THE

SCIENCE OF ECONOMICS

A CRITICAL ANALYSIS OF ITS PRINCIPLES.

Volume I. Part I.

METHODOLOGY.

BY

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WITH A FOREWORD BY

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THE ENGLISH BOOK DEPOT

Mochi Gate, LAHORE.

IN PREPARATION

By the same Author.

I. Similar parts of this book on Production, Value, Money and Exchange, International Trade, Distribution and Public Finance.

II. Post-war Developments in Monetary Theory.

III. Monetary Theory and Practice directed towards Economic Recovery.

IV. Reflections on Education in general, with a particular examination of Commercial Education.

V. Organisation of Commerce and Industry.

TO

THE LATE PROFESSOR

EDWIN CANNAN

EMERITUS PROFESSOR OF POLITICAL ECONOMY

IN THE

UNIVERSITY OF LONDON.

FOREWORD

By

Dr. Hugh Dalton, D. Sc. Econ. (Lond.) M. P., Cassel Reader in Economics in the University of London, formerly Under-Secretary of State for Foreign Affairs.

Professor Kapoor is an old student of mine. He attended my lectures on Economic Theory at the London School of Economics in the session 1920-21. Since then he has been appointed to a responsible teaching post in India and is thus one of that increasing band of Indian economists whom the University of London, jointly with Indian Universities, can claim as one of its sons. In this book he has set out to lay the foundation of clear and instructive economic thinking in the minds of the rising generation of Indian students. The opportunities, and the social need, for fruitful economic study, combining theory with practical conclusions, are no less great—are, indeed, perhaps greater—in India than in most other countries in this age of rapid transition and of perilous perplexity. Professor Kapoor has made a most helpful contribution in this direction. His book should be widely read both by students of Economics at Universities and Colleges and by members of that wider public which rightly desires to comprehend some of the fundamental problems of our day.

PREFACE.

This book has been written with the object of acquainting the general reader and the student with the fundamentals of the science of Economics. It may be said that this is a commonplace because almost every author puts forward the same claim and that there are already numerous books in the market which satisfy the same want quite as well. Consequently in the opinion of some people there is no room for another book which does no more than this. But I maintain that although I keep the same object before me as many others have done, my method of approach is sufficiently different from others to justify my venture. Most students, at least in my part of the world, learn by heart some very simple truths about Economics which neither they nor their favourite authors of these very cheap books have sufficiently digested or assimilated. The result is that neither the Science makes any progress nor do they themselves gain anything by this kind of smattering of knowledge. While, as regards style, arrangement and language, etc., we should do all we can, to express the essentials of the science in as lucid a manner, and make them as easily comprehensible even to the beginner, as possible, yet I doubt very much the wisdom of aiming at too great a simplicity in exposition which, in most cases, can be attained only at the cost of sound thinking. Such an attempt leads us to be too uncritical and to be satisfied with an incomplete and superficial treatment of the subject. Let us make Economics as popular as possible by all means. But at the same time let us not sacrifice sound and deep thinking at the altar

of popularity. We must realise that things too easy to understand are mostly shallow and superficial. Most often the scientific truth is hidden behind the apparant and the obvious. Let us not court lucre to the extent of trying to push the sale of books by pandering to the taste of the lazy. It is, in my opinion, a great mistake to lead the beginner to believe that Economics is such a simple subject that very little effort is necessary to know this science inside out. The facts are, however, just the contrary. There are so many different factors and forces working in, and from all sorts of directions in respect of any social matter that to train oneself to take a comprehensive view of any question and thus to arrive at a right conclusion is hardly the task for the easy-going. Somebody has said that by teaching a parrot to repeat "Supply and Demand" you can make an economist of him. And one does come across many such human parrots who pass as very good students of Economics. In many cases greater efforts are necessary to rid such people of the unassimilated popular half-truths about Economics than to teach them how to distinguish between the economic grain and the chaff.

The present work, therefore, does not contain simple formulae which the student may learn by heart merely for passing an examination with the bare minimum of marks. I regard healthy controversy as the spice of life. It is certainly the essence of a social science. I have, therefore, not hesitated to discuss even those matters on which there is a great difference of opinion amongst economists. Without such discussion one cannot have enough

intellectual gymnastics which is so indispensable in one's education. Without this, again, the capacity to distinguish what is economically right from what is wrong cannot be developed. From a facile teaching of Economics only muddled thinking results. Exercises in checking popular economic fallacies of the past as well as of the present must be given to the mind before sound economic thinking can be achieved.*

It will be idle to pretend that there is no other book serving even that purpose. For instance, Professor Edwin Cannan's works are masterpieces and I must confess that these are the main sources of my inspiration. Professor Pigou's 'Economics of Welfare' and 'Industrial Fluctuations' take the same line of treatment of other important economic problems. Professor Fisher's 'Nature of Capital and Income' is another example. But these and other works, extremely valuable though they are, being a bit too advanced for the beginner, remain practically a dead letter to those who are brought up on very cheap stuff which can hardly be called Economics. This book, therefore, is intended to lead to an intelligent appreciation and a firm and clear comprehension of the fundamentals of the science. And if I succeed in creating an interest in the reader for higher works such as those just mentioned, I

*Once an interesting incident occurred in my class room. While I was explaining the point of view of the Mercantilists a student anxiously enquired whether that point of view was right. And when I said it was not, he looked like protesting against my teaching wrong things. I, then, explained how the right thing is better appreciated and more firmly grasped when it is pointed out in a striking contrast with the wrong thing.

would have ample reasons to be satisfied that I have done my work.

One of the great handicaps from which Economics suffers is the lack of a fixed terminology. Even very prominent economists like Marshall use the same terms in different senses in the same book in different contexts. Take for instance the term 'Utility'. In defining production* it is said that man does not produce matter. By shaping and re-shaping the matter already existing he simply produces utilities. Here one would imagine that utilities are objects or services (*e. g.*, that of a merchant who according to Marshall produces time and place utilities). But in connection with the explanation of the law of 'Diminishing Marginal Utility' it is obvious that the term means 'satisfaction'†. It is inconceivable that by consuming more and more of a particular article that which diminishes is anything else than the rate of increase of satisfaction itself. Similarly in connection with the idea of the consumer's surplus the term utility means satisfaction. ‡ Yet another definition is given by some other writers *viz.*, the utility is the 'power of satisfying want'.§ Even this meaning is not applicable to

*Marshall : Principles of Economics, p. 63, VIII ed.

†Marshall : Principles of Economics. pp. 92-93, VIII ed. See also (*i*) Marshall : Economics of Industry, p. 63 ed. 19 Macmillans. (*ii*) Taussig : Principles of Economics, Vol. I, p. 121, III ed. 1921 Macmillans (*iii*) Moreland : An Introduction to Economics for Indian Students' p. 160 1913 Macmillans. (*iv*) The literal meaning given in Dr. Annandale's 'The Concise English Dictionary' on p. 747, is usefulness. It must, however, be remembered that 'desire' or satisfaction are psychological facts and usefulness is an external fact See Thouless: Social Psychology Foot-note on page 276 University Tutorial Press, London, 1927 ed.

‡Marshall : Principles of Economics, p. 125, VIII ed.

§It is generally believed that Marshall himself has said so. But I have failed to find this definition of the term from his Principles. This, however, is given in Thomas Elements' of Economics, published by Gregg. p. 31, III ed.

the law of Diminishing Marginal Utility as it is not the power of satisfying but the rate of increase of satisfaction itself which really diminishes. All equal portions or quantities of an article have equal power of satisfying want. And yet any of them will give more satisfaction if used first in order, than the satisfaction obtained from the second equal portion, and the satisfaction obtained from the second equal portion will be more than that obtained from equal portion used on the third occasion. Any one of these equal portions may happen to be used first or second or third and so on, yet the sequence of rate of satisfaction will remain the same. Thus it is obvious that 'utility' in connection with this law means neither the goods and services as is supposed to be the case with the definition of Production nor does it mean power of satisfying want.

From the nature of the subject the use of words in senses more than one in different contexts cannot altogether be avoided. Economics makes use of the words found in ordinary parlance. As Cannan says "most commonly-used words have many different meanings, and we can only tell which is the right one at the moment by looking at the context or the surroundings..... It is only the more illiterate economists who complain of this and fail to see that to tie words down to one meaning only would make it impossible for us to communicate our thoughts unless our vocabulary was enormously enlarged. The others are content to make sure that both they themselves and their audiences understand in which of its various senses a word is being used."[1] This is perfectly true. Economists are certainly at liberty to take words from

1. Pp. 42-3 "Economic Scares" P. S. King 1933.

wherever they like and use them in as many senses in different contexts as they are used in the ordinary language. Yet they would be greatly facilitating the task of the beginner if, at least as regards technical terms they attach one and the same meaning throughout their works. They may use even these words in any sense they please in their language. But as technical terms, the desirability of a fixed sense or definition cannot be exaggerated. Cannan himself says "The first thing to do in economic, as in all other discussions, is to make sure that we are all talking about the same thing."[1] In this book, therefore, particular attention has been paid to the clarity and unambiguity of definitions.

On the other hand, it is rather unfortunate that in some other respects even some profound thinkers like Marshall have sought to encumber some departments of Economics with seemingly useless and subtle distinctions and a plethora of terms. For example, 'Capital' has been divided in a needlessly large number of classes like Fixed and Circulating Capital, Production and Consumption Capital, Auxiliary, Floating, Personal and Private Capital, etc., etc.

The object of coining terms is to fix some ideas or conceptions in the mind so that higher theories may be built on the basis of these conceptions. Judged from this point of view the uselessness of this galaxy of terms at once becomes apparent. This is, therefore, the second leading idea with which I have written the following pages, *viz.*, fixed and clear definitions of terms on the one hand and the avoiding of unnecessary multiplication of terms and classifications on the other.

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[1] Ibid P. 42.

It is customary to express gratitude for the writings of some others by mentioning their names. I am indebted to so many in this respect that it will be impossible for me to count them all here. I have, however, mentioned Professor Cannan's name already. A poor pupil like myself has no better tribute to pay than dedicating this work to his erstwhile teacher. In a private letter Professor Cannan wrote to me that there was hardly anything new under the sun. Whatever one wrote somebody was sure to unearth some earlier writing and say that the former was not original because it had been said before by so and so. In the light of this I shall be loth to lay claim to any originality and leave the readers to judge in that regard. My gratitude is indeed great to all the well reputed masters of the science, like Marshall, Taussig, Clark, Fisher, and many others whose names are mentioned in the footnotes in numerous places. And it is none the less so even when I have disagreed and criticised any one or more of them in one place or another in the following pages.

I must, however, particularly mention the names of the Hon'ble Mr. Manohar Lal, M. A. (Cantab) (formerly the Minto Professor of Economics in the Calcutta University, sometime Minister of Education in the Punjab and at present Finance Minister in the same Province), Professor G. D. Karve, M.A., of the Fergusson College, Poona, Dr. Mohan Singh, M. A., Ph. D., D. Litt., Oriental College, University of the Panjab, Lahore and Mr. Kali Charan, M. A., formerly Currency Officer, Lahore, who went through some portions of the manuscript and advised me on several points and two of my own pupils Messrs. Dev Raj Bhatia, B. Com. and A. R. Shibli, B. Com. who helped me in proof-reading.

I am also very grateful to my wife who assisted me so greatly. Without their co-operation the following pages would not have seen the light of the day for many more years to come.

Sanda Road, I. M. KAPOOR
Lahore.
April, 1937.

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CHAPTER X.

PART I

CHAPTER I

INTRODUCTION

The Subject-matter of Economics

What is Economics: old concepts.

Economics has been variously defined. There were people who thought that the main function of the study of this subject was to keep full the coffers of the King or the State. They were known as Cameralists. To them the Science of Economics meant nothing more than the Science of Public Finance. And in the days of Cameralists (16th Century A. D.) the latter Science itself, was in very early stages of its development. During that period kings were laying down the foundations of strong states, wars were frequent, and the expenses of the courts were increasing. Hence they wanted more and more money. It had to come from the people. The industry and trade had to supply it. Thus the necessity of large taxation led to the discussion of economic questions. Cameralism may be regarded simply as an advice tendered by the courtiers to the king as regards the ways by which he could become rich. Their point of view was that of the Ministers of State. Later Cameralists, specially the English, realised this inadequacy of treatment of the subject and tried to remove this defect by giving more and more thought to the condition of the people. They developed a statistical turn of mind and collected facts and figures concerning the subjects of the state. For example, Sir William Petty collected facts as regards land, hous-

ing, shipping, commodities, furniture, plate and money in England in the third quarter of the 17th century. Some serious attempts were made at finding out the total population of England and their annual expenses for food, housing, clothes and other necessaries. The capital value of the land, houses, shipping, "wares, merchandise and utensils of plate and furnitures" was estimated, and the figure of the total quantity of money existing in the country was roughly arrived at. From all this capital and labour of the country, the total income of the nation also was sought to be discovered. Such questions as "how much money is necessary to drive the trade of the nation" were also discussed.

The great fallacy of these people as regards the concept of Economics was that they regarded the state as the 'end all' and 'be all' of the whole universe. Economic problems are neither confined to kings nor to the isolated 'economic man'—a later fiction of the economists long since exploded. Prosperity in general which results from the proper acquiring and administration of resources indeed does not in case of a state or a king depend on its (or his) ability to coerce people into paying more and more taxes. On the other hand it depends on the activities of the state (or king) which in this regard are a reflex of those of the people. If the people know how to acquire and administer resources to their best advantage and to the extent they know this, the state will be prosperous. In other words if the people themselves are rich, they will be a far better milch cow for the king or the state. The chief concern of the economist should therefore

be not only to lay down the methods for making the king rich, but to discover how the sources of the king's own prosperity (*viz.*, the people) may not get dry. The principles of prosperity of the people should be the most important consideration. It is this hen that lays the golden eggs. Let the king take care not to kill it. This fallacy was in fact discovered—as we have seen—by the later Cameralists. It is a pity that their influence did not prove lasting. That line of sound thinking soon got blurred under the influence of other schools of thought, specially the Physiocrats.

Another famous school of thought was known as 'Mercantilism'*. According to this school the central idea of Economics was to make or keep a nation rich by means of safeguarding its money or metallic resources. Under the influence of ideas of this school very serious attempts were made to prevent the export of money or gold and silver bullion. This really is a very crude form of Mercantilism. People advocating this form of Mercantilism were called 'Bullionists.' Enlightened Mercantilism, on the other hand, believed in maintaining the volume of the inflowing stream of gold and silver larger than that of the outgoing one. They said that prohibition of export of gold and silver was injurious to the country. They argued that by exporting a little of these precious metals for purchasing raw materials and spices from the East a larger amount of gold and silver could be brought in by re-exporting the Eastern stuffs to

*The treatment of 'Mercantilism' after that of 'Cameralism' should not be taken to mean that the one preceded the other. In fact the two schools were more or less contemporaries. Mercantilism held its sway in France while Cameralism originated in Germany about the same time (16-18th Centuries A. D.).

other countries. They, therefore, advocated the maintenance of a 'favourable balance of trade.' If a country wants to grow richer and richer, let her export more than she imports and let her then demand gold in payment for the surplus of her exports from the country which thus becomes debtor to her.

