
UNIT 4 POST-INDUSTRIAL SOCIETY

Structure

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4.0 OBJECTIVES

After reading this unit you should be able to:

- differentiate post-industrial society as a phase distinct from the industrial society;
- make out how different professions and service sector emerge in the wake of the post industrial society; and
- examine out how technology is creating the difference between the industrial and the post-industrial society.

4.1 INTRODUCTION

In the previous Unit you read about the rise of the industrial society. You saw how with the coming of capitalism there arose a polarization between capitalists and workers which became the hallmark of that society. The industrial society in the era of classical capitalism was marked by invention and utilisation of machines and factories with labour becoming a function of the industrial processes which came into existence. The inventions powered by steam and electricity transformed both the method and scale of manufacturing. In recent years a phenomenon which hitherto has not been given due attention has been taking place in the capitalist societies of the West. There has been definite changes in technology and in the society which has been brought forth by the advent of information technologies. Some writers see this as a different phase in the history of capitalism.

4.2 WHAT HAPPENED?

Since the 1960s and 70s the U.S. economy was threatened by the economic recovery of Europe and Japan. It was also facing the challenge of third world nationalism and an unprecedented rise of oil prices. The war in Vietnam had further weakened the U.S. and its economy was losing its competitive advantage. This was the time the U.S. government and corporations had to take notice and adopt new strategies to counter the decline.

A number of **factors** were happening on the ground level which had to be taken cognisance of. Firstly the **manufacturers** adopted an international strategy of moving some elements of production overseas taking advantage of cheaper labour, anti-union policies and **establishing** export processing or free trade zones. This strategy was particularly dramatic in the case of electronics and textile industries where a phenomenal growth was seen in the previous years.

Secondly there had been a rapid growth in the service sector of the economy. This sector comprises transportation, public utilities, wholesale and retail trade, finance, insurance, real estate, government, business and personal services. From 1970 to 2000 service sector jobs more than doubled from 49 to 102 million. In contrast employment in the goods producing industry increased only by 15 per cent.

As a measure of the decisive shift in investment flows from goods production to finance, insurance and real estate, we can examine the increase over time in investment in private fixed assets by industry sector. From the end of World War II through the 1970s goods production (mining, construction and manufacturing) accounted for about 32% of the total increase in such investment whereas in the 1980s and 90s the share was only 18%. In contrast in the finance, insurance and real estate sectors investment flows went from 16% in the first period to 30% in the second period (1980s and 1990s).

4.3 WHAT DID THIS MEAN?

These changes have been traced by different writers over a period of time. Daniel Bell an eminent sociologist who had been analysing these trends, sees this as a shift to post-industrial society. He sees the coming of new information technology as a decisive feature of this shift.

Bell points out that the industrial revolution was marked by an innovation of energy. This was a time when steam and electricity transformed the method and scale of manufacturing. He argues that now the post-industrial society moves at a very different quantum level where energy is transformed into information and knowledge. Further "and yet in a broad sense seeing the way in which information serves as a resource, as a control device, as we organise large masses of material and production, we begin to get a sense of how a new kind of change is taking place." He considers the relocation of industries as a break up of the older systems as a result of the speed through which communication develops. This led to the spreading out of industries, what he calls a wider integration. He also sees a political fragmentation "since the instruments of management are not responsive and perhaps cannot be responsive to these areas of change."

Thus, according to Bell, the industrial society was **characterised** by **manufacturing** and therefore making of goods. A post-industrial society, he says, in contrast, is one primarily involved in the **processing** of information and controlling the directions of communication. Neither of these replaces the other. That is to say, alongside the machine industry of the industrial society there is a rise and development of an intellectual technology. This does affect the way in which manufacture is **organised**. The post-industrial society then is basically that in which high technology operates and that this society utilizes the materials we **derive** from this information.

In the post-industrial society then we experience a change in the nature of technology. It is basically a change **from** mechanical technology to an intellectual technology. This intellectual technology is embodied in the elements of coded programming, software and various other devices, which become the way in which we organize our materials. This intellectual technology then requires a very different kind of education than it was during the age of mechanical technology.

