CHAPTER II

REVIEW OF LITERATURE

This chapter is concerned with a brief review of some of the important theories of economic development as propounded by economists and some other social thinkers. The purpose is to highlight or bring to prominence the salient features or factors of growth which these thinkers have considered important in the process of economic development.

David Ricardo's theory is based on the marginal and surplus principles. He assumes the entire economy as one huge farm, fixed in supply, which is employed in the production of corn only, by administering homogenous units of labour and capital. The three groups in the economy viz. landlords, capitalists and labourers cooperate in production process and the entire produce of the land is distributed between them as rent, profits and wages respectively. Under equilibrium, the rate of profit earned on capital must be equal in both agriculture and industry. As believed by Ricardo, economic development depends on the difference
between production and consumption i.e. capital accumulation. Capital accumulation is the outcome of both the capacity and the will to save. Capacity to save is more instrumental in capital accumulation. The price of corn, in his understanding, determines the rate of profit in industry. The profit of the farmer regulates the profits of all other trades. He recommends free trade and a minimum of tax imposition. Ricardo opined that technology improvements led to unemployment. Ricardo emphasised the distribution aspects in his theory.

Malthus did not regard the process of economic development as self-activating. Instead, economic development required consistent and conscious efforts on the part of the people. Malthus held that several depressions occur prior to the achievement of optimum level of development. For him, the process of development was one of unstable economic activity. He associated economic development with the "progress of wealth" of a country, which depended upon the quantity and value of produce. He denied a corresponding relation between the increase in value and the wealth of a country. According to his theory, as the rate of capital
accumulation increases, the demand for labour also increases simultaneously. This leads to population growth. However, mere population spurt does not increase wealth. Population growth increases wealth only if it increases effective demand which in turn leads to increase in wealth. According to him population growth was a consequence of economic development and not vice versa. Malthus regarded the precise production-distribution relationship as the basis of increasing wealth. Malthus related the difference between potential gross national product (i.e. power of producing riches) and actual gross national product (i.e. actual riches) as a fundamental explanatory factor in economic development. Accordingly, the size of potential gross national product depends upon land, labour, capital and organisation. These four factors in right proportion maximize production in the agricultural and industrial sectors of the economy. Further, Malthus considers non-economic factors like politics and morals also responsible for economic development. Like Ricardo, even Malthus accepts capital accumulation as a crucial determinant of economic development. The source of capital accumulation is plentiful
profit. But unlike Ricardo he advocated consumption by the capitalists. In this connection Malthus suggested a concept of the "optimum propensity to save". He advocates that "saving, pushed to excess, would destroy the motive to production". In Malthus' view underconsumption or deficiency in effective demand leads to glut which is the main cause of underdevelopment.

John Stuart Mill gave stimulating ideas on economic development which were later known as Mill's theory of economic development. Whereas the other classical economists chiefly dealt with the working of economic phenomenon under static conditions, Mill was primarily concerned with the study of economic phenomena under dynamic conditions. According to him the economic development is a function of land, labour and capital. Increase in wealth is possible only if land and capital help to increase production faster than the growth of labour force. Labour force has been classified as productive and unproductive. Productive labour is a genuine contributor of capital accumulation as well as of productive consumption. Capital accumulation as presumed by
Mill depends upon "the size of the net produce of industry" and "the strength of the disposition to save". Capital is the outcome of savings, and since savings depends upon the size of the net produce of industry it increases with the increase in profit and rent which go to make the net produce. For Mill, profits depend on the cost of labour. He postulates an inverse relationship between profits and wages. Therefore, in Mill's judgement, rate of capital accumulation will rise only when profits increase at the cost of decreased wages. Mill apprehended that investment led to increase in the wage fund and to economic progress. Mill was an upholder of Malthusian theory of population and propagated birth control measures to improve and maintain the conditions of working class. He agrees that due to an increase in population at a 'Malthusian' rate, and due to diminishing returns in agriculture and absence of technical improvements in agriculture, the rate of profit declines and an economy sinks into a stationary state. He accepted the 'stationary state' without reservations because this was the turning point according to him towards correction and recovery. Mill advocated laissez-faire and considered state intervention as an evil, although he favoured
reforms in the institutional structure of ownership, means of production, peasant proprietorship, profit sharing, cooperation and market to be brought about by legal enforcement. Mill was an adherent of compulsory education to ensure qualitative improvements in human agents of production. He favoured free-trade and approved temporary protection in case of infant industries only.