These people glorified the merchant whose operations, according to them, brought about the prosperity of a country and supplied the king with treasure. They failed to realise that prosperity did not depend on the amount of money or gold and silver brought in, nor even on the total quantity of money or metals which may exist in a country. Wealth is not money and the entire population is not fed only by that portion of a nation's income which is obtained through the 'favourable balance of trade' *i. e.*, which consists of the value of the surplus of exports over imports. If that were so, England and many other "old countries" would have gone bankrupt long ago because they continued to have an 'unfavourable balance of trade' for quite a large number of years, during the past century and a half.

The phrase 'favourable balance of trade' itself has now become more or less technical. It is clearly seen that for a country to maintain or increase her prosperity it is neither necessary nor indispensable to have a 'favourable balance of trade.' What is essential is the plentifulness of enjoyable goods and services and a healthy and efficient population. On the other hand a country having a 'favourable balance of trade' like India is frequently seen to feel unhappy over the situation in which she finds herself. There is a

growing tendency among countries to buy goods and services of the people of other countries in exchange for services like banking, shipping and civil services etc., which do not swell the balance of trade, rather than for goods which do so. The modern idea is that a country should obtain from other countries the goods she wants, not by exporting other goods in exchange but by rendering services. These services do not enter the statistics of international trade. That being so, a country which is successful in carrying out this policy will always show in her statistics that she is importing goods from outside but not exporting any goods in exchange for them. This position is now regarded as economically, more sound than that of a 'favourable balance of trade.' Thus countries now aim at achieving an 'unfavourable balance of trade.'

According to the doctrine of Mercantilism every country came to be regarded as a unit whose interests were supposed to be in conflict with those of "all the rest, as a great object of each of them was to get as much gold and silver as possible at the expense of the others. Trade between nations was looked on, very much as some barbarians are said to regard trade in general, not as a method of co-operation but as a sort of tolerated robbery. The paramount aim of a statesman seemed to be the making of ingenious arrangements for cheating the foreigner out of some of his gold and silver."*

This policy cannot obviously be followed by every country simultaneously. It means that principles of

*Cannan : A review of Economic Theory, p. 11, 1929 ed., P. S. King & Son.

Economics thus evolved would not be of universal application. Economics would not, therefore, be a science. It will be reduced to the status of national or political strategy. This is perhaps more in conformity with the older term "Political Economy." At any rate, Economics is no longer regarded as the art of enriching a country by means of acquiring an increasingly large quantity of gold and silver. Precious metals themselves are no longer treated as *sine-qua-non* of wealth. On the other hand, it is now frequently seen that when large quantities of gold enter a country her price level rises and her export of merchandise is naturally reduced because other countries shrink from purchasing anything from that country, at high prices. She therefore tries to rid herself of at least some of her gold.*

The third prominent school of thought which we would consider in this connection is known as 'Physiocracy'. This school originated in France (at the end of the 17th century) as a great reaction against the rigid restrictions and regulation of trade which resulted from the doctrines of Mercantilism. Agriculture was most oppressed. Naturally, therefore, the demand for freedom of enterprise or 'Laissez faire' championed the cause of agriculture most vigorously. Agriculture was thus idealised. At first the people

* In 1931-1933 this sounds strange when every country except India seems to sit tight over what amount of gold she happens to possess at the moment. But this is a temporary phase of affairs. Countries like France and America, to which all gold seems at the present time to flow, do not want to create artificial gold mines within their borders. Let us hope that trust and confidence among nations and countries will soon be restored and then the normal economic conditions will prevail once more. Still, however, the tenacity with which countries are sticking to the policy of preventing export of gold unmistakably suggests that the world has not yet shaken itself off from the bullionist dogma which had once so powerfully held the imagination of the people.

advocating the cause of freedom of enterprise and that of agriculture were known as economists. Later because of their belief in the rule of nature they were known as Physiocrats. They believed that the prosperity of a nation springs from those occupations alone "in which *nature* and the divine power combine with the efforts of man in producing or collecting new productions".*

They said, "Increase of these riches can only come from cultivation, from fishing and from mines and quarries". Labour of all other kinds according to them would therefore be unproductive because it did not add anything physical or tangible to the stock already existing; Therefore, they thought that all real income of an individual as well as of a nation ultimately came from land. In agriculture and other extractive industries nature yields not only what human labour consumes, while at work, but also a surplus and this surplus enables commerce and other professions to be carried on. Thus, according to this school, the prosperity of a nation ultimately depends on agriculture and other extractive industries.

We are not concerned here with the ideas of this school as a whole. Enough has been said to indicate what the Physiocrat thought about the subject-matter of Economics.** It must, however, be admitted that there is a large element of truth in their ideas and that, in some respects, they have made a lasting contri-

* Quesnay, quoted by Cannan in his "A Review of Economic Theory", p. 28, 1929 ed., P. S. King & Son.

** For a further account of these schools of thought see pp. 6-36 ibid or Haney's History of Economic Thought pp. 103-192. 1924 ed. Macmillans.

bution towards making clear the true meaning of Economics. For instance, they protested against the exaggerated importance attached to money at that time. Thus they successfully exploded the Mercantilist doctrine of 'favourable balance of trade' serving as the basis of a nation's well-being by bringing in money or precious metals. Again, they rightly protested against the rigid restrictions and regulation of trade and insisted on individual liberty. They did not advocate unlimited individualism as they realised that a person's rights were limited by the rights of every one else. But they believed that the individual knew his interest best and so long as he did not trample upon the legitimate rights of others he should be let alone to pursue any calling or profession which he thought best for himself. Under the influence of their ideas the doctrine of 'Free Trade' as distinguished from 'Protection' was nurtured. Even the biggest protectionist of to-day would admit that their protest against the rigid restriction of trade existing at that time was perfectly justified, as the result of such a state of affairs was that cities and towns within the same kingdom or country had begun to regard themselves as each other's enemies.

But their idea, that the whole of a nation's income ultimately comes from land, was most certainly wrong. The idea of surplus making is indeed very valuable. But the realisation of a surplus of what is produced over what is required for carrying the process of production itself is not confined to agriculture and extractive industries only. A banker is as well a producer as a grower of corn. A carpenter who

makes a chair out of a log of wood is a producer in as good a sense as the grower of the tree or forest from which the log of wood for making a chair has been obtained. Further a musician who produces music is a producer as also the carpenter who has made the flute out of the bamboo, as also the grower of bamboo with which the carpenter has made the flute for the musician. This has been well recognised by all the present-day economists. Thus 'Production' in Economics no longer remains confined to the shaping and re-shaping of matter only. It is not merely the creation of useful *material* objects but also includes the creation of services which are consumed in a single process. For example, the service of a musician is destroyed or consumed as soon as he finishes his song. But it is 'Production' in no less technical a sense than the production of a gramophone record.

Unfortunately this recognition is more or less only formal. Most people think that the present age has outgrown the easy belief that the prosperity of a nation ultimately depends on agriculture and other extractive industries. For example, if that belief were well-founded then a country like India, which is mostly agricultural and which produces other raw materials (from fisheries and other extractive industries) should be very rich; while in fact, she is poorer than other industrial and commercial nations. And yet strangely enough the influence of Physiocratic ideas as regards the basis of prosperity has not yet completely died out. People imperceptibly and unconsciously fall again and again into this error. For instance, although people readily admit that even the labour of

those who do not produce anything tangible is also productive yet the followers of Professor Marshall—the dominant school of economists to-day—somehow believe that production is or can be carried on in relation to material goods only. This is a curious survival of the Physiocratic idea which has not been noticed or of which people are not aware. They say that man does not create matter but only shapes and reshapes it. According to them Production is the creation of any or all the three kinds of 'utility' *viz.* time, place and form. Shaping and reshaping of matter, such as when a carpenter makes a chair, is known as the 'form' utility. When a merchant buys to-day and sells to-morrow he is producing 'time utility' or again when he is buying at one place and selling at another he is creating a 'place utility'.* This is nothing but merely a relic of Physiocracy. As has been said before, they admit that the labour of a doctor, a nurse, a professor, or a judge, is also productive. And yet it is not known what kind of 'utility' out of the above category do they produce. Is it a 'form', 'time', or 'place' utility?

In a very large part of even modern economic literature, undue emphasis is put on the production of material goods. This tendency reduces Economics to the status of merely a biography of goods. The central idea should be ' man ' rather than goods. These goods are, after all, only a means to an end. But an exaggerated weight given to the so-called ' Wealth ' results in man himself being regarded as a means of producing goods and not as an 'end' in himself. This tendency reaches its climax when as shrewd and astute an economist as Irving Fisher, under the influence of the by-gone days of slavery, begins to treat man also

*Marshall: Principles of Economics. p. 63, VIII ed. Macmillans 1920.

as wealth (human capital).** He is not alone in this. As he has himself pointed out, there have been many (from Petty down to Engel and Nicholson) who "have tried to assess the exchange-value of human beings."

Another anomaly that results from the Physiocratic practice of regarding wealth as something consisting of material objects is readily seen, when we begin to compare two persons or two countries, possessing exactly equal amounts of gold and silver, and other kinds of material goods, either at a particular *point* of time or during a period of time. They cannot be regarded as equally rich or wealthy. We have to take into consideration the needs of the two individuals or countries as well as the circumstances under which they have come to possess these equal amounts of material goods. For instance, one of the two persons in the illustration may have to work for longer hours and under unhealthy or unattractive conditions for earning the same income or obtaining the same amount of the stock of material goods as the other man. And he may also have a larger number of dependents. Obviously, the first will not be regarded as rich as the second, because the second has greater leisure and opportunity to enjoy life. The same applies to countries. Thus, obviously the prosperity of a person does not merely depend upon his material possessions either in the form of income or in the form of a stock existing at a particular point of time. Other circumstances have to be taken into consideration. Moreover, to regard these material

** See his 'The Nature of Capital and Income' p. 5, 1923 ed. Macmillans.

possessions as wealth is to confuse the end with a particular means of achieving that end. The end or object is prosperity and the material possessions are only a particular means contributing to prosperity but are not prosperity itself. If they were so, no such thing as 'misery in plenty' would exist in this world. But we know, to our own cost, that it exists and exists in a very real sense too. All material possessions avail nothing to a man who hasn't the capacity to use and enjoy them. And, secondly, although everybody admits that production of goods and the potential capacity of the world for producing them has increased within the last decade, yet he will be a bold man who, in view of the severe depression which the world has experienced during that period, can say that the world is more prosperous now than it was before 1914. Don't we see granaries full of corn in one part of the world and yet people starving in another? Does the existence of these material goods without being supplemented with the co-operation of man with man and country with country contribute even a single iota towards the prosperity of the world?

Besides, to treat 'Land' even as a factor or agent of 'Production' is again a lingering belief that after all there must be some truth in the Physiocratic tendency of idealising agriculture. As will be seen in the later chapters of this book land is not an independent factor or agent of Production but only a particular variety of capital.

Yet another example of the survival of the influence of the Physiocracy is at hand. A reference was made

above* to the modern tendency among countries to buy goods of other countries not with goods but with services rendered. This results in an 'unfavourable balance of trade' and speaking economically people regard this position as more sound for a country. Still a little consideration will make it clear that there is no fundamental difference between exporting either goods —the physical embodiment of services—or the services which bring those goods into being. After all we have to export something in exchange for our imports. No country can go on importing indefinitely from other countries without exporting something to them in exchange. And it matters little whether you export material goods or non-material services. There is no greater 'intrinsic' value in either, to give it preference over the other to be kept within or to be sent out of a country. To cherish the belief that you can make your country rich by exporting labour (*e. g.*, that of bankers or of civil servants) and by keeping or bringing material goods in your country is again nothing short of Physiocratic idiosyncracy. A country may encourage emigration either to rid herself of her surplus population or for political reasons. But that does not make labour as such any the less valuable than the material product of labour. This tendency gives satisfaction only to those who look with favour on the 'visible balance of trade' and cannot see beyond the narrow horizon of material goods as the only or the most important constituent of wealth.

Many more schools of thought have arisen in the past, in economic matters. But we need not take

*On page 5.

notice of them all. Enough has, however, been said to show what kind of ideas about the subject-matter of Economics have been held before and how in some cases they were wrong and in others incomplete. Let us in the next chapter give some modern examples of mistaken ideas held about Economics.

CHAPTER II.

Definition of the Subject.

What is Economics: The modern concepts. We shall take the following six definitions and see how far they are correct:—

(1) Economics is the science of Wealth. (*Fisher*)

(2) Economics is the science of *Material* Welfare. (*Cannan*).

(3) Economics is the science of Value. (*Seligman*)

(3a) Economics is the science of Price. (*Davenport*)

(4) Economics is a study of mankind in the ordinary business of life. It examines that part of individual and social action which is most closely connected with the attainment and with the use, of the material requisites of well being. (*Marshall*)

(5) Economics is the study of the social aspect of making a living. (*Clay*).

(6) Economics studies the wants of man and how they are satisfied. (*Richards*).

The first of these definitions uses the term "Wealth". This has the sanction of long usage behind it. The difficulty as regards this definition is that there is no unanimity as to the meaning of the term. Fisher would make wealth synonymous with 'material objects owned by human beings'. Marshall says that a man's wealth consists of material objects and such non-material external ones 'as are used to obtain material goods'. Cannan regards wealth as material welfare. According to Seligman, wealth must possess four qualities *viz.*, utility, scarcity,

appropriability and the quality of being external to man *i.e.*, objectivity. We can say briefly that according to Seligman anything exchangeable is wealth.

Now, according to the rules of Logic, a term which itself requires definition should not ordinarily be used in the definition of another term. This definition, therefore, suffers from the defect of ambiguity. This is quite a sufficient ground for its rejection. But there are still stronger objections. This definition is really derived from the Physiocratic conception of Economics which we have already discarded. It hides the really important consideration *viz.*, 'man', from our view, and fixes our attention on material objects which, relatively speaking, are not so important. This is a very undesirable tendency and, as has been pointed out before, it results in man being regarded as a mere tool. If, however, the term 'wealth' is taken to mean the state of being 'well off', or, prosperity in general, then there is nothing wrong in defining Economics as the science of wealth, except that it is not a desirable practice to define a science in terms of the advantages or benefits which it yields. This practice tends to give an appearance of Art to a science thus defined.

There is, however, a special advantage in taking 'wealth' in the sense of prosperity. It is that by doing so we avoid the anomaly of the following position. Suppose, by some discovery or invention we are able to make food or any other useful object so plentiful as to make it freely available to any body as much as he likes. Then before it was made free it would be regarded as 'wealth' in the

former sense. However, its unlimited increase will not be an increase but a decrease of 'wealth', because just like other free goods such as sun, air, etc., it will no longer be wealth. But, if 'wealth' is understood in the latter sense, then certainly its unlimited increase will be an increase of wealth in so far as this is bound to make men more prosperous. The larger the amount and the number of free goods in a country, the more prosperous its people are bound to be.