At the same time various authors have pointed out there is a revolution in material science which, in areas of production and trade, affects the way in which things happen. No longer will engineers think of separate metals as zinc, tin or copper. They will say rather what sort of **properties** do you want? Do you want conductivity or ductility? What is it in a sense you want a thing to do? As Bell points out "they will make out from the combination of materials a reconstituent element just as today we may think of a recombinant DNA in the way biological processes are **organised.**"

This process then, Bell points out, is not simply just telecommunications and computers. There is a matrix underneath which allows us to see how these **things** begin to take place and more often chart diffusion of things. That is if you want to think about **post-industrial** society it is not when you have innovation ~~or~~ invention that is crucial but it is when you have diffusion. That is it is the point where you have the way in which elements of change take hold and begin to spread throughout the society." The crucial point today says Bell, is the beginning of these processes of **diffusion not necessarily that of invention or innovation.**"

Says Bell, following things occur in the arc of technology in the post-industrial society:

- 1) All systems hitherto mechanical become electromechanical and then electronic. For example, the typewriter becoming electronic.
- 2) The idea of **miniaturisation** comes into play. You *can* take things and shrink them to a smaller size. We can for example devise a chip and send to Mars. This can biologically and chemically analyse material from the surface of Mars and electronically send back a signal on its findings.
- 3) Thirdly, you have digitalisation. That is where you make analog systems binary and therefore compatible in a variety of ways with **other kinds** of communication. For example, a movie, a telephone call, letter or magazine article may be sent digitally via phone line, co-axial cable, tape or a disk. With digitalization the content becomes totally plastic. Any message, sound, or image may be edited **from anything to anything** else.

Check Your Progress 1

Note: i) Use the space given below for your answers.

ii) Check your answers with those given at the end of the Unit.

- 1) What was the nature of change occurring in the US Society since 1960s and 1970s.

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- 2) List some of the characteristics which Daniel Bell specifies for the post-industrial society.
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4.4 WHAT IS THE RESULT OF THIS?

Bell gives the example of how in the industrial society great industrial complexes came into existence with traditional means of transport and communication. Waterways for example facilitated iron and steel industries to come up in a concentrated form, example in Detroit. With communication technologies and transport, developing industrial units can be located in a dispersed fashion. Production of textile goods for example, can mean having production and design units in locations in different parts of the world. You can send design online to a production firm located in South Asia from the U.S. This design's individual requirements can be speedily catered to. Today many production and design units of textile industry in the U.S. are located in different countries of South Asia. There is a new approach to production using information technology. As a result there is a flattening out of the traditional management structure. Hierarchical decision making of the industrial factory production is now replaced by multi-skilled teams with groups of workers collaborating at every stage, from design to quality control, with each team member contributing to a process of continual improvement while simultaneously being allowed access to all computerized information generated within the company. Thus says Bell "what is happening today is the breakup of those systems. We have a situation where the old industrial structures of the world, the old concentration of industries begin to lose their significance. Now it is the communications which becomes the major determining infrastructure through the organisation of economic exchanges, trade, communications as such."

4.5 CHANGES IN SOCIETY

The concept of post-industrial society emphasises the centrality of theoretical knowledge as the axis around which new technology, economic growth and the stratification of the society is organised. Post-industrialism is then an effort to identify a change in the social structure.

In the stratification system of the industrial society, the historic base of power was property and the means of access through inheritance. In the post-industrial society while property remains an important base, technical skill becomes another, sometimes a rival base along with education as a means of access to the attainment of technical skill. The post-industrial society sees the continuation of the trends of the industrial society in a historical sense. Both St. Simon and Marx had emphasised the crucial role of engineers and science in transforming the society.

In the post-industrial society the chief problem is the organisation of science and the primary institution, the university or the research institutes. In the 19th and early 20th centuries the strength of the nations was their industrial capacity, the chief index of which was steel production. After World War-II, according to Bell, the scientific capacity has become a determinant of its potential and power and Research and Development has replaced steel as a measure of its strength.

At the same time we see a drastic decline in the number of industrial proletariat. In the industrial society labour displaced from its traditional **moorings** in the country side formed a huge proportion of the factory town population. In the post-industrial society the industrial proletariat comprises a mere 15% of the working population and is steadily declining. In the same way people engaged in agriculture make up 5% or less of today's advanced societies. The shift to services is also decisive. These human services or professional services in health, education and social services expand the range of what a population can do. In the process there is an expansion of longevity of the population and expanding of these skills.

