusive than they are in the villages, and the importance of sub-castes much less. In addition, the castes are to a large extent local. The process of industrialization jumbles castes from different localities together so that it is not easy to establish the essential hierarchy among them. When it is impossible to establish the hierarchical relationships among the castes or their major functions in organizing the social relationships between people ceases, and there is that much less purpose in maintaining the distinctions.

Smaller Family Unit

It can also be seen that movement about the country will tend to break down the larger family units. With each man living in a different locality and receiving his own pay packet, the natural unit becomes the biological family of man, woman, and minor children. By no means does this imply that there will be any lessening of the bonds of love between parents and chidden and brothers and sisters (perhaps it will be easier to love, domestic tensions being less), nor that mutual support and aid will die out. When I say that it is likely that the larger family will break down, I mean that with separate

THE ECONOMIC WEEKLY

means of maintenance and separate households the daily and in fact most of the major decisions will come to be taken in the smaller households of man and wife. Certainly today one can see this happening in the cities among professional and business people whose parents’ and grandparents’ families were not so broken up into smaller units.

The policy of the Government of India is to eliminate the differentials based upon hereditary caste, so that it is encouraging to feel that the movement towards an industrial society will of its own accord move in step with the policy of the government. It is not so clear that the other effects of industrialization upon the attitudes and ways of living will be so widely welcomed. But changes of the kinds outlined above seem likely to occur simply as a result of the creation of an industrial society.