The second definition aims at making Economics a science of 'material welfare'. There are, indeed, several kinds of welfare. Thus, for instance, marriage, friendship and good neighbourhood of honest and straightforward men are said to lead to 'social welfare'. Frequently, a bachelor is unable to secure a lodging in Indian cities. He must feel how married couples are socially far better off than himself. Similarly, to safeguard one's rights and to perform one's civic duties is said to lead to one's 'political welfare' and to hear a clergyman's sermons and such other acts are supposed to lead to one's 'spiritual welfare'. Then again in the phrase 'maternity welfare' we use the term welfare to imply physical health of woman during the period of delivery. When Professor Cannan says that although there is no distinct line of demarcation between one kind of welfare and any other, and that one kind of welfare gradually and imperceptibly shades into others, he is certainly right. For instance, an honest act may lead to spiritual as well as to social welfare. To take marriage, again, it is said that it is chiefly conducive to one's 'social wel-

fare'. And yet one's 'spiritual welfare' is greatly made or marred by marriage or by successfully avoiding it. Who can deny the truth of the saying that the flag follows the trade or its reverse? Here, obviously political and commercial interests are seen to be promoting each other. All kinds of welfare, therefore, are mutually dependent and supplementary. But Professor Cannan is again perfectly right in saying that this inability to isolate one kind of welfare from others in actual practice should not prevent us from having a department of study for each. Even if we are not able to separate one kind of welfare from others in actual practice, we can at least imagine their separate existence for the purposes of study only. According to this classification we shall be supposed to study 'spiritual welfare' under Religion and Philosophy. When we fix our attention on 'physical welfare' of man we shall be studying Physiology, Medicine and Hygiene. Similarly under Politics and Civics we study another kind of welfare which results from man's civic rights and duties *e.g.*, whether he is a slave or a free man or whether he is the subject of an alien rule or a citizen of an independent state, etc. According to Professor Cannan, therefore, there is nothing wrong in having a department for the study of 'Material Welfare'.

If this line of argument is followed to its logical extreme, then every branch of knowledge will be supposed to study human welfare of one kind or another. And there will be some departments of study which it will be difficult to classify. For example, what about Art? Do we study a man's

'spiritual', 'social' or what other kinds of welfare under it? Similarly, what kinds of welfare will physical sciences be supposed to study? In so far as they lead to the invention of destructive weapons of war, they may be condemned as leading to destruction of welfare rather than creation of or contribution to it. But, in so far as they lead to enormous increases in the production of goods and services which men enjoy these sciences may range with any other. A study of physical sciences sometimes, and perhaps always, leads to spiritual advancement—so much so that one day man may experimentally discover truth about philosophical concepts of God and soul etc.

As a matter of fact and practice, although it is true that every branch of knowledge confers or is likely to confer some great benefit on man, yet nobody defines a science in terms of benefits or kinds of benefits which its study yields. Science, like inanimate objects and services may be utilized for the advancement or for the destruction of man. And, if they are employed for the latter purposes by some misguided souls, that is no condemnation of these sciences themselves. Just as a gun can be used for self-protection against wild animals as well as for killing innocent people (and yet nobody blames or credits the gun itself but the use which is made of it), similarly a knowledge of Economics, Politics, Electricity, or any other science may be used for the welfare or for destruction of mankind. Knowledge of each and every science ultimately produces important repercussions on all kinds of welfare. We cannot, therefore say that this or that science studies the causes of

this or that kind of welfare and therefore no science should be defined in terms of any kind of welfare.

Moreover, the meaning of 'material welfare' is also not quite clear. What does this phrase really mean? Does it mean the welfare that results from the possessions and use of *material* goods? Then, of course, this definition too is based on the Physiocratic conception of Economics. What about the welfare resulting from the use of services of nurses, musicians and cinema shows etc. Surely the services of these are not *material* goods and equally surely the welfare which results from their use does not, in any fundamental respects, differ from the one resulting from the possession and use of *material* goods such as medicine, musical instruments and cinema accessories, which the nurses musicians and the cinema shows make use of. Moreover, the services of a nurse, a musician and of a cinema-show may and do contribute as greatly to one's spiritual welfare as to that of any other kind. Welfare resulting from the use and possession of material goods cannot, therefore, be exclusively described as 'material'. Further the chief kind of welfare which can be attributed to the use and possession of goods and services does not again exclusively result from them alone. Free gifts of nature like sun, air, water etc., contribute to all kinds of welfare as much as and perhaps more than the other material and non-material goods. And yet, Economics does not treat of these free gifts as the cause of this or that kind of welfare.

Professor Cannan does not really explain what he means by 'material welfare;' he thinks the idea is

clear enough. Professor Cannan says that a man's 'material welfare' depends on: —

(*i*) his original qualities,

(*ii*) his training and the improvements made in his surroundings,

(*iii*) soundness of his decisions between different courses,

(*iv*) and his choice between 'material' and other kinds of welfare.

Besides these causes there are three more, according to him, in case of a society *viz.*, the ages of the people, the degree in which they co-operate and their numbers.

These are no doubt important causes of one's welfare in general or of that of a society. But again the kind of welfare resulting from these causes is not exclusive. They lead to one's spiritual and other kinds of welfare also. Besides, there is something like *chance* in this universe of ours. The existence of all the causes enumerated by Professor Cannan will not ensure any definite amount of welfare of the 'material' or any other kind. Lucky people seem to blunder through to a fortune. Very efficient people continue to rot through lack of 'chance' or opportunity for better things.

Professor Cannan thinks that just as 'health' means the state of being free from disease, similarly 'wealth' should be taken to mean the state of being 'well off.' This may be explained as being free from cares or anxiety for securing the necessaries of life. And, if 'material welfare' is understood in that sense

then, again, there is no objection against this definition either, except, of course the one urged against the first *viz.*, that it is not desirable to define a science in terms of benefits it confers on man.

The two definitions *viz.*, that Economics is the science of Value and that it is the science of Price may be taken together. The first point against both of them is that they too suffer from the defect that the terms 'value' and 'price', themselves need defining. In Economics these two terms mean something different from what they mean in ordinary language and in every book on the subject their technical sense is explained later than that of 'Economics'. A layman coming across these definitions may feel puzzled at being told that Economics is the science of value. He may say that there is no science which is valueless or which possesses no value. What is it that makes only this science as one of value ?

If, however, the term 'price' be understood in a very wide sense and not in its technical sense *viz.*, either that it is value in terms of money or that it is the rate at which an economic good exchanges in terms of any other, then this definition makes the nearest approach to truth. Let us explain our meaning further. Ordinarily, people think that the phenomenon of price arises only as a result of exchange economy and that when buying and selling is abolished and is replaced by some other arrangement of distribution of goods and services such as the one proposed under Socialism or Communism etc., this phenomenon of price will disappear. But if the term 'price' is understood in the sense of 'cost' then it becomes obvious that the

question of price exists all through. It is there in an isolated man's economy as well as under Communism or Socialism. Every man as well as every collection of men must consider the cost (in terms of money or sacrifice) of everything which they want to achieve. And this applies to their efforts for spiritual, social, political or any other kind of welfare. We can work for our advancement at any time and in any direction. But we invariably and instinctively put the question to ourselves to achieve this or that 'at what cost'? Except for the enjoyment of free gifts of nature or to some extent, presents and bequests from friends and relatives we must make some direct effort or must sacrifice some material resources for securing the services and material goods of others. And besides the direct efforts or sacrifice for securing any particular advantage, we have also to forgo enjoyment or advancement of some other kind. For instance, let us suppose reading of scriptures furthers one's spiritual advancement; then one has not only to spend money etc. for buying those scriptures but also to go without the advancement of some other ends during the time one spends in reading them. One might have earned a larger income, or one might have enjoyed a cinema show or the company of one's friends. In fact all economic questions turn out ultimately to be the problem of weighing the costs of the alternative ways of achieving anything. Jesus said, "Knock and it shall be opened unto you." This might lead the simple folk to think that it does not cost any thing to get the door of the Kingdom of Heaven opened to them. But this again is a question of cost. For in another

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place Jesus has also said that it is easier for a camel to pass through the eye of a needle than for a rich man to enter the Kingdom of Heaven. If we want that, then we have to 'take up our cross.' Thus, even the spiritual advancement is a matter of paying the price. It may sound vulgar but it is nevertheless entirely true. Even under the department of Economics known as 'Consumption', the main problem is how a man decides which of his innumerable wants he will satisfy at the cost of not satisfying others either for the time being or for good. In other departments of Economics the fact that the question of price or cost is the central one is so obvious that no pointed reference to it need to be made here.

And yet this definition of Economics is so brief that without the elaborate explanation given above it hardly conveys any adequate idea of the kind of problems forming the subject matter of Economics. Economists take the term 'price' in the sense of value in terms of money or the rate at which one thing exchanges for another. It is, therefore, inadvisable to use this term in the definition of Economics.

The fourth definition is also quite vague and indefinite. What is the ordinary business of life? Is it not eating, sleeping etc? Economics does not surely treat of these things as such. All these actions of man have an economic aspect. But nobody imagines Economics to tell how to sleep well or what to eat and what not. But even if 'ordinary' business of life is taken to mean the ways of earning a living the definition does not appear to be correct. Because, while it is true that the knowledge of Economics is

helpful in practically all callings, professions and occupations, still Economics does not teach any single profession. In fact no science does, nor is it the business of any science to do so. That really is the function of an art, and not that of a science. A professor of Physics is not necessarily a good toy-maker nor a professor of Chemistry a good Chemist and Druggist. Economics then is not an art which teaches men any particular way of earning a living.

Marshall's further elaboration of this first sentence of his definition does not improve matters. He says "it examines that part of individual and social action which is most closely connected with the attainment and with the use of the material requisites of well-being." In the first place the words "most closely connected with" are not definite and precise. Secondly, "material requisites of well-being" show the force of Physiocratic influence in the mind of the writer. It should be noticed that this explanation does not bring Marshall's definition in comformity with that of Cannan as an unwary student may think. While Cannan refers to material well-being, Marshall is really thinking of *Material requisites* of well-being. As we have seen, the services of lawyers, judges, policemen, etc., are certainly requisites of well-being, but they are not 'material' at all. They are as non-material as 'well-being' itself. Well-being again is of various kinds. One may acquire, for instance, highest *spiritual well-being* by contemplation and meditation without the services of the police, the magistracy, etc. These then will not be regarded as requi-

sites of spiritual well-being by any one. Meditation and contemplation certainly are requisites of at least one kind of well-being *viz.*, spiritual. But Economics deals with neither the material nor the non-material requisites of spiritual or any other kind of well-being. Indeed, as we have seen above, it does not deal with well-being at all just as no other science does. Its principles can be used, for increasing or destroying the well-being of any kind just as the principles of any other science can be.

The fifth definition confines Economics to the study of the social aspect of making a living. Now Economics examines the effects of actions on individuals as well as on society. In Economics we study wants and their satisfaction along with many other things. Most wants are essentially and primarily felt by individuals and their satisfaction is a private affair. A man can and does satisfy quite a number of his wants by his individual efforts and practically with the help of nobody else. Economics concerns itself among other things with the principles of satisfying these as well as social or collective wants. Thus, the satisfaction of some of the wants of single individuals gives rise to as serious economic problems as the satisfaction of collective wants. And yet the satisfaction of quite a large number of wants of individuals have practically no social aspects. The principles of Economics apply to an isolated man as much as to collections of men.

Secondly, the reference to 'making a living' in this definition will make Economics to be a science of

professions and callings in general. This would exclude the discussion of some of the very important departments of Economics such as 'Consumption', and 'Public Finance' from its subjectmatter.

The sixth definition would make Economics "a study of wants and the ways in which they are satisfied." This is either too narraw or too wide. It is too narrow because it emphasises a little too much a particular department of Economics *viz.*, 'Consumption'. It is true that mostly the aim of human activity is to get satisfaction through the use of its products. But, in Economics we discuss many other important problems relating to the Production, Exchange and Distribution of goods and services which are consumed in order to get satisfaction.

On the other hand, this definition is too wide because it would include many other things in Economics which should not really be included. For instance, it would make Economics a study of *all* wants and every thing about them. Now Economics is only concerned with a particular aspect of certain wants. The wants which interest Economics are those for satisfying which the available means are scarce. A man may feel the wants for air, water, or sunlight etc. But the means to satisfy these wants are unlimited and hence no economic problems arise as regards these. But wants for food and clothing etc. certainly give rise to economic problems because the means to satisfy them are scarce. Even as regards these wants Economics does not study every thing. For instance, it does not care for the spiritual, social or moral aspects of satisfying this or that

want. It is simply interested in the study of the comparative costs or sacrifices involved in the various ways of satisfying them. A baby's want for food may be satisfied by its mother suckling it or by a wet nurse. Whatever the way in which a particular want is satisfied the question is whether the cost of satisfying it is greater than the satisfaction obtained. Economics, therefore, is not interested in the ways, as such, in which the wants are satisfied, but in the means or expenditure of money, time and other material and non-material things, involved in different and alternative ways of satisfying them. A man may satisfy his soul by hearing the sermons, or by giving alms or by reading scriptures. The question is which of these is likely to give the best result at the least expense under any set of circumstances. A baby's want for food may be satisfied by its mother or by a nurse. The two ways as such are not important for Economics. It is concerned only with the various problems of expenditure and the result which each of these ways gives rise to. The mother does not compare the amount of her sacrifice with the commercial reward which she is likely to get for it. Those days are gone when children were brought up with an idea of getting support from them in one's old age. The lesson which we, in our boyhood, learnt in the Hindustani First Primer—*viz.*, "*Ma bachche ko god men lie baithi hei. Bap huqqa pi raha hai aur kahta hai ke bachcha jab bara hoga ap khaega hamen khilaega*", no longer represents the feelings of parents. That last portion of "*hamen khilaega*" is now gone beyond the possibility of return. Children are not brought up

by their parents with a commercial motive. Moreover, neither the services of a mother to her baby are included in the calculation of the labour supply of a country nor is the satisfaction rendered by them added to the national income. But certainly a mother would consider the cost of employing a nurse and the nurse would consider the rewards for her labour. These are really economic questions.

It is true that the satisfaction of all wants has an economic aspect. Apart from the direct cost, there are other things which one has to go without while satisfying any single want in any particular way with the limited means at one's command. But Economics as such does not deal with every thing about all wants and the ways of satisfying them. It simply "studies human behaviour as a relationship between ends and scarce means which have alternative uses."* All economic problems are really and ultimately the questions of those wants for satisfying which the available means are scarce and the ways of using those means are various. If wants are limited and the means to satisfy them unlimited there would be no need for studying Economics. But the position is just the reverse. Life is short, time, energy and other resources at the disposal of man are limited and are capable of alternative uses. His wants are innumerable. He must therefore pick and choose.