Karl Marx was a leading social scientist of his time. His major endeavour was to contradict the work of the classicals whom Marx considered as the upholders of the capitalist order. His contribution to the theory of economic development is framed on three planks: (i) The economic exploitation of the proletariat by the bourgeois; (ii) The motivating forces of capitalist development and (iii) The alternative path of planned economic growth.

According to Marx society is divided into two classes, one has property and the other is deprived of it. The former owns the means of production. The latter constitutes the labour force. The exploitation of the masses leads to capital accumulation by a few. This surplus is the
root of the capitalistic organization. Marx divides capital into constant capital and variable capital. The constant capital (c) directly assists the productivity of labour. The variable capital (v) is devoted to the purchase of labour power in the form of wages. The surplus value is denoted by (s). The total value of product W is the sum of constant capital, variable capital and surplus value i.e. W=c+v+s. It is on the basis of this division of the total output that Marx introduces his Departmental Schema of Simple and Expanded Reproduction.

Marx further divides the total output of the economy (W) into capital goods and consumer goods. All production, if entirely consumed, will not contribute to any accumulation or surplus. Contrary to this if the output of capital sector is more than the output of consumer sector the process of accumulation will start and the society will turn into a capitalist society with economic power concentrated in few hands only. The ratio of constant to variable capital is termed as organic composition of capital which affects the rate of profit. Technical progress affects the organic
composition of capital. The tendency of industrial progress is to lower the rate of profit.

Marx considers the transformation of a capitalist society to a socialist society inevitable. Marx used the labour theory of value as a basis for discussion of the exploitation of the workers by the capitalists in the form of surplus value. Marx predicted the inevitable collapse of the capitalist system and its replacement by socialism under which workers would control the means of production thus avoiding the inherent paradox of capitalism. According to him, in a socialist society each individual will contribute to national income according to his abilities and will receive according to his needs.

Joseph Schumpeter assumes a perfectly competitive economy which is in stationary equilibrium. This equilibrium is characterised by what Schumpeter terms the "circular flow", which is persistent in a time-less economy. For development, spontaneous change in the channels of circular flow should occur which would alter the equilibrium existing earlier. Innovations are one such aspect.
the existing ones lead to the disintegration of the circular flow. Innovation in one field may be followed by innovations in related industries. These stimulate a wave of new investments and generate thereby development. Entrepreneurs are the key figures in the Schumpetarian system. They bring about economic development in spontaneous and discontinuous manner. According to him, a reservoir of untapped technical knowledge exists which the entrepreneurs can make use of and initiate development. An entrepreneur is prompted to action by profits and large profits arise due to dynamic changes resulting from an innovation. Continued technological progress will result in an unbounded increase in total and per capita output, since historically there are no diminishing returns to technological progress. As long as technological progress takes place the rate of profit will be positive. Identical to Marx, even Schumpeter predicts the collapse of capitalism. According to Schumpeter capitalism can perpetuate only as long as entrepreneurs are enterprising and enthusiastic.

John Maynard Keynes put forward a General
Theory of Employment, Interest and Money. Although his contribution is noteworthy, it is unsuitable to all socio-economic set-ups. The Keynesian theory is explicitly relevant to advanced capitalist economies. Keynes presumes production of goods and services, and therefore the level of aggregate demand, which is determined in turn by the level of income, as determined by the consumption function and by the level of investment. In its simple form the model splits variables into those that are endogenous (income, consumption) and those that are exogenous (investment, government budget). Equilibrium is achieved when the level of withdrawals from the circular flow of income i.e. savings, imports, taxation etc., just equals the level of injections into the flow i.e. investment, government expenditure, exports. The equilibrium may well occur at a level that is less than full employment.