The central occupational category then emerges as the professional and technical. Growth in this category has outpaced all other major occupational groups. Bell points out that from less than a million in 1890 the number of professional and technical personnel has grown to 10.3 million in 1968. Within this category the largest group was teachers, health workers, scientists and engineers and **engineering** and science technicians. The growth of these sections is accompanied by a growth in the white collar workers. From 17.6% of the workforce in 1900 their percentage has risen to 46.7% in 1968.

In the process even the most widely discriminated group – the blacks in the U.S. society have made an impact on the growing professional sector of the U.S. About 20% of the black males are professional, **technical** and clerical occupation holders. However this is still in stark contrast to 43% of white males in similar occupational categories in 1968.

Another important shift had taken place in the society with the shift to service sector. This was the large scale entry of women into the professional and service sector. In 1968.46% of service sector employees were women and by 2000 they had risen to becoming about 60%. The shift was important enough to be **characterised** by one author as a second bourgeois revolution. Though the service condition of women professional workers had not broken the patriarchal barrier, their presence in the workforce in such large **numbers** meant redefining the issues which affect day to day **life**. Hence for working women the issue of balancing the working career and family life became important. With this grew the importance of child care and day care for working mothers. Appropriate neighbourhood **schools** and **community** support became very important. Similarly the questions of maternity benefits, maternity care became centrestage. These also gave a fillip to the dormant healthcare issues.

4.6 DIFFERING VIEWPOINT

Here it might be useful to compare the views of J.K. **Galbraith** on this emerging society. Characterising this as the new industrial state he focused on how new technology has **integrated** with multi-national corporation and state. Here he points out we have become **servants** thought and action of machines. Here he agrees with Daniel Bell that technology has developed an **initiative** of its own. Subsequent

development is that as the integration of technology with the military industrial complex takes place the economic function of the state become more varied. Next he sees a transition from capitalism to industrialism with the emergence of mature (as against **entreprennial**) corporation which eliminate competitive forces of market relations and ensures planned economic **behaviour**. **Finally** he says this industrial society makes possible the merger of these **mature** big corporations with the state.

It is clear here that Galbraith is speaking of developments in the 1960s and 1970s whereas Bell is more sensitive to what has happened in the 1980s and 1990s. Bell has drawn attention to the process of political fragmentation as more and more big corporation activities get located overseas. In the 1990s the cold war is over and therefore the earlier compulsions of the military industrial state of 1970 and 1980s are no longer there and the society as such takes a new direction. This is a society full of optimism about how to harness technology to **further** needs of the day to day life. There is also a movement here towards freeing human life from **technocratic** compulsions. However we need to be aware that the technocratic legacy is by no means over. **As Marcuse** has pointed out this is a 'behaviorist universe' where technologically linked thought patterns are still the order of the day. **Bell** is pointing to the promises this society holds for us. But equally important to remember here is that the 'good life' comes at a price. The heaviest price is the way our thought belief systems are **reified**. That is to say how they are delinked from nature and presented to us as some kind of logical or mathematical symbols.

Check Your Progress 2

- Note:** i) Use the space given below for your answers.
- ii) Check your answers with those given at the end of the Unit.

1) What is the nature of change in the production process of the post-industrial society?

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2) What are the changes that we see in the social structure of the post-industrial society?

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4.7 LET US SUM UP

In this Unit we showed how the post-industrial society emerges as a distinct phase in the modern world. It is not that the industrial society has disappeared. Production and manufacturing continue to be important constituents of this new society. The change however is in the fact that a service sector shift is evident in the economy. This is signified by the rise of real estate, insurance and finance in a big way. Secondly there is a decrease in the number of the traditional proletariat engaged in manufacturing and production. There is also decline in the agricultural work force. All these have shifted to the service sector. The rise of new technology in information and communication drastically changes the way work is performed now. All these entail changes in society and the issues with which it is confronted.

4.8 KEY WORDS

Information and Communication Technology: You will read about these technologies in detail in Block 7. Here it is sufficient to say that we are talking about modern means of communication like the internet linked to personal computer. The innovation and change in the transport and movement of goods and services get linked up to the speed with which computer aided communication takes place.

4.9 ANSWERS TO CHECK YOUR PROGRESS EXERCISES

Check Your Progress 1

- 1) See Section 4.2
- 2) See Section 4.3

Check Your Progress 2

- 1) See Section 4.4
- 2) See Section 4.5