We can, then, define Economics as the science which studies human activity directed to satisfying those human wants for which the available means are scarce

*Robins 'Nature and Significance of Economic Science—p. 15 Macmillans.

and have alternative uses. In short, it studies human activity from the point of view of cost as compared to the result. This is why the definition of Economics *viz.*, that it is the science of price was characterised above as making the nearest approach to truth, provided, of course, that the term 'Price' is taken in a very general sense. We can add that the art of *costing* which is very much restricted in its application is the direct off-shoot of Economics. Every man compares the subjective and objective costs of every thing he wants to achieve. It simply means taking the economic aspect of the question into consideration.

This definition truly covers the whole field, and includes all the departments of Economics. Under Production, we study the cost and ways of creating of those goods and services, (or making them available) which people use and enjoy. Under Consumption we consider the satisfaction obtained from these goods and services. Under Value and Exchange we consider how they reach those persons who want them. And under Distribution we study the proportions of costs and products, which fall to different parties to Production under different sets of circumstances. Under Public finance we study how the state ensures the working and progress of this whole system.

However, if we ask a further question; what is the aim or object of a man's activity in relation to scarce means which have different uses? the answer is twofold. In the first place man endeavours to get over the scarcity of means to his satisfaction. He tries to increase the supply of desirable objects as much as possible, so that his enjoyment may increase. Second-

ly, he tries to get the maximum of enjoyment by the use of means or resources which he has got already. In short, the object is to maximise enjoyment. And if Economics *must* be defined in terms of benefit it confers, we can say that it "studies the causes and cures of poverty and the principles or tendencies which people follow in their efforts to secure prosperity." In this definition 'poverty' should be understood in the sense of scarcity of necessaries of life; and 'prosperity'* is achieved, not when poverty is only removed but when a man has some surplus of resources for his enjoyment over and above the necessaries of life. This last phrase, again, is a very wide one. Its sense need not be narrowed down to food, clothes and shelter, etc. Thus, if a man has developed a passion for knowledge, or a certain kind of social reform without which he cannot live (and Mahatma Gandhi's love for anti-untouchability work is a case in point) then most certainly the removal of scarcity in that respect is an economic problem and he will feel prosperous only when he makes such necessaries available to him as much as he wants.**

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*'Prosperity' may be regarded by some as equivalent to "material welfare." Thus, this definition mostly conforms to that of Prof. Cannan. However, this term is preferable in so far as it does not suffer from the misleading associations like 'material' etc. All that is implied in the text here, is that it studies the human tendencies and efforts made to remove poverty and to achieve prosperity. Causes of prosperity or poverty may be human or divine. We are, however, simply concerned with the selection of man's efforts in relation to his achievements.

It must be admitted that 'prosperity of the individual and the society' has been recognised to be the subject matter of Economics from the very early times. The account of the three schools of thought given above brings this out very clearly. The mistake of these and other schools of Economic thought was not that they had not understood the true aim of the subject but that their interpretation of tendencies and efforts directed to achieve that end was wrong.

**However "We must never forget that the welfare of a people is to a very

It is worth noticing that even if there is at any time no poverty in the world (in the sense of inadequacy of necessaries of life for some sections of human society) it will still be worth the peoples' while to study the principles of making the available resources go farthest in yielding satisfaction and developing those resources which tend to increase their prosperity.

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great extent determined by the physical and moral qualities of that people, and that it cannot be the economist's business to make known the rules to be observed in order that these qualities may be developed. It is not for the economist to lay down the rules of health for mankind. It is not his business to ascertain the best systems of diet or of education, or to discover means for counteracting drunkenness. Some people would include, within the scope of economic science everything connected with material welfare, however remote the connection might be. Let it be stated here once and for all that no denial of the great value of the personal causes in material welfare is implied by the exclusion of such causes from the scope of economic inquiry.

The same course has to be adopted with regard to the natural causes, including climate, situation, and the fertility of the soil, and in fact all those external advantages upon the presence or absence of which the wealth or the poverty of many a country depends. We do not expect economic science to teach us the rules which a people should apply in order that a river, which has proved to be an affliction, may be converted into a source of prosperity, or in order that refuse which pollutes the air may become the cause of more abundant crops. Such an inquiry would be interesting, no doubt; but the fact that a subject possesses interest even from the point of view of wealth does not bring it within the range of economic science.

There are social as well as personal and natural causes of well-being. As a contributory cause of wealth or poverty in a nation nothing can be said to be immaterial. The moral and physical qualities of its people cannot be regarded as immaterial; neither can its natural resources or its laws. Good laws, incorruptible judges, and an efficient police are indispensable conditions of material welfare; is that any reason why economic science should teach us what provisions the law should contain so as to be effectual as a means of protecting property?" (Principles of Economics Pierson-Vol. 1 pp. 7-8, 1913 ed. Macmillan.)

CHAPTER III.

THE NATURE OF ECONOMICS.

The Derivation of the term.

The term 'Economics' is derived from two Greek words 'Oekos' which means a household and 'Nomos' which means law.* In Greece 'Oekonomos' was a person who laid down laws for the household, and by Oekonomia was meant the science of the management of the household. From this it was a short step to call laws laid down for the household of the nation as 'POLITICAL ECONOMY'. But that would imply Politics, and not Economics as we understand it to-day. In fact, it was used in the sense of 'Politics' for some time. Rousseau used it in that sense. Then Sir James Stuart in 1767 gave the term its present meaning and in 1877 J. M. Sturtevant abbreviated it and called his book "Economics or the Science of Wealth."

The Nature of the Subject.

To us to-day, it is clear that the problems of 'Prosperity and Adversity' 'Riches and Poverty' 'Affluence and Scarcity.' 'Well-being and Misery' come within the purview of this subject. Let us explain this with the help of an example.

Suppose a weaver has produced cloth. Before producing it he must have decided in his mind the use which he was going to make of it. He may have thought to give it away in charity or present it to his son-in-law or wear it himself or sell it for money with which he

* This derivation of the term is agreed upon by every writer. See Chapman's Outlines of Political Economy p. 1. 1921. Longman Green & Co. 1921 ed.

would buy food etc. If he intends giving it in charity he is comparing his spiritual satisfaction accruing therefrom in this or the next world with the cost or sacrifice involved, first in making and then, in giving it away. If he is thinking of giving it to his son-in-law, he is comparing the enjoyment of seeing those dear to him, well-clothed or of being praised by his associates for his magnanimity, with the same thing *i.e.*, cost or sacrifice as before. Similarly, if he intends to wear it himself or sell it, he is comparing the enjoyment which its use, or the use of the value he gets for it, will yield with the cost as before. If in all or any of these cases the cost is greater than the enjoyment or satisfaction he expects, then he will not incur the cost, as he thinks he is not likely to be better-off for undertaking the manufacture. By incurring the cost he will be the poorer. Similarly, there may be different ways of producing cloth. And he is sure to select the easiest and the most profitable known to him.

Now it is sometimes wrongly supposed that only one particular end for which he wants to make the cloth *viz.*, for his own use or for sale, is the economic one; while the fact is that any of these ends *i.e.* whether he wants to give the cloth to his son-in-law or to a priest or any other needy person, is as economic as the one which is popularly but, as was said above, quite wrongly, supposed to be. So long as the satisfaction expected from the result is greater, be that satisfaction spiritual, physical or social, than the cost, the end or motive is perfectly economic. Economic motive is the motive of gain in the balance and this applies to every human activity, no matter whether it be directed to gain of health or

of material goods or services or fame, or solace to restless souls. But, apart from the end or motive for doing a thing, that particular *way* of doing it is the economic one, which is the easiest. Thus, this comparison of the resultant gain with the cost of doing a thing and the selection of the ways and means of doing it indicate the true nature of the subject unmistakably.

The principle of Maximum enjoyment at the minimum cost or sacrifice.

The most prominent characteristic of human nature seems to be that man wants to get the greatest amount of satisfaction with the least possible effort. This is the most central fact in Economics. If there are more ways than one for doing a thing, people will choose the easiest. This is known as the 'principle of least sacrifice'.

Apparently, there is no reason to believe that any one will challenge this elementary principle when it is stated in such an innocent way. But it is feared that some hearts will begin to throb violently when the implication of this principle is pointed out. According to this most elementary principle of Economics 'Back to the Spinning Wheel' movement, upon which so much stress is laid by Mahatma Gandhi, is against human nature. Plying the spinning wheel is most certainly not the easiest way of producing yarn. If the object is *merely to produce yarn* it can most surely be done at a far smaller expense of human energy and other resources, which should be conserved and husbanded rather than lavished wastefully. The amount of resources thus released could then be devoted to some better purpose. To condemn labour-saving machinery on the ground that it creates unemployment

is really a confession of bankruptcy of imagination. Employment in itself is not the goal. We seek employment because we want to achieve certain ends. It is no good to *make* work. Man's wants are innumerable and if a way is discovered to satisfy some of them which involves a smaller expenditure of resources than was necessary before, such a discovery should be welcomed as an achievement inasmuch as it opens a way out to the satisfaction of certain other wants and thus leads to progress. It would be absurd to justify the doing of a thing in a longer way when a shorter one is at hand, on the ground that the latter would leave us to sit idle for some time. It means that we imagine ourselves to have reached such limits of perfection that there is nothing further to achieve for which we could bend our resources thus released.* It is not, however, contended that this argument alone is sufficient and final to condemn "the Charkha" or the "Khaddar Movement" from the economic point of view. For we cannot maintain that in deciding upon the way of producing yarn, the advantages or benefits of no other

*Perhaps the following quotation from Robinson's "The Structure of Competitive Industry" (P. 3, 1st ed ; 1931 Nisbet and Cambridge University Press) would not be out of place here. "We ought to regard every man added to the unemployment figures as success, as an achievement, provided that, we still get as much as we did before. It is only because the second half of our industrial organization, the re-employment of unemployed, has broken down, that we do not so regard it. So long as the curing of the consequent unemployment remains imperfect, the gains of efficiency are worthless. For the same quantity of things produced by eight men while two stand idle is seldom to be preferred to that quantity produced by ten men, since the leisure is given not to those who wish to enjoy it, but to those who would prefer to be occupied."

This sounds like Mahatma Gandhi's worship of the 'Daridra Narain'. Does n't it? In this connection I would strongly recommend to the reader an extremely interesting discussion on "Shorter Working Time and Unemployment' given in the March 1932 Supplement of the American Economic Review, pp. 8-15.

kind than only that of getting the largest quantity with the least effort should be kept in view. 'Man does not live by bread alone ' and, therefore, considerations of material gains are not the only ones which prompt human action. We have said above that the attempts to achieve *all* kinds of ends can be studied from the economic point of view. And if the object is not merely to produce a quantity of yarn but certain other aims are also combined with it, such as, political or spiritual, then from even the purely economic point of view, as much can be said for as against this movement. A full discussion of this problem cannot, however, be undertaken here.

As has been said in the definition of the subject, Economics aims at studying the efforts made by man for removing poverty and securing prosperity. Now, as everybody knows, prosperity cannot be achieved without some effort or sacrifice. But many people, specially in India, have too great and too easy a belief in Fate, *Kismat, Karma* or luck; so much so that they would not make even as great an effort as they are capable of, simply because they believe that they will get what is in their *Kismat* without any special effort on their part. Mr. Edwin Montague rightly described this attitude as 'Pathetic Contentment'.* On the other hand people in the west have a greater belief in the common saying that " man is the architect of his own fate". They try to find out why they have only as much of the amenities of this life, and not more, and how they can increase them. They are driven by that force which Marshall calls

*Perhaps this frame of mind is the result of inculcation, for hundreds of years, of the doctrine of renunciation, and reduction of wants. It was

'Divine discontent'. They try to remove the causes of poverty.

Is Economics a Science or an Art?

The statement that Economics studies the causes and cures of poverty etc., should not mislead any one into thinking that Economics teaches any remunerative business. Although it discusses Banking, International Trade, Speculation and many other concrete subjects it does not undertake to enable a man to become expert in any particular business. It is true that a knowledge of its principles is very useful in all kinds of business yet just like all other sciences it embellishes the intellect of a person rather than teach him any particular art. Economic principles are at work everywhere and at all times, although the manifestation of their working is not always quite apparent. All business men, —nay all men and women make use of economic principles in their daily work. The law of gravity works just the same, whether anybody has studied Physics and recognises it in a case when a physical object falls to the ground, or whether one does not know this law, but acts according to his general experience. Similarly, in all economic efforts of men, the 'law of minimum sacrifice' and the motive force of self-interest (in

thought that the practice of renunciation was necessary for attaining 'spiritual welfare' because without it one could not practise contemplation and meditation. His attention would be attracted towards worldly objects in the absence of which he would feel miserable. Of course, 'spiritual welfare' was thought to be of higher value than worldly prosperity. It is now realised that there is no mutual conflict between one kind of welfare and another. There are many really noble souls among the rich. The conflict arises only when people get so much engrossed in one kind of welfare as to forget every other kind. It is, however doubtful how far the spiritual welfare attained by a very few persons in this world by means of practising renunciation has been a sufficient compensation for the loss of prosperity of such a large number of people due to this attitude of passivity and fatalism and whether that has helped in any important way those multitudes of people in attaining even a particle of spiritual welfare.

some instances sufficiently broadened and enlightened) are working, whether anyone is aware of them or not. The only advantage—but which is by no means an unimportant one—is that in case one has made a systematic study of any science, one can take greater advantage and develop several arts according to its principles. Economics, therefore, is a science and not an art of any particular kind of business.

It must, however, be pointed out that there is no well-marked line of demarcation between the Art and the Science of Economics. As Pierson remarks : " .....No clear boundary line can be drawn between explaining and prescribing economic rules.....Is there any wide gulf between " pointing out the merits of a single monetary standard as contrasted with the evils of the double standard and stating the conclusion in the indicative mood such as ' that the double standard has injurious results ' on the one hand and making ' a statement in the imperative mood enjoining the use of one metal only as a standard, ' on the other? " An advocate of the doctrine of free trade will show " the evils of the policy of protection. " Is it material whether he puts his conclusion in the form of a statement, that protection is harmful, or of an injunction not to adopt protection.....Indeed, the ultimate object in view in the study of Economic science is to throw light on economic questions of a practical nature.....The function of Economics is said to consist in making known the rules to be observed for promoting "* prosperity. Every science has its corresponding Art; so has Economics. But in this

* Principles of Economics, Vol. I—pp. 3—4. 1913 ed., Macmillan.

case the difference between the two is not quite so prominent as in some others.

Is it Science or Philosophy?