Total income is a function of total employment in the country. Rise in investment leads to increased income, and increased income creates demands for more consumption goods. More consumption goods leads to more income and increases in employment. This process is cumulative. The relationship between increments of investment
and income is called by Keynes, the Multiplier(k). The multiplier establishes a precise relationship between the factors involved and suggests that when there is an incremental increase in aggregate investment, income will increase by an amount which is 'k' times the increment of investment. The formula is

$$ \Delta Y = k \Delta I $$

and $ 1 - 1/k $ represents the marginal propensity to consume. Thus the multiplier (k) is $ 1/1 - MPC $. Since the marginal propensity to consume falls with increase in income it becomes essential to pour large quantities of investment for securing higher levels of income and employment within the economy.

W.W.Rostow has historically sequentialized the process of economic growth as the traditional society, the pre-conditions for take-off, the take-off, and the drive to maturity, and the age of high mass consumption.

The early society was dependent mainly on agriculture. With technological advancements economic growth could be attained with improved methods of agriculture and
agriculture. With technological advancements economic growth could be attained with improved methods of agriculture and other industrial developments. To secure the full advantage of scientific and technological advancement, proper education of the masses is essential. Then follows take-off, i.e. an industrial revolution tied directly to radical changes in the methods of production having their decisive consequence over a relatively short period of time. The rudiments of take-off are (i) a rise in the rate of productive investments (ii) the development of one or more substantial or 'leading' manufacturing sectors with a high rate of growth and (iii) the existence of quick emergence of a political, social and institutional framework for expanding the modern sector. The next stage is to consolidate the gains of take-off and finally involve the masses to consume more and more. In this stage the attention is shifted from production to consumption and social welfare.

Ragner Nurkse elaborated the concept of disguised unemployment which occurred as a consequence of industrialization of overpopulated and underdeveloped countries. Such unemployment is found where too many workers
are engaged in agricultural operations because of the lack of alternative employment opportunities. According to him, the state of disguised unemployment in under-developed countries constitutes "a disguised saving potential". This surplus labour force can be put to work on capital projects like irrigation, drainage, roads, railways, residential construction, training schemes, community development, education and health etc. In this way, rural underemployment can be converted into a source of capital formation.

W. Arthur Lewis postulated a theory of economic development with unlimited supplies of labour. Lewis suggests that economic development is possible when capital accumulates as a result of withdrawal of surplus labour from the "subsistence" sector and its employment in the "capitalist" sector. When the supply of labour is unlimited new industries can be established or existing industries expanded without restraint at the current wage. The current wage is commensurate with the wage in the subsistence sector. Lewis asserts that the shortage of skilled labour is only a "quasi bottleneck" since this impediment can be overcome by
impacting training. If unlimited supplies of labour are available at a constant real wage and if any part of profits is reinvested in productive capacity, profits will grow continuously relative to the national income, and capital formation will also grow relatively to national income.

Harvey Leibenstein is of the view that the under-developed countries which are poverty stricken cannot develop economically unless some "critical minimum effort" is attempted which raises per capita income to a level to sustain the development. The 'critical minimum effort' thesis is based on the assumption that income-increasing forces expand at a rate higher than the income-depressing forces. In the development process such conditions are created by the expansion of the 'growth agents'. The typical growth agents are the entrepreneurs, the investors, the saver and the innovator.

R.R. Nelson developed the theory of low-level equilibrium trap for underdeveloped countries. A stable and low level of per capita income is the main cause of underdeveloped economies. At a stable equilibrium level of
per capita income, the rate of saving and consequently the rate of net investment are at a low level. Even the efforts made to enhance them are neutralized by growth in population which pushes back the per capita income to its stable and low equilibrium level. Thus, underdeveloped economies are caught in a low level equilibrium trap. According to Nelson's diagnosis the factors leading to trapping are (1) A high correlation between low level of per capita income and high rate of population growth; (2) A low propensity to direct additional per capita income increasing per capita investment; (3) Scarcity of uncultivable land; and (4) Inefficient methods of production. Besides, cultural inertia is also responsible. To overcome all this a favourable socio-political environment is essential so that the growth rate of income far exceeds the growth rate of population.