Similarly it may be argued that "on account of recent developments in philosophy and science we are to-day again confronted with the important question as to whether economics is really a science or only a study of values akin to philosophy proper. If economics is a science comparable to physics or chemistry, for example, applications in both private and public life may be possible; if not, the practical value of economic research must be slight, whatever our interest in it on other grounds."[1] The business of philosophy is to attempt some sort of construction in the light of acquired knowledge of some special problem so as to have the largest view possible. Knowledge of disjointed facts, however vast, is no good guide for future policy or action. Man tries to gain from his past experience of particular events. He collects similar experiences together and formulates rules for future conduct. He has a craving for the synoptic view of reality. The attempt to attain this view is the proper sphere of philosophy.

Besides, philosophy includes problems of value, morality, beauty and knowledge. Originally philosophy included the whole realm of knowledge. At the present day it contains only the residue of problems which cannot be put to the test of observation and experience. Frequently it happens that a number of hypotheses fit the facts all equally well. All the available evidence confirms every one of them. Therefore,

(1) Bouke, "A Critique of Economics," Preface, pp. vii, Macmillan, 1922, New York.

mere experiences cannot serve as the means of confirming or refuting one. This, however, is the essence of science.

Every science deals with particular problems. Science is concerned with the things as they are. It does not think that its duty is to discuss the value of phenomena. Here we are simply concerned with problems which can either directly or indirectly be brought to the test of observation and experiment. Hypotheses must be verified. A hypothesis which cannot be put to the test is barren.

Science is essentially specialised in its nature. The motto of science is to divide up problems into as many minor fields as possible. It is true that every group of problems is to be sooner or later intimately connected with some other group or groups of problems. No man can really know his science if he knows his science only. Still we have to concentrate attention on one group of problems, for the most part ignoring all other problems. It is only by such isolation that we can draw generalisations regarding any group of problems.

The world of reality is a universe in which every thing is, in one way or the other, connected with every other thing—in which any thing might conceivably influence any other thing. Hence in studying one aspect of reality we must always bear in mind that the particular group of facts which we are studying might be influenced by many other facts which for the moment we are not considering. It is, therefore, very important to learn not only how to break up, but also how to put together. Science is often blamed for failing to anticipate one thing or the other. The scientist can

consider his problem only in the light of certain knowledge. By overlooking certain possibilities, the results anticipated do not tally with the actual. In this sense, of course, every science is abstract. In every science we study some group of facts and we abstract them from other facts. Some sciences are more abstract than others, but all sciences are abstract. This abstraction brings penalties; anticipations based on certain facts may be falsified by the influence exercised by other factors which we did not take into account. We have frequent examples of this in Pure Economics where pure economic facts are often influenced by facts which are not economic, and the total results therefore do not conform to the anticipated results.

From this it is clear that for the advancement of knowledge we have to do both things *viz.*, split up complex phenomena for the purposes of study as well as to join the results and then generalise. In the study of every group of specialised problems there comes a point where these become inevitably philosophical problems, whether it be Biology, Chemistry or Physics. We reach a point where the hypotheses can not be tested by reference to observation and experiment. At that stage the question which may be under investigation at the moment becomes philosophical.

It is true that in Economics we cannot control experiments in the same sense in which they are controlled in Physics and Chemistry. Besides, the introduction of the element of time in economic experiments leads to the creeping in of uncertainty. We can not but allow considerable time to any factor in an economic experiment to produce its full effects. And

when this is done we are never quite sure that in the mean time certain other factors have not worked their influence unnoticed. And yet for disentangling the maze of human motives and discovering truth about the economic as well as any other aspect of human activity we must make experiments. A shop-keeper makes experiments by lowering or raising prices of his wares in his attempt to maximise profits. A finance member makes experiments with regard to his plans of taxation. A manufacturer makes experiments with reduction of hours or raising of wages or introducing other changes in the organisation of his factory and so on and so forth.

Unless the nature of man or of this universe changes, the study of any complex of problems will always yield the same result. This belief in the uniformity or unity of nature is the fundamental basis of generalisation. If a certain set of conditions does not lead to an identical result every time, we begin to suspect the introduction of some countracting forces. All social sciences like Economics and Politics, however, suffer from the fact that man is always changing. At one time human nature may have been taken as something fixed and unalterable. It is no longer regarded like that. On the other hand, it is now established beyond doubt that human nature, to a very great extent, is mouldable to any shape or form. In a very large measure it is the result of environments. But at the same time sudden changes are not expected even in human nature and generalisations based on experiment and observation regarding man's reaction to certain conditions are fairly accurate.

Inasmuch as Economics splits up the study of human motives and only a particular aspect of human activity comes within its purview, inasmuch as it isolates its subject-matter from other branches of knowledge and lays down its own laws and canons, in asmuch as it arranges facts in a systematic way for studying their collective significance, and inasmuch as it attempts to test the validity of general propositions known as hypotheses in the light of facts, it is undoubtedly a science.

However, as in the former case, *viz*; the question whether it is a science or an art, it must be pointed out here again that there is no real conflict between a science and a philosophy. Science leads to reflection and theorising on the basis of facts and these, in their turn, provide guidance for future conduct in particular situations. Both are then complementary rather than contradictory.

Inasmuch as Economics attempts to take a synoptic view of a man's relations of a particular kind with his fellows and with the universe, it may be described as a philosophy. But as its conclusions relate to individuals as well as to groups of individuals and as it does not aim at studying all kinds of social relations it cannot be described as a complete philosophy of society.

Economics is a philosophy as it consists of theories regarding human actions actuated by a certain kind of motive. It is a science as it attempts to analyse and test theories in the light of facts and experiments.

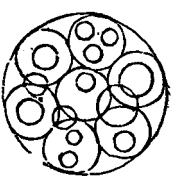
CHAPTER IV.

THE SCOPE OF THE SUBJECT.

The Scope of Economics: Its relation to other sciences.

Some writers have separated the discussion of the scope of Economics from its relation to other branches of knowledge and have mixed up the 'nature' of the subject with its scope. We have, on the other hand, discussed under 'nature' the kind of problems with which Economics deals. Under 'scope', therefore, we shall show the relation of Economics with other sciences and thus indicate the particular field covered by Economics as distinguished from the field covered by other sciences.

Let us represent knowledge as a whole by a circle. Then every single branch of knowledge will have to be represented by a smaller circle or area within this wide circle. Thus the scope of any branch of knowledge can be ascertained by examining the relation of any circle with the larges as well as with all other circles.*



Now sciences may be divided or classified broadly as follows:—

(*a*) Physical sciences dealing with objects in which the manifestation of life is not apparent to the naked eye, such as Chemistry, Physics etc.

(*b*) Sciences dealing with objects in which manifestation of life is quite obvious, such as

*Similarly the nature of any branch of knowledge can be known by examining the contents of its corresponding circle.

Biology, Sociology (in the narrow sense), Politics and Economics.

The latter class may be further sub-divided into sciences:—

(*i*) Dealing with the physical structure of living bodies, such as Biology and Medicine.

(*ii*) Dealing with the motives underlying the relations of individuals with one another and with inanimate objects. These are Politics, Sociology, Economics etc.

Thus by examining the scope in this way we are also led to make our idea about its nature more vivid because

(*i*) From this classification it is obvious that Economics is a science dealing with those relations of 'man' with his fellows and with other objects of the world which are based on the motive of gain.

(*ii*) But, although it makes use of all other sciences, it cannot be said to study man completely. It studies only one aspect of his activity and that aspect is his motive to remove scarcity and secure prosperity, *i.e.*, increase his possessions on the one hand and his capacity to enjoy them on the other. To obtain possessions he is required to put in labour or part with some other material or non-material possessions. Economics studies how he tends to reduce to the minimum his labour or those possessions which he has to part with and increase to the maximum those which he wants to obtain.

Now let us delimit the field covered by Economics more definitely.

We shall take some of the branches of knowledge and see the connection between each of these on the one hand and Economics on the other. Let us first take Mechanics.

Mechanics and Economics.

"In the 18th century almost all sciences including Economics were modelled on the mechanical conceptions. Even today there is a tendency to regard economic matters as mechanical. For example, 'fool-proof' schemes of managing currency are based on this kind of conceptions. But the human society is something which progresses and develops and things which dominate human development at one period may become quite unimportant at another period. The rule of brute force is not quite as important as it was in the past. The same is the case with competition." Changes in human society are brought about not by an outside force as is the case with changes in a mechanism, but by its own will to adapt itself to changing circumstances. A machine has no will of its own, but "a society often sets to modify or counteract tendencies, once it has discovered what those tendencies are." The motive force behind human activity is the wants of man and the scarcity of means to satisfy them. The motive force behind the activity of a machine is the fuel—an inanimate object. It is true that a human body requires feeding as much as, and more than, a machine, yet the reactions of feeding on human bodies are obviously different from what they are on a machine. Beyond a certain re-

semblance in some points, there is therefore no fundamental connection between Economics and Mechanics.

".....It is especially needful to remember that economic problems are imperfectly represented when they are treated as problems of statical equilibrium and not of organic growth. For, though the statical treatment alone can give us definiteness and precision of thought, and is therefore a necessary introduction to a more philosophic treatment of society as an organism, it is yet only an introduction"* "...And the forces of which Economics has to take account are more numerous, less definite, less well-known and more diverse in character than those of Mechanics."**

Physics and Economics.

There is a great analogy between these two sciences. The force of self-interest occupies the same place in Economics as the force of gravity does in Physics. The force of self-interest is constantly at work in all kinds of economic activity. In some cases it is more marked, in others less so, but it is always there. Just as in the Physical world the force of gravity keeps things in space and prevents them from flying, so self-interest in ordinary life makes people do what they think would pay them best. The force of self-interest, however, is not as measurable as gravity. Economics is, therefore, a less exact science than the physical sciences. And it may be noticed that 'self interest' in quite a large majority of cases broadens out at once. For example, if a man has a family, his actions are largely based upon the desire to

*Marshall: Principles, p. 461—8th ed. Macmillans.
**Ibid p. 772.

make proper provision for his wife and children. This kind of normal family takes the edge off the doctrine of self-interest. In such cases self-interest becomes the interest of the family. In some other cases it becomes still broader. Thus we have larger groups coming in. Here we have collective forms of life whose interest is taken into account. Group loyalty and collective spirit modify the doctrine of self-interest still further. But if we expect too much from individuals or ask for too great a loyalty to these collective groups, the loyalty might break down and individual self-interest may assert itself again.

Just as in the physical world the solid, liquid and gaseous bodies or substances can be turned into each other, similarly Land (the gifts of nature), Labour and Capital, the three requisites of economic activity, are convertible into each other. These three terms will be explained later. Here let the following example suffice. A man may sell off all his possessions and educate himself or his sons, who become more efficient in work for that reason. Here Capital is being turned into Labour. If he or his sons again buy up those or similar possessions with the proceeds of what they earn with their work they can be said to be converting Labour into Capital. And, again, as soon as a free gift of nature is appropriated it becomes Capital.

But, apart from this analogy, Economics is still more fundamentally connected with Physics. In fact it is grounded on the discoveries of physical sciences in so far as those discoveries may have any effect on investigations regarding the alternative ways of doing things or regarding the different uses to which the

available means can be put. Thus both Physics and Chemistry, in fact, all sciences, increase the field of choice and satisfaction. They help man in getting over scarcity of means and securing prosperity. Economics, for instance, treats of differential returns from land etc. The law relating to this investigation is known as that of Diminishing Returns. Strictly speaking, it is a physical law. Economics is concerned with the increasing or decreasing tendency of the product yielded by the different processes of doing a thing carried to different stages. Again, the discoveries of the geologists and the geographers also interest the economists in the same way. They widen the field for securing prosperity with the help of increased resources thus made available.

Ethics and Economics.

There has been raging a great controversy round the relation between Ethics and Economics. They have a great deal of common meeting-ground inasmuch as both of them primarily interest themselves in human conduct. But their relation to each other has been questioned. Indeed, people have gone so far as to say that there is a conflict between the two. Adam Smith thought that Ethics is based on sympathy, whereas the science of Economics revolves round self-interest. Apparently if we pursue one, the other is neglected. Those who say that they have no connection or are even mutually conflicting not only believe that Economics does not take account of ethical considerations but also that it should not. Their idea is summed up in the popular saying that "business is business." In fact these people have a very narrow conception of Economics. They

regard Economics as the science of acquisition of material resources which they treat as wealth. They think that this kind of 'wealth' acquired in whatever manner leads one to command respect from one's fellows, as in this way one becomes powerful. This idea is strengthened by the increasing difficulty of ascertaining whether one is profiting from the use of some immoral means such as sweating and exploitation of the weak. Modern business is becoming more and more complex every day and a man finds it impossible for him to counteract its evils. Thus he gives up the attempt and begins to believe that morality has nothing to do with business. Easy beliefs like these lead one also to another conclusion *viz.*, that it is useless to meddle with the operation of economic laws, because whatever a man may do he cannot escape from their inexorable consequences.

This attitude of some economists led Carlyle and Ruskin to launch a sweeping attack on Economics. They treated it as the science of mammon. If it was to serve any useful purpose they thought it must answer the ethical question: What is welfare*? Their attack has served at least one good purpose. It has emphasized that the acquisition of material objects must not be regarded as an end in itself and that the tendency to so regard it leads to sacrificing the producer to the product.

It is now realised that sympathy and self-interest are not really conflicting but complementary. 'Honesty', for instance, which Ethics applauds, has come to be

*At present two strong advocates of this view are Hawtrey and Hobson. See Clay: Economics for the General Reader, pp. 440, Macmillans, 1920 ed.

realised as the best policy even from the economic point of view. It is shortsightedness for an advertiser or a shopkeeper to cheat, and lose permanent custom for the sake of a transitory gain.

But it is easy to go to the other extreme and regard Ethics as laying the boundary lines of Economics. Thus the advocates of this school would say that nothing which is ethically wrong can be economically right. The real parting of the ways between Economics and Ethics comes when it is realised that Ethics deals with the selection of ends and ideals of human conduct while Economics explains how men tend to achieve those ends. It is, therefore, concerned with means rather than ends. However, if we study means without reference to ends, then certainly there is a real danger of our confusing the former with the latter. For example, a miser thinks that a collection of money should be made for its own sake. Similarly, accumulation of gold or other kinds of material objects has very often been regarded by several countries as the achievement of prosperity itself. As a matter of fact all economic goods are merely means to an end, and we can praise or blame a society only after finding out what use that society is making of those means. In the stress of life ethical considerations are sometimes forgotton in economic matters. If there were no possibility of modification and adaptation of human conduct with reference to ends, then, but only then, it would certainly be useless to meddle with the operation of economic laws and to pay attention to ethical considerations. But we find " that the economic organization in the past has been moralized by the direct

action of the State" as well as "through the economic actions of individuals: the abolition of slavery, the reform of the early factories, the disappearance of infant labour in mines, the regulation of dangerous trades, the prevention of deleterious adulteration, the prevention of excessive drinking" *are all instances in point.