Rosenstein Rodan has proposed a "big-push" theory which means that a large comprehensive programme is needed in the form of a high minimal amount of investment to overcome the obstacles to development in an underdeveloped economy and to launch it on the path to progress. The theory says that proceeding 'bit by bit' will not launch the economy
successfully on the development path. Rather, a minimum threshold amount of investment is a necessary condition. Simultaneous establishment of technically interdependent industries with the help of external economies is also necessary. Indivisibilities of inputs and outputs lead to increasing returns. Social overhead capital comprising basic industries like power, transport and communications are indirectly productive. They cannot be imported. Their installation require a sizeable initial lump of investment. Thus, a big push of sizeable investment is required to have a meaningful impact on growth.

Albert Hirschman is the upholder of unbalanced growth. According to him intentional and deliberate unbalancing of the economy, according to a pre-designed strategy, is a desirable approach to achieve economic growth in an underdeveloped country. When paucity of resources exists, the priorities for investments have to be selective. It is this preference schema which makes it unbalanced. As development in a selected sector gathers momentum then available capital and other resources may be allocated to the
unattended and neglected sectors. He regards development as a "chain of disequilibria" that must be kept alive rather than eliminate the disequilibria, of which profits and losses are symptoms in a competitive economy. If the economy is to be kept advancing the task of development policy has to be to maintain tensions, disproportions and disequilibria.

Gunnar Myrdal analyzes the effects of economic development. He is of the opinion that it gives rise to many inequalities e.g. regional inequalities, international inequalities etc. This is due to the backwash effect because the spread effects (which are the counteracting forces to the former) are very weak. The centre of economic activity attracts young and active people from nearby (or sometimes even from distant) places. Their migration leaves that region backward, as trade, capital movement etc. are also concentrated at the active centre. This effect is known as backwash effect. No doubt, the interaction with this developed centre spread economic activity in nearby areas, but the process is weak and slow. Hence its effect is not capable of checking the growing inequalities in the region. Thus, for sustained economic growth the "spread effects" must be greater
than the "backwash effects" and, in addition, the spread effects must be such that they have maximum forward and backward linkages.

Harrod and Domar models of economic growth have their heritage in advanced capitalist countries. Obviously, their relevance to the steady growth of those economies is more. Domar builds his model by establishing a link between aggregate supply and aggregate demand through investment. The two vital factors in any economy i.e. productive capacity and aggregate demand are at their peaks in advanced economy and this model seeks equilibrium between them through a fundamental equation:

$$\Delta I / \xi = I \sigma^-$$

On rearranging

$$\Delta I / I = \xi \sigma^-$$

Where $\Delta I / I$ is net autonomous investment,

$\sigma^-$ is productivity

$\xi$ is MPS

This equation shows that to maintain full
employment the growth rate of net autonomous investment must be equal to the MPS times the productivity of capital. This is the rate at which investment must grow to ensure the use of potential capacity in order to maintain a steady growth rate of the economy at full employment.

Harrod's model is based upon three distinct rates of growth -(i) the actual growth rate \( G_a \) depending upon saving ratio and capital output ratio; (ii) the warranted growth rate \( G_w \) which is the full capacity growth rate of income; and (iii) the natural growth rate \( G_n \) i.e. the welfare optimum or full employment rate of growth. They are connected mathematically as:

\[
G_c = s \quad (1)
\]

and

\[
G_w \cdot Cr = S \quad (2)
\]

or

\[
G_w = \frac{S}{Cr} \quad (3)
\]

Where \( G \) is the growth rate i.e \( \frac{dX}{X} \)

\( C \) is capital-output ratio, i.e \( \frac{I}{dX} \) and

\( s \) is fraction of income saved \( \frac{S}{X} \)
If the economy has to advance at the steady rate, utilizing its full capacity, income must grow at the rate of \( S/C_r \) per year.

Both the models are very similar but for minor differences in respective terminology used e.g Harrod's warranted rate of growth \((G_w)\) is Domar's full employment rate of growth \((C_r)\). Besides this, their point of emphasis also varies.

Feldman's model is concerned with long run planning and is based on the Marxian division of the total output of an economy into two categories. Category one comprises capital goods while category two concerns consumer goods including raw materials. The division of economy between the two categories is almost complete. It is a two-sector model.

The elements which determine the national income and the growth rate of economy are given by:

\[
Y = I + C
\]

Where:

\( I \) = the annual rate of net investment
allocated to the respective categories,

\[ C = \text{the annual rate of output of consumer goods.} \]

\[ Y = \text{the annual net rate of output of the whole economy or national income.} \]

The fundamental equation shows that \( C \) and \( Y \) each represent a sum of a constant and an exponential in \( t \). The values of \( C \) and \( Y \) will be greater than the value of \( I \); with the passage of time, the exponential term will dominate. The exponential term contains capital coefficient \( (V) \) which is a variable for the purpose of economic development, and \( (\gamma) \) the fraction of total investment in the first category. According to Pel'dman, if the purpose of economic development is the maximisation of investment or national income at a point of time, or of their respective growth, \( (\gamma) \) should be set as high as possible. A high \( (\gamma) \) does not imply, however, any reduction in consumption.

Mrs. Joan Robinson formulated a model of economic growth based on the 'capitalist rules of the game'. Her model presupposes laissez faire and a closed economy. In
her model capital and labour are the only productive factors. Technological progress is neutral. This model is applicable for a labour-deficient economy. Her model assumes that national income is apportioned between the labourers and the entrepreneurs. Workers spend their entire wage on consumption and consequently their savings are nil. On the other hand, entrepreneurs spend moderately and reinvest their total profits. Price level is assumed to be constant. Net national income is the aggregate of the total wage bill plus total profits and is regarded as:

\[ Y = wN + pK \]

Where \( Y \) is the net national income, \( w \) is the real wage rate, \( N \) represents the number of workers employed, \( p \) indicates the profit rate and \( k \) stands for the amount of capital. Income, labour productivity, the real wage rate and the capital-labour ratio, together determine the rate of profit. The saving-investment relation is presented as:

\[ S = pk \]

and

\[ I = \Delta k \]

\[ pk = \Delta k \]
where \( \Delta k \) is the increase in real capital, S is savings and I investment. In Mrs. Joan Robinson's assessment, profits can be maximized under three alternative situations: (i) if income remains constant and the wage rate decreases; (ii) if income increases and the wage rate remains constant; (iii) if the capital-labour ratio falls. Mrs. Robinson states that the 'golden age' for an economy can be attained by maintaining a maximal rate of capital accumulation through a constant rate of profit.

J.E. Meade constructed a neo-classical model of economic growth. The model illustrates the operation of a simple economic system in a state of equilibrium during the process of growth. Meade also assumes a perfectly competitive laissez-faire and closed economy functioning at constant returns to scale. The economy is engaged in the manufacturing of consumption goods and capital goods. Machinery is assumed to be uniform. Price level of consumption goods is fixed. Land and labour are extensively utilised. The ratio of labour to machinery is mutable and Meade addresses this as the perfect malleability of machinery. There exists a perfect substitutability between capital goods and consumption goods.
Meade also takes depreciation into account.

The net output in such economy is determined by the availability of four factors: the net stock of capital accessible in the forms of machines, the labour force obtainable, the disposal of land and natural resources, and fourthly, the state of technical knowledge. This relationship is put across in the form of a production function as follows:

\[ Y = F(k, L, N, t) \]

Where \( Y \) is the net national income. \( k \) indicates stock capital, \( L \) stands for labour force, \( N \) symbolizes land and natural resources, and \( t \) represents time signifying technical progress.