There is indeed no such thing as an *economic way* of doing a particular job for all times and climes. The determination of the economic way of doing a thing at any time depends upon the end selected at that time. There is an economic way of achieving a moral as well as an immoral end, The selection of an end is the task of Ethics and when that has been done, our next task is to study the tendencies of men's efforts directed to achieving that end. This is the function of Economics. It must be clearly noticed here that the achieving of a particular end is not the business of Economics That is the function of an art. All that Economics does is this. When an end is selected—and it matters little what this end is, whether it is moral or spiritual or immoral or material— we begin to study the ways and means at our disposal for achieving it and to what extent other ends are likely to be affected by our efforts in any one direction. The function of Economics is confined to facilitating the latter study. It explains how men tend to select the easiest way of doing a thing. Then comes Art with its rules which people follow in using the means to gain the end in view.

Let us explain all this with the help of an example from Physics. The Law of Gravity does not tell us whether we should or should not lift up a weight.

*Clay: Economics for the General Reader, pp. 445, Macmillans, 1920 ed.

Nor does it tell us what we should do to lift it up. If we should do so we must have some purpose, some aim or 'end' in view. Once we are clear in our mind about what we want to achieve we can directly study the art of lifting. But a study of the law of gravity helps us in understanding and appreciating the rules of the art of lifting weights and it also enables us to improve upon the rules of the art known so far.

Similarly we must decide why we want to acquire this or that kind of material or non-material means or remove their scarcity. This is done by Ethics. We can then either directly proceed to acquire a particular object and thus learn the Art concerned, or we can study the law of supply and demand, or the law of wages, or the law of substituion etc. in relation to the object in view, and then practise the rules of the particular art.

We, therefore, come to this conclusion. That in selecting an end or deciding a policy or a course of action we make use of the principles of Ethics. It is in accordance with our notions of morality or the aim of a fuller life that we decide whether we should go to the church or practise charity or direct all our resources to obtaining food etc., and whether we should resort to robbery or an honest trade for getting the means of sustenance. Of course, the way we select affects our morals as much as our morals affect our choice of the way itself. Robbers are actuated in their work as much by the economic motive *viz.*, to get over scarcity of some kind *e. g.* that of means of sustenance, in the easiest way known to them as by their notions of morality. The economic motive is neither to be blamed nor

praised. Blame or praise is earned by men following a particular art. Just as Physics and Chemistry cannot be blamed or praised for the use which people make of their knowledge of these two sciences for the purposes of warfare, and just as the law of gravity is neither to be praised nor blamed if a careless fellow loses his life by falling into a well, similarly the principles of Economics should neither be blamed nor praised if they are seen working in such a way as to lead to the destruction of some higher and nobler qualities of man in some cases. Ethics probably requires that there should be harmony of motives in a man's life. But if a man deliberately chooses an eccentric behaviour, a knowledge of Economics would certainly facilitate his achieving that end also. In Economics we study why a man adopts a certain proportion in the distribution of his resources for achieving various ends, or how much stimulus a certain end gives him for expenditure of his resources towards achieving it. Principles of Economics enable us to study as much the behaviour of primitive people as that of the civilized ones. They are at work in economising speech and husbanding time etc. as much as in securing food, shelter and clothes. Thus, while we make use of the findings of any science necessary for our purpose in taking a course of action, the principles of that science neither dictate nor prohibit that course. Whether we should or should not adopt any particular course is certainly an ethical question. But a study of what is, or what actually happens, and why, has certainly nothing to do with ethics. In Economics, for instance, we do not undertake to study whether prices

should rise and when they should rise but only why and when they rise. We are not concerned whether a man should or should not buy more of a commodity when its price falls or whether he should or should not demand a higher price for his work and wares when their prices go up. On the other hand, we simply want to know how he behaves under certain influences.

We must, however, remember that in actual life the influence of ethical, economic and other motives are so blended that they cannot in practice be separated. It is only for the purposes of study that we imagine their separate existence and that to try to achieve anything by resorting only to ways and means which our morality justifies is as necessary as to select the aim itself in accordance with the principles of Ethics so that the higher and nobler ends of life may not get blurred from our sight.

CHAPTER V.

THE SCOPE OF THE SUBJECT (*continued*).

Psychology is the study of mental processes.

Psychology and Economics.

The subject-matter of Psychology is how we think, or the reactions of mind to different stimuli. Some economists like Jevons have treated Economics as a kind of applied Psychology. No doubt, a very intimate connection exists between Psychology and Economics. Economics treats of things like 'wants,' 'effort', 'satisfaction' etc. All these are as much psychic phenomena as physical. In 'Production' we study how a man compares the efforts and sacrifices involved in bringing an economic good into existence with the satisfaction which is likely to accrue from it as well as the efforts and sacrifices involved in the different ways of doing a thing. The theory of Consumption is nothing but the application of the Law of Diminishing Marginal Satisfaction. Jevons's treatment of Economics as applied psychology is in fact based on his giving magnified importance to this department. He reduced Economics to be the calculus of pleasures and pain. Even if we do not go so far as Jevons, we must admit that the importance of dealing with the psychological phenomena on which this branch of the subject rests is great.

"_____If the economists exclude consumption from express and psychological treatment, they leave room for and almost invite popular fallacies such as the statement that what people want they will pay for, and that therefore all subsidising is a waste of effort and is against Political Economy. Here the datum is that if one and the same man wants A as much as

he wants B, he will be willing to give as much for it, sooner than go without it. From this datum certain conclusions as to market values and the commercially wise direction of efforts and resources are deduced, and these in their turn are reinterpreted into the statement that if one of two men is unwilling to give as much for A as the other is willing to give for B, then the first man does not want A as much as the second wants B, and it would be wasteful and mistaken philanthrophy to supply No. 1 with A rather than No. 2 with B."* Psychology teaches us that "No one can compare and measure accurately against one another even his own mental states at different times: and no one can measure the mental states of another at all except indirectly and conjecturally by their effects___For instance, the pleasures which two persons derive from smoking cannot be directly compared: nor can even those which the same person derives from it at different times___" All that Psychology enables us to say is that "if we find a man in doubt whether to spend a few pence on a cigar, or a cup of tea or on riding home instead of walking home, then he expects from them equal pleasures". ___Or "if the desires to secure either of the two pleasures will induce people in *similar circumstances* each to do just an hour's extra work, or will induce men in the *same rank* of life and *with the same means each to pay* a shilling for it; we then may say that those pleasures are equal for our purposes, because the desires for them are equally strong incen-

*Wicksteed: The Common Sense of Political Economy, Vol. II, p. 768 Routledge 1933 ed.

tives to action for persons under similar conditions."*

Similarly 'value' being a function of 'demand' (along with that of 'supply') is intimately connected with the psychological fact of 'want'. Even the objective concept of 'value' as a ratio between two quantities which exchange for each other cannot be divorced from the concept of 'demand' (and that of supply). In the ultimate analysis, therefore, the psychological fact of effective 'want' which is nothing else than 'demand' plays an important part in the department of 'value'. In the same way under Distribution we study how people try to select and change their occupations or professions according to their expectations of adequate proportion of the product falling to their lot, in each of them.

From all this it must not, however, be inferred that the validity of the Laws of Economics depends upon any particular psychological doctrines. If that were so, then every time when any important psychological truth is discovered, Economics will have to be rewritten from one end to the other. The economist need not discuss "why the human animal attaches particular values in this behaviouristic sense to particular things.... That may be quite properly a question for psychologists or perhaps even physiologists. All that we need to assume is the obvious fact that different possibilities offer different stimuli to behaviour and that these stimuli can be arranged in order of their intensity."* Psychology, for instance,

*Marshall : Principales: pp.15-16, Macmillans 1920 ed.
*Robins: The nature and significance of Economic Science, p. 86, Macmillans, 1932.

studies the pleasant sensations which follow from hearing music. The why of these sensations may also be studied by physiology. Economics simply assumes these but it goes further, and compares and weighs them with some others which are unpleasant ones and which a person is willing to experience in order to have the former ones.

Our conclusion then is that while Economics borrows a good deal from Psychology, it is not the duty of an economist to investigate the problems of Psychology. The economist assumes many psychological facts, but he need not explain or analyse them. They are in a sense the basis, but not the subject-matter of his reasoning. He takes them as his data but does not establish them as his conclusions. "The economist starts with both psychological and physical data, which he need not analyse, provided he has satisfied himself that they are true. But whereas his data are partly physical, his quœsita are, in the last resort, wholly physical. The laws of political economy, then, being ultimately laws of human conduct, are psychical, and not physical; and therefore psychology enters into political economy on something more than equal terms with physical science and technology."**

**Wicksteed: "Common Sense of Economics," Vol. II, pp. 766-67, Routledge: 1933 ed.

There is a great connecting link between Economics and Politics. The department of 'Public Finance' is now universally regarded as a subject on the border lines of both these. In the first chapter we also saw how in Germany Economic thought was first provoked by financial considerations for the state (or the Emperor).

Politics and Economics.

Thought on economic matters is greatly influenced by political considerations and it is equally true to say that economic considerations alter people's political ideas a great deal. At one time in the history of England, for instance, fish diet at regular intervals was made compulsory so as to encourage fishing industry which led to England's becoming a first class maritime power. And again the Fascist regime has led to new economic doctrines which are neither socialism nor pure individualism. These are instances where political machinery is influencing people's ideas about economic matters. The political party known as Tories are described as 'Individualists' or believers in 'Free Enterprise' whereas 'Laborites' are generally all socialists. No doubt, as time passes, these distinctions tend to get blurred. But the influence of political machinery on one's economic outlook and ideas is unmistakeable. Similarly when a country prospers under any kind of government, it naturally begins to believe its own form of government to be the best. Parliamentary government has for a long time been regarded as perfect. The examples of Russia, Italy, Turkey and now Germany are shaking the foundations of this belief. Here economic gains seem to change political ideas.

As Seligman remarks: "Finally it was recognised that political life itself is closely intertwined with the economic life, and that the forms as well as the practices of government are profoundly influenced by the conditions of 'Production as well as by those of Distribution. Economic facts would then be the cause; political phenomena the result. On the other hand, since all modern economic action is carried on within the frame work of the state, when we deal with any practical economic institution no final solution of the problem can be reached until the effect of political conditions be weighed. . . . . There is almost always a distinct interaction between the two. It is a necessity for the publicist to comprehend the economic bases of political evolution; it is the business of the economist to remember the political conditions which effect economic pheonmena."*

The connection between Economics and Politics has, however, been exaggerated in the past on account of the confusion which was caused by the old name 'Political Economy.' Here the term 'Political' simply meant 'social.' Economics was supposed to take account of social relations. And as the relations of the individual to the state are also after all social these two sciences were more or less regarded as twins if not altogether identical. It is true that economic thought has influenced political evolution in the past as political thought has affected the economic development of countries. But in this sense almost every science affects many others. Religion has also been a potent

*Seligman: Principles of Economics, p. 32, Longman Green & Co., 1932.

factor in the evolution of political and economic thought. The 'Divine right of kings' was a well known political doctrine for centuries in the mediaeval Europe. Similarly who can deny that for a long time, taking of interest and usury were regarded as synonyms and both were condemned according to some religions. The question of the abolition of slavery also had its religious and social as well as its economic aspects. In fact every question can be studied from the point of view of any science. We can study the giving away of presents and charities from the moral, social, religious, economic or any other point of view. Life as a whole is a complex of all sorts of motives, instincts and impulses. All sides of life are so intertwined that in practice they are inseparable. But it is conducive to clarity of thought if we practise the great economic principle of 'Division of labour' and study all the sciences separately, remembering at the same time their fundamental unity. Knowledge as a whole is one, its branches are many and we make better use of our time and energy if we try to gain knowledge bit by bit instead of attempting to become omniscient all at once.

Sociology and Economics.

Economics studies the behaviour of man with regard to his attempt at removing scarcity of means and making most of them for achieving any end. Sociology is said to be a comprehensive study of human behaviour of all kinds. Thus Economics is rightly regarded as a branch of Sociology. But is Economics wholly a social science? Have we not already said that the pivot of Economics is 'self-interest.' Of course, 'self-interest' may not in many

cases be opposed to social good. But the social aspect is not indispensable in the study of the working of economic principles. Economics studies not only a particular kind of relations into which man enters with his fellows but also a particular kind of relations in which he enters with the other animate and inanimate objects of this universe. The working of Economic principles can be studied in the actions of an isolated man as much as in those of a man living in a civilized society.

Economics, therefore, although in a sense very intimately related to Sociology, is not altogether only a branch of it but something more. Just as religion or Philosophy deal not only with some relations of man with man but also with those of man with God etc., so also Economics is not confined only to the study of a particular kind of relations of men to one another but also studies an aspect of those relations which men individually as well as collectively develop between themselves on the one hand and the other living and lifeless objects of the world on the other.

Carlyle, however, said that man is a social animal, and according to Comte* "The Various general aspects of—" the phenomena of society—being scientifically—inseparable—" no specialized study of man's action in society is any good. To be useful the study must comprise the whole of social science. But even if Economics be regarded wholly as a social science a specialised study is not altogether undesirable. As far ahead as one can see, there is no possibility

*See J. N. Keynes: Scope and Method of Economics pp 112-115 and also pp. 135-41, Macmillans 1904.

of a science coming into being which will cover all the so-called social sciences such as Politics, Economics, Ethics, and Sociology (in the narrower sense) etc. It is true that in practice man's actions are actuated not merely by the motive of getting over scarcity or making most of the available resources, but all sorts of motives influence them. At the same time we must gain from the experience of the progress of physical sciences and study the working of all these motives separately. The progress of physical sciences was tardy so long as the Greek philosophers continued to search for a unitary basis of all the physical events. But these sciences made forward strides when their broad problems were split up and were made the subject of specialized studies. That there is a "unity of nature" is not questioned. But if we are now able to discover it even partially it is all due to the separate specialized studies and occasional comprehensive surveys of the whole nature. Similar development is now discernible in the progress towards the unification of social studies and the understanding of social organism. At the same time the duty of those who make a specialized study either of social or physical sciences, always to maintain a close correspondence with the work of others who are similarly working in the allied fields, must be emphasized. Without this the specialized studies shut out the light which the developments in every science throw on all the others.* As Mill said, "A person is not likely to be a good economist who is nothing else."

In the light of the foregoing remarks it becomes apparent that although all sciences being branches of

*See Marshall : Principles of Economics, Appendix C, pp. 770-80.

knowledge which is essentially one, are combined at the centre, yet no branch is comprehensive enough to cover the whole of even a limited field like that of a complete study of man as distinguished from other objects of this or the other world. Neither Economics nor any other science comprises the whole of the field of social relations and Economics, therefore, is not a complete philosophy of society. Besides, as we have seen, just as religion is social as well as personal, similarly Economics is not altogether social, but also personal. Its principles apply to the activities of an isolated man as closely as to those of collections of men.*

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* ".....It is necessary that economists should keep in view all the various aspects of social life; and it is clearly mischievous to aim at an entire isolation of economics from all other sciences. But political economy does not, therefore, lose its individuality.....to do away with the boundaries that now separate the different social sciences, would be to sacrifice all the gain resulting from scientific division of labour.....' The tendency of scientific progress'; as Cherbuliez has well remarked 'has always been to separate the sciences, not to confuse them.....' If, for instance, a rise in wages takes place, the possibility of its being maintained may depend on the effect of better food upon the efficiency of the workers....." Even in physical sciences such interdependence is discernible. " Geological phenomena, for instance, are dependent upon physical and chemical phenomena. But no one therefore denies the right of geology to be recognised as a distinct science.....In a way everything includes everything else....."—J. N. Keynes: Scope and Method of Economics, pp. 136-7. Also see above, p. 63.

CHAPTER VI.

LAWS OF ECONOMICS.

Laws of Economics.

At the end of chapter III it was said that Economics has its own laws.* Now the term "law" is used in many senses. It "may denote a body of customary usages, as the common law, or primitive law. Law may mean a statutory law," as a law passed by Parliament. "Law may specify a rule of action or precept, as a moral law. Law may mean the statement of relations of cause and effect between phenomena as a law of physics**". Obviously the laws of Economics are of the last type. Now all statements of causal relationship in every science are formal and hypothetical. All of them are based on the assumption of a given set of conditions. They simply declare that if such and such conditions exist, such and such other things will also exist. They do not warrant that any course of events will certainly take place. That is not the function of a science. No science predicts the future course of history. They certainly provide intelligent guesses. Their generalisations are statements of tendencies and amount to a conditional assertion that if certain events occur certain others will also occur. Anybody can study the existing data or a set of given conditions and forecast future events. In this respect Economic generalisations are as sure and definite as

*See p. 44 above.

**Seligman, Principles of Economics, p. 24 Longmans, Green & Co., 1929.

those of Physics and Mathematics. If all the relevant circumstances of a given situation are known, Economics like any other science, will lead to inevitable conclusions from them. If the circumstances concerned are not altered, the conclusions anticipated will be sure to follow. Economics does not tell us what the circumstances will be. But its study does enable one to find out the collective as well as the individual significance of any given situations under any set of circumstances.

The truth of the laws of Economics is not less absolute than that of the laws of any other science. But the laws of Economics have their own limitations. To discover the applicability of the laws of this science to particular situations is a much more difficult task. In this respect physical sciences have a firmer field of work. They are not concerned with objects having a will of their own. The facts of a given situation which we may for the moment be studying in connection with those sciences are more or less completely under our control. Uniformities assumed by these sciences are certain and definite. But that is not so in Economics. Economics is concerned with a man's reactions to his surroundings. Neither these reactions nor the surroundings are uniform. Two men may react very differently to an identical circumstance and the same man may react very differently to the same circumstance on two different occasions. "Both individual valuations" and the "technical facts" are outside the sphere of economic uniformity." And "from the point of view of Economic analysis these things constitute the *irrational* element in our

universe of discourse." For instance the demand for anything " is not a simple derivative of needs. It is, as it were, a function of a great many apparently independent variables. It is a function of fashion___ and might be substantially changed by a change in the theological views of the economic subjects entering the market. It is a function of the availability of substitutes. It is a function of the quantity and quality of the population. It is a function of the distribution of income within the community and changes in the volume of money. Transport changes will alter the area of demand. Discoveries in the art of using a commodity may change its relative desirability ___ "*

Even all physical sciences however, do not attain equal certainty. For instance when every thing about tides and weather is said, prediction is not quite so sure as in physics and chemistry. In case of physical or astronomical facts gravitation is taken for granted. But in case of Economic laws, although the existence of the motive of self-interest is to be assumed yet the force and influence of this motive is not always precisely calculable. Whereas the operation of a physical law is automatic, the operation of an Economic law as pointed out by Pierson** requires in the first place that the existence of an interest be known to a large number of persons. If the knowledge of a particular advantage to be derived from a certain way of doing a thing be confined to a privileged few, they

*Robbins: the nature and significance of Economic Science, pp. 98-100, MacMillan, 1932.

**Pp. 23-30, Vol. 1, Principles of Economics, MacMillan, 1913 Ed.

will make huge profits for themselves. " In countries where more or less primitive conditions prevail, large profits may be made by a few traders, unknown to the general body of their fellow-traders."* Secondly, even if the existence of an interest is widely known, the lack of capital and other resources may make it impossible for any very large sections of people to take advantage of it. And thirdly, when the two foregoing conditions are fulfilled the desire to take advantage of the situation may be absent. Sometimes it is seen that the increase in wages encourages indolence and absenteeism. Some people are so contented with their lot that they would not move out of the narrow grooves in which their forefathers have taught them to remain.

All these difficulties, however, should not lead any one to believe that it is impossible to have laws of Economics, which are universally applicable. They point out important limitations and warn us to be very careful in formulating such laws. But they are not insuperable difficulties, and by taking all possible care to avoid these pitfalls, we are able to formulate some laws for Economics, which will serve the same useful purpose as general laws do in every other science.

A statement of even an approximate tendency will be better than making no attempt at studying the collective significance of similar events in the sphere of Economics. Besides, in a country where a definite set of condifions have prevailed for a consider-

*Ibid

able time, after taking all the relevant circumstances into consideration it *is* possible to forecast the future course of events fairly accurately. The events may take quite a long time to take their full course. But sooner or later certain causes *will* produce certain known effects. Those effects may be marred, or be merged in some other effects of certain other causes. That simply necessitates our making an important proviso *viz.*, "other things being equal". We should say: this or that thing will, other things being equal, lead to this or that result. Such a proviso is understood in every law and in all sciences. In Economics as Marshall pointed out it should be made more explicit and should be repeated time after time as the subject being one in which all and sundry are interested, "its doctrines are more apt than those of any other science to be quoted by persons who have had no scientific training and who perhaps have heard them only at second-hand, and without their context."*

Some of the advocates of the Historical school** putting their faith entirely in the facts went to one extreme and declared that on account of the unending diversity of situations and circumstances Economics can have no such laws, as other sciences. "On the ground that the economic phenomena of each age and each community are subject to special laws, an absolute system possessing universal validity is regarded as necessarily an impossibility; every people and every epoch are considered to have a political

*Marshall: Principles, p. 37. MacMillan, 1920.
**E. g. Thorold Rogers. See Pierson's Principles of Economics Vol. I, p. 32. Macmillan, 1913 ed.

economy of their own more or less peculiar to themselves.[1]

The Physiocrats, on the other hand, pinned their faith to the immutable and inescapable laws of nature.[2] Both these schools of thought erred and exaggerated the importance of their cause. The truth is that while the bewildering mass of facts leads to the discovery of some general tendencies in Economics as in other sciences Economics takes account of the human reactions to different situations also; and these reactions are so numerous that the statements of general tendencies are necessarily to be hedged in by so many provisos. The special circumstances of every situation materially effect and influence the operation of the general tendencies.

As J. N. Keynes has said: "The relativity of concrete economic doctrines does not establish the impossibility of an abstract theory having a certain character of universality. In the first place, abstract economics analyses the fundamental conceptions of the science such as, utility, wealth, value, measure of value capital and the like. In the analysis of such conceptions as the above it is not too much to look forward ultimately to a certain finality. Abstract economics next proceeds to discuss certain fundamental principles that are universal in the sense of pervading all economic reasonings. One of these principles is the law of variation of utility. The truth of this elementary principle is quite independent of social institutions and economic habits, though the results which it actually

[1] J. N. Keynes: "Scope and Method..." p. 292, Macmillans 1904.
[2] See Haney: History of Economic thought P. 167 Macmillans 1924.

brings about may vary considerably. Another principle of a similar character is that, other things being equal, a greater gain is preferred to a smaller .... The theory of economic rent in its most general form .... merely affirms that where different portions of the total amount of any commodity of uniform quality supplied to the same market are produced at different costs those portions which are raised at smaller costs will yield a differential profit; and there is now no similar limitation to its applicability. This principle may even be said to hold good in a socialistic community, for the differential profit does not cease to exist by being ignored or by being municipalised or nationalised. . . In this way may be built up a system of general theorems relating to economic phenomena which, with due modifications, are applicable under widely different conditions. ... The abstract theory is invaluable as a preliminary study... and the economist who would deal with the more concrete problems of any particular age or state of society cannot afford to neglect them. . . . "[1]

As compared to physical sciences, however, the laws of all social sciences including Economics are less definite and certain. But among all social sciences, the laws of Economics are most certain of all. It is so because the intensity of the economic motive is more easily, and to a greater extent, ascertainable by the measuring rod of money. Even under some other arrangement of society different from our own some easy device for the measurement

[1] "Scope and Method", pp. 310-14, Macmillans, 1904.

of the economic motive could not be altogether done away with. All that can be attempted is that instead of leaving individuals to measure the intensity of the economic motive of each other, such measurement may be done collectively. The question is: what amount of sacrifice is it worthwhile to make for achieving a certain end ? And this question is put by individuals as well as by societies. The ends aimed at may be the gain of material goods or non-material services. The estimate of their worth is in all cases more or less accurately obtained by comparing them with the cost or sacrifice which a man or a collection of men are prepared to make for achieving those ends. And this cost or sacrifice is made in most cases in the form of parting with money. Even when an actual service is performed or a material good is offered in exchange for another object, it is always possible to ascertain the money-worth of what is offered. And not only for the sake of convenience but also in the interest of precision this is almost always done. Thus the economic motive being always more measurable with something objective and concrete than other kinds of motives, laws of Economics are more definite than those of any other social science.

A few laws of Economics may be instanced here:—

(1) The principle of maximum enjoyment at the minimum cost has already been explained in Chapter III.

(2) The law of the Equations of prices declares that prices tend towards a point at which there is equilibrium between supply and demand.

(3) Gresham's Law points to the unmistakable tendency of the bad coins to drive the good ones out of circulation.

(4) A decline in prices of commodities in a country encourages export and discourages import.

(5) A rise in the rate of interest reduces the price of stocks.

(6) An increase of population raises the rent of land.

(7) A land tax tends to lower the price of land.

CHAPTER VII.

THE METHOD OF ECONOMICS.

At one time there was a great controversy around the method of Economics. The classical school believed that Economics should follow the Deductive method of reasoning. The Historical school advocated the cause of the Inductive method. Let us first briefly state the essentials of these two methods. We shall then see which is more suitable for our subject.

The Deductive method.

We sometimes take some general statements for granted and by relating certain propositions to each other, a conclusion relating to a particular instance in point is drawn. In this case if the premises are correct and are properly related, the conclusion must also be correct. For instance we may assert that prices fall when supply increases, and observe that supply of corn has increased. From these we may argue that sooner or later the increased supply of corn will reflect itself in the reduction of its price. Again we may say that men try to do every thing in the easiest way known to them and that production of yarn by machinery is easier than by the spinning wheel. Therefore "Back to the spinning wheel" movement is doomed to failure in the long run.

The Inductive method.

Some people challenge the validity of the method according to which some general propositions are to be taken as correct. What ground is there to assume that

even the axiomatic propositions are true. Do not we see men deliberately taking a long route sometimes when a shorter one is at hand? Is it not possible that the price of a commodity may not fall even when its supply increases or it may even rise with increased supply? Intuition advanced in support of the 'Deductive' method does not appeal to the advocates of the 'Inductive'. They would examine particular instances and see what happens in a sufficiently large number of them. On the basis of their examination of these particular cases they would generalise. They would collect facts, arrange and analyse them and then come to a general conclusion. It must be pointed out that even this method is based on certain general assumptions. For instance the belief that what has happened in some considerably large number of instances of a particular kind will also happen in other examples of the same kind, is grounded on another belief *viz.* the uniformity of nature. We believe that fire burns physical objects because it has always done that and because the natural order of things continues and that there is no reason why it should change frequently or at any time. On the other hand the advocates of Induction would say that the belief in the Uniformity of nature also is based on an induction. We believe that such and such a thing will happen because we have observed that for ages past it has happened in innumerable cases when such and such conditions were present.

On account of ever-changing individual valuations and equally ever-changing technique referred to above in connection with the laws of Economics a few

extreme advocates of the Inductive method, however, do not believe that Economics can be based on a few general axioms. No two instances of any phenomenon exactly alike have ever occurred in this world and would never, in all probability, occur in future also. Economists therefore should, according to this school, abandon all effort to find general principles.

If this view is accepted, then Economists have nothing better to do than to collect and describe the details of phenomena. A bewildering mass of facts and no conclusions! Is this an edifying task for any scientist ? No relations between innumerable facts bearing resemblance!!! Is it possible ? It is quite probable that generalisations discovered by Economists may not be found exactly applicapable to any actual situation. But cannot we make allowance for the mitigating or disturbing circumstances in each situation and discover uniformity in the operation of similar factors?

The object of discussing the question of method is to discover the right way of finding the truth which leads to the extension of the area of certainty, foresight and prediction. As J. N. Keynes remarks "The process, moreover, whereby a conclusion is reached affects its character and value. If it is purely empirical, then it will be established only with a more or less high degree of probability, and it cannot be extended far beyond the range of space or time over which the instances on which it is based were collected. If, on the other hand, it is obtained deductively, then it is hypothetical until it has been determined how far, and

under what conditions, the assumption on which it rests are realised."*

Thus we see that whereas pure collection of facts would be merely moving in a maze without any aim and without reaching any haven wherefrom to be able to proceed to a goal, mere abstraction having no relation to, or bearing on reality, or generalisations based on imaginary facts which do not exist in the world in which we live and move would be equally useless. In fact the Historical school was started as a protest against the conception of "Homo Œconomicus" (*i e.*, the economic man) or what is popularly known as the "Cruso" Economics. It was pointed out that the "Economic man" which was supposed to be actuated purely by economic motives never existed and the theory of Economics based on such a myth can neither describe nor explain the actual world around us.

As a protest against the extreme tendency towards abstraction the Historical school has done a real service. But as has been pointed out before, some of its advocates have gone to the other extreme. It is true that no two events in the realm of our discourse have happened exactly alike, and that human valuations as well as technical conditions keep on changing. In that way, however, generalisations will be debarred not only from Economics but from many other sciences. No two men, or for the matter of that, no two living organisms, have been exactly alike in this world. Even in physical sciences we

*Scope and Method, pp. 4-5, Macmillans, 1904.

frequently isolate a phenomenon and study it and then introduce one by one certain conditions as they are found actually to exist in relation to the phenomenon under study and then examine their effects. Prof. Robbins puts the matter in a nut-shell when he says "... the *truth* of a particular theory is a matter of its logical derivation from the general assumptions of the Science. But its *applicability* to a given situation depends upon the extent to which its concepts actually reflect the forces operating in that situation ..."* The general principles in sciences like Economics are worse than useless if they cannot explain the given situations and if their study does not lead to prediction. But these general principles cannot be expected to describe any and every detail of a phenomenon or a kind of certain phenomena. The training in respect of methods of drawing sound conclusions from the study of the details of the phenomena must inevitably enable a man to discover not only the causal relation in more or less similar situations but also to explain the operation of the disturbing elements. In a sense "all laws of causation may be said to be hypothetical in so far as they merely assert that given causes will *in the absence of* counteracting causes produce certain effects. It does not, however, follow that because a law is hypothetical in the above sense, it is therefore unreal or out of relation to the actual course of events."† Just as in some physical sciences like physics and chemistry we artificially isolate a certain

*The nature and significance of Economic Science, p. 106, Macmillans, 1932.