Since land and natural resources are constant, net output can be enhanced by boosting \( k, L \) and \( t \). This relationship is shown as:

\[ \Delta Y = V\Delta K + w\Delta L + \Delta Y' \]

Where
\[ \Delta = \text{incremental increase}, \]
\[ \nu = \text{marginal product of capital}, \]
\[ w = \text{marginal product of labour}, \]
\[ \gamma' = \text{time signifying technical progress}. \]

Professor Meade also specifies the conditions for steady state of economic growth. It is a state in which the growth rate in total output and growth rate of income per head is constant.

In the subsequent pages of this chapter an attempt is made to briefly review the ideas of social thinkers on guiding factors or determinants of economic progress.

August Comte reckons that progress is observable in all aspects of society. According to him progress is multi-dimensional: physical, moral, intellectual, political. The intellectual state is the fundamental and the most conspicuous. It is manifested by the historical development of ideas, philosophy and science. Nonetheless, the paramount importance for mankind has been the satisfaction of material needs and therefore they are preoccupied in exercising their dominance over the forces of nature towards
meeting their fundamental needs. Comte opines that intellectual development stimulates material development. Discussing about the determinants of progress in general, Comte stresses that the increase in the density of population brings about greater specialization in the division of social labour. Subsequently, individuals are compelled to engage more vigorously and effectively to maintain subsistence in a competitive society. Comte further mentions about the differential velocity of progress based on climatic and racial inequalities. Some were receptive and suitable while others inert and passive. Comte believed that political action might accelerate as well as retard progress. Comte feels that an individual's development passes through three stages akin to social development. Comte established correlation between the basic intellectual stages and the stages in the development of man's material life. As early as 1822 Comte could visualize the emancipation of women and workers as an underlying requirement for any society or country to develop economically.

Edward B. Tylor believed in the existence of distinct stages in the development of man's culture. Tylor
sought to find a means to measure this development. The principal criteria of cultural growth, according to him, were the development of industrial arts, the extent of scientific knowledge, the nature of religion, and the degree of social and political organisation. Tylor's most lasting contribution was his definition of culture. Culture or civilization is that complex whole which includes knowledge, belief, art, morals, law, custom and any other capabilities and habits acquired by man as a member of society.

Lewis Henry Morgan stressed technology as a significant factor in ushering changes within the society. Morgan perceived stages of evolution through which men must pass everywhere. According to Morgan, the experience of mankind has run in nearly uniform channels, human necessities under similar conditions have essentially been the same, and operation of the human mentality is uniform in various human societies. Morgan categorized three main stages of cultural advance: savagery, barbarism and civilization. He subdivided the first two stages into three sub-stages. Each stage and substage was assumed to have been initiated by a major technological evolution/invention. Savagery's second stage was
the lighting of fire and catching fish and the third stage comprised of archery (bow and arrow). Barbarism began with the invention of pottery making. Its second stage was characterized by the domestication of animals and the third by the technology of smelting. Civilization emerged by the use of phonetic alphabets. Each stage of technical evolution corresponded with distinctive developments in religion, family structure, political organization and property arrangements. Morgan's 'Ancient Society' was the ground work for Marx and his co-worker Friedrich Engels in developing the Marxian sociology.

William Graham Sumner, though a sociologist, was one of the ardent apologists of the laissez-faire principle. Sumner viewed society as a system of forces subject to laws which are investigated by science. In his opinion men must respond to social laws as they respond to physical laws, and these laws are to be discerned and followed. Sumner observes the law of evolution as an inherent, spontaneous non-linear and irreversible process which cannot be changed by social effort. Evolution is propelled by struggle for existence. The endurance of the industrious
ensures the survival of the fittest. This law of civilization has also been termed as 'Social Darwinism'. It is not possible to restrain the social forces which produce monopoly, wars and social classes and social conflicts. These forces are the outcome of pressure of population and of economic conditions. Class struggle, according to Sumner, has marked all historical development. Sumner's foremost emphasis was on the sociological importance of usages, manners, customs, mores and morals.

Herbert Spencer's thought found enormous acceptance from 1865 to 1895. His appeal was impressive as his theories reciprocated to two needs of that period: the desire for unifying knowledge and the need for a scientific justification for the laissez-faire principle. His thought marked a combination of two intellectual traditions - evolutionary and classical economics. The very foundation of Spencerism is the evolutionary doctrine. Spencer blended two fundamental concepts - the society as an organism and progressive social development. According to Spencer societies continuously adjust their populations to the means of existence. Thus supply and demand are adjusted. Political
institutions fall into harmony with the desires of the people. However, the sociological contribution of Spencer is dominated by the idea that throughout all times there actually has been social evolution and this evolution has been moving steadily from the uniform to the multiform, that is, always towards more and more progressive forms. Spencer envisaged the military and industrial types of society as alternatives for human progress. The military society is integrated by force, while the principle of integration of industrial society is voluntary cooperation in which men enter into relation with one another freely and contractually. In the industrial type of economy political intervention, in Spencer's viewpoint, should be minimized otherwise it upsets voluntarily coordinated activities of free individuals. He holds that free men are motivated by their interests and individual interests are balanced by voluntary interchanges.

Achille Loria is an important protagonist of economic evolutionism. In 'Economic foundations of society', Loria attempts to establish the proposition that the gradual decrease of free land is the underlying factor in social evolutionary development. According to Loria, as long
as land was free there was no division of society into classes, nor such controlling forces as morals, law or religion. With the beginning of the appropriation of land slavery became the main institution. As the same alienation process advanced, the next stage was characterized by compulsory organization of labour, for instance, serfdom in rural areas, guilds and corporations in the city. When all or most of the land was appropriated capitalism emerged.

Thorstein Veblen was the patron of technological evolution. According to him habituation and mental discipline in human life is governed by variety of work and the same associated style of techniques. Veblen was convinced that technology framed human socio-cultural relationship. Human instincts give rise to habits which vary according to changing opportunities for expression made available by the material environment. Redadjustment in society is slow. Facility in adaptation depends on the degree to which individual members are exposed to the constraining forces of the environment. Any class of the society which is sheltered from the action of the environment will adapt its views more tardily to changing situations and so tend to retard the
process of total transformation of society. In Veblen's book the Theory of Leisure Class, the leisure class is just such a retarding segment of the social order. In Veblen's opinion, any society may be viewed as an industrial machine the structural elements of which are its economic institutions. Further there is a close correspondence between culture and the underlying technology. The feudal order was a system of trained manpower organized on a plan of subordination of man by man. In the new order of the industrial society, the mechanical power takes over the place of manpower. The new technology destroys the old organization of society. Veblen's conception of technology as being the vanguard of the evolutionary process found expression in the notion of cultural lag developed by William F. Ogburn.

Max Weber had a very wide range of scientific interests, such as sociology of religion, social and economic history, sociology and social policy. Weber held that the natural sciences and social sciences are quite different. In the natural sciences human interest is directed toward control whereas in social science human interest is directed towards valuation. Social science must be an
empirical science of concrete reality. Weber wished to test the basic contention of Marxism according to which all cultural phenomena including religion are fundamentally determined by the evolution of economic forces. The protestant reformation was a by-product of the rise of capitalism according to Marx. Weber's conclusion was different. Weber holds that Capitalism is a system of profit-making enterprises bound together in market relations which has developed historically in many places and at various times. Modern mature capitalism is distinguished from capitalism in general by its rational character and the rational organization of free labour. Weber emphasizes that the problem of initial emergence is distinct from that of later growth since once fully developed, a social system becomes self supporting. Weber concludes that the rise of mature capitalism was affected by the emergence of protestant, especially Calvinist' ethics. Mature capitalism is not simply based on the acquisitive urge but embraces rational activity emphasizing order, discipline, and hierarchy in organization. The maxims of action grounded in Calvinist' ethics directed the believers to behave in the spirit of mature capitalism.