†J. N. Keynes, Scope and Method, p. 219, Macmillans, 1904.

phenomenon, for carrying out experiments, we do so in Economics, but only in imagination as that perfect elimination of every other circumstance but the one we want to study at the moment, which is possible in physical sciences is not to be had in Economics.

The "economic man" device therefore is not an altogether unreasonable one. No one professes that the "economic man" actually exists or has ever existed. This is only a way of studying the working of motives of a particular kind. "Although laws of causation may from a certain point of view be regarded as hypothetical, they are from another point of view categorical. For they affirm categorically the mode in which given causes operate..."* All sciences of causation do not say what the data will be at any particular point of time. But if the data of a particular situation be given, they can draw inevitable conclusions. The laws of such sciences are simply "statements of tendencies and are therefore usually subject to the qualifying condition *viz.*, 'other things being equal.'"

On the other hand, Prof. Robbins throws down the following challenge to the Inductivists:—

"Yet not one single "law" deserving of the name, not one quantitative generalisation of permanent validity has emerged from their efforts. A certain amount of interesting statistical material. Many useful monographs on particular historical situations. But of concrete laws, substantial uniformities of economic behaviour not one."†

Ibid pp. 215-16.

†Nature and Significance of Economics, p. 104, Macmillans, 1932.

The true functions of Induction in Economics is not to supply general principles but to test theories or hypotheses and to point out their deficiencies so that they may be revised, restated and completed and thus the unexplained facts may be explained.

"It can bring to light the changing facts which make prediction in any given situation possible . . . "[1] It has been said above that all causal relations are subject to the qualifying condition of "other things remaining unchanged". But other things do not remain unchanged. That, however, should not lead any one to declare that principles of Economics are never true in fact. The realistic study, the study of actual facts will always reveal what allowance we have to make for the influence of the disturbing circumstances. This qualifying condition needs to be repeated, emphasized and kept in the foreground of all discussions of economic questions as in regard to this science the tendency of critics is too prominent to condemn it. "No body in his senses would hold that the laws of mechanics were invalidated if an experiment designed to illustrate them were interrupted by an earthquake. Yet something of this sort is general in the fashionable condemnation of Economic Laws. A protective Tariff is imposed on the importation of commodities, the condition of whose domestic production makes it certain that, if other things remain unchanged, the effect of such protection will be a rise in price. For quite adventitious reasons, the progress of technique, the lowering of the price of raw material, wage reductions, or what not

1. Robbins, Nature and Significance, p 111, Macmillans, 1932.

costs are reduced and the price does not rise. In the eyes of the lay public and "Institutionalist" economists the laws of supply and demand are suspended. The bogus claims of a science which does not regard the facts are laid bare. And so on and so forth. Yet whoever asked of the practitioners of any other science that they should predict the complete course of an uncontrolled history"[1]?

Of course the general theories and principles which the Analytical or Deductive Method is to supply also do not come out of void or thin air. They are the results of attempts at explaining what has been observed. But observation by itself would not lead to any general principles. The so-called "Deductive Method" is not altogether deductive. Observation, ratiocination and verification, all these three steps are the necessary constituents of that method. From this it is clear that in Economics we want both Induction and Deduction and neither of them can serve our purpose without the aid of the other. However, in some departments of Economics we are more inclined to assume general conditions and test them with reference to actual things around us. In others, we are more inclined just the other way. "When the method of Political Economy is described as essentially deductive, it must be not the theory of Production, but the Theory of Distribution and Exchange, that is had in view."[2] Here we study how the general forces have led to the reward of a particular section of the community to be what it is. Under

1. Robbins, Nature and Significance, pp. 112-3, Macmillans, 1932.
2. Sidgwick, Principles of Political Economy, p. 38, Macmillans, 1924.

production on the other hand we study the different methods followed by different individuals and nations so that we may discover the best in order to get as prosperous as any other nation has become by following such a method. Here therefore we proceed more inductively.

In all social Sciences, including Economics experimentation is not possible in the same sense as it is in the physical science. The reason is that we lack the means of isolation and reproduction and cannot measure the quantitative changes in respect of such phenomena. Laboratory methods for securing generalisations in these sciences therefore are out of the question. The difference between the units of physical science and those of Economics etc. are too clear to be ignored. However, a substitute for such measurement by experimentation is proposed. It is the statistical measurement of social phenomena. Of course statistical methods cannot be exact. There is always an element of approximation in such measurements. Yet their utility cannot be denied. "It is fair to forecast events on the strength of measurements regarding individual, or bundles of events. Though our data will never be known as completely as those of natural scientist, yet an agreement between hypothesis and our actual counts is a most favourable omen in many cases. We may assent to the dictum that it is impossible to frame any general theories of value, interest, wages, rent etc., by purely a posteriori method of reasoning; but this will not blind us to the merits of satistics, to the value of numbers, of frequency, of constants, of fluctuation, of multiple

correlations as a basis for short-time inferences .... The calculation of probability has become part of many a survey of facts economic and sociological. If statistics do not rival experimental methods in exactitude and magnificence of verified generalisations, neither has its method as yet been so highly perfected ...." [1]

In conclusion we may say that any problem can be studied inductively as well as deductively. For instance although, as has been said above, the problem of Production is mostly studied inductively yet "a certain amount of deduction inevitably comes in when we analyse the combined play of the forces of economic change whose effects history presents to us. And we may, of course, examine the phenomena of Distribution from the same point of view of comparative Plutology; we may ask why the share of wealth annually obtained by an English miner is larger than that obtained by a German miner or why the English land-owners now obtain higher rents than they did 100 years ago: and if in our answer we 'include directly or remotely, the operation of all the causes' that have combined in causing the differences indicated, it seems evident that our method of investigation must be just as in the case of Production—a primarily inductive and historical one. We shall have to note and explain differences and changes in national character generally, in the habitual energy, enterprise, and thrift of special classes, in law and administration and other political circumstances, in the state of

1. Bouke: A Critique of Economics, Macmillans, pp. 272—5, 1922.

knowledge, the state of general and special education and other social facts; and in this explanation the method 'a priori' can evidently occupy but a very subordinate place."[1]

In view of the plurality of causes and intermixture of effects in all human affairs we cannot exclusively follow one single method. The question is which of these carries greater conviction at any time. But apart from verification which is the exclusive function of Induction, for the task of predicting, ratiocinating, and of laying down policy for future guidance Deduction is undoubtedly indispensable.

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1. Sidgwick., Elements of Political Economy, p. 39, Macmillan 1929.

CHAPTER VIII.

THE IMPORTANCE OF THE SUBJECT.

The importance of Economics is indeed very great. Every science is important in its own way. Every attempt at getting the truth is valuable. This is so even in the case of sciences like astronomy which have been developing for centuries although they may not have proved themselves to be capable of yielding anything useful for man except the satisfaction of curiosity of a few. But when the knowledge of the principles of any science can be applied to practical affairs of life, its importance automatically increases. Economics has, however, nothing to gain by exaggeration of its importance. That there has been a tendency towards such exaggeration admits of no doubt. Let us, therefore, first clear the ground of wrong ideas.

Some people regard Economics as the most important of all social Sciences because it is under thi science alone that the industrial side of life receives a considerable part of our attention, and the modern world attaches a great importance to industria life.

The above tendency was encouraged and accentuated by the Utilitarian philosophy of the mid-nineteenth century. The Utilitarian School was essentially an ethical school. According to this Schoo of Philosophy the ultimate aim of life is happiness which is said to consist of certain pleasures we enjoy. Therefore, it was thought right that we should enjoy

pleasures as long as they do not clash with the pleasures of others. The greatest good of the greatest number was the chief aim of the philosophy of this school.

They identified happiness with pleasures and thus emphasized the importance of Economics. The first few utilitarians did not distinguish between various kinds of pleasures and regarded all pleasures alike in quality. They recognised the quantitative difference between various pleasures. But from the point of view of quality one pleasure was as good as another. Bentham, who was their leader, thought that the greater the pleasure a thing yielded, the greater was its desirability. Of course, pleasure associated with economic satisfaction looms large in the life of man and hence the importance given to the science of Economics among social sciences. According to this writer social pleasure was the sum of the total individual pleasures, and since the most important group of pleasures is the group connected with the economic aspect, Utilitarian philosophy gave an undue importance to Economics among social sciences.

Another reason why Economics occupied so much attention is that, as pointed out before, in Economics we deal with motives which are measurable with something concrete, *viz.*, money. In scientific studies it is a great gain to be able to deal with measurable facts. The more measurable the phenomena are, the more accurate is the science. It will, however, be a mistake to suppose that facts which do not lend themselves to direct and objective measurements of this kind do not matter. The economic aspect of life is not

the only aspect. There are others and they are, also, equally, if not perhaps more, important.

The end of life may be the securing of the greatest happiness. But the greatest happiness does not consist of a sum of pleasures as was thought to be the case by the Utilitarians. As the consumption of commodities yields pleasure, their philosophy led people to regard the mere accumulation of commodities as an end in itself. Besides there are things which have to be acquired even if their acquisition does not give us pleasure.

Similarly it used to be thought that the economic law known as the law of diminishing marginal utility is capable of deciding some important policy in Public Finance. The justification of the Progressive system of taxation used to be sought in this law. But surely the satisfaction derived by two persons from their incomes cannot by any means be compared even if the incomes of both of them be equal. Everybody can compare his own satisfaction from any thing with that from any other thing or the satisfaction he derives from a thing at one time with that he derives from the same thing at some other time. But as the satisfaction derived by any body from the use of anything at any time also very much depends upon his capacity and not only on the attributes of that thing, we have no means of judging whether a rich man derives greater satisfaction from eating a mango than does a poor man from eating an exactly similar mango. Nor, in view of their unequal incomes, would their willingness to pay different prices for the same mango lead to any satisfactory

conclusion as regards the amount of satisfaction that each one derives. Apparently then there is no scientific basis for the belief that a more than proportionate tax (*i. e.* a progressive one) can be imposed upon the rich people without making them feel more burden than what is felt by the poor people in regard to a light tax.

We can now proceed to show the positive side of the importance of our subject.

Why should Economics be studied?

The discussion of the subject matter of Economics and its nature must have clearly shown the usefulness of the study of this branch of knowledge. Everybody and every country wants to be prosperous. But there are ways and ways of getting rich. A clear discernment of the operation of forces which bring wealth* to individuals and to nations or a study of the causes of poverty and its cures is apparently most useful. Economics explains the wonderful organisation which enables such a vast majority of people to be well-fed, well-housed and well-clothed from day to day. That this organisation has defects and imperfections admits of no doubt. But on the whole it works very well. To understand the working of this organisation is a great step towards being able to suggest or bring about improvements therein. It is a commonplace to say that all human institutions are imperfect. But this admission does not amount to the granting of a commission to any novice to condemn the exist-

* Unless otherwise stated the term 'wealth' should be understood in the whole of the text of this book in Prof. Cannan's sense *i. e.*, the state of being well off.

ing order of society. Let him understand its working and thoroughly grasp the principles underlying it. Only then his opinion will be entitled to any weight or importance as regards any suggestions for improvement or for experimenting with utopias. But, apart from this general purpose, the study of Economics has also another practical utility. Economics leads a person through the labyrinth of the existing economic order. While thus studying the various services rendered by individual members and noticing many other new possibilities of giving satisfaction, a man may find his own place in society and may take up any one of the possibilities either of improving the existing services or rendering of any of the new ones thus discovered. Further, if the knowledge of Economics becomes widespread and the economic intelligence of people is improved, a large amount of opposition to many desirable changes which at times are badly needed will be removed. Similarly the pros and cons of every new scheme will be more carefully weighed and costly projects will not be light-heartedly undertaken simply because they may look attractive. Every individual tries to make his sources go the farthest. He wants to get as great an advantage or satisfaction as possible out of his possessions, whether material or non-material, and whether subjective or objective. He wants to eliminate all possible waste of expenditure and energy. Economics teaches him to do that more effectively. It impresses upon him the necessity of spreading his expenditure in such a way that the satisfaction obtained from all equal portions of his

expenditure is equal and, the total satisfaction from the entire expenditure is, under the circumstances, maximum. (This is known as the law of equimarginal satisfaction). Similarly he tries to spread his energy over several tasks according to the same principle. But very often the operation of this principle is defeated by a great margin in respect of national or collective resources. A natural reason for this is that the criterion of personal satisfaction cannot be applied here by the statesman. It is not his own satisfaction which ought to guide him in matters of national expenditure but the satisfaction of the whole nation itself; and without a thorough knowledge of the principles of Economics this the statesman cannot properly understand.

Besides, inspite of the antagonistic tendencies of the various countries visible at present we can say that Economics teaches co-operation between man and man (and also, therefore, between nation and nation). It is true that the revival of protectionist tendencies and the question of war debts and Reparations at present obstruct this co-operation of all for the benefit of the whole world. But no country professes to advocate or admire the present economic impasse which has been created by the short-sighted policy of the politicians. Indeed signs are not wanting that sense is dawning upon them and that they are realising that their present policies require complete overhauling for the world's economic recovery. It is not the considerations of justice which may ultimately lead to the wiping out of reparations and war debts or the abandonment of protective policies, and

the increasing expenditure on armaments; dire economic necessity may, however, awaken a more realistic sense of their interest in the peoples of the world in the near future. The frequency with which International Conferences are held, now at Lausanne and then at Geneva and London etc., clearly points to this fact. The conversion of Senator Borah of the U. S. A., who was a staunch advocate of no remission of war debts, to this view is also very significant of the tendency of the times.

What kinds of commodities, or how much capital should a country import and from which other countries of the world, what should it produce or what industries should be encouraged, what and how much of any commodity should she export, in what way should the unemployment question be solved, all these are purely economic questions the satisfactory answer of which is obviously of vital importance for a nation. How much should a country spend on armaments and how much on education and other nation-building departments will depend on the clear appreciation of the present and future economic needs of a country. In all these respects international co-operation means a great economy of resources for the benefit of every country. Just as every single individual has no longer to spend as much to defend himself as he, in the absence of the forces of the state, would have to, and just as this means a great economy to the whole nation, similarly international co-operation would reduce the need of expenditure of such huge sums on

armaments by every single country. Just imagine, how much inconvenient it would be for a passenger who goes from Paris to Constantinople if he has to change and shift from train to train in case the railway systems of the various countries did not co-operate with one another. A great world economy is possible by such co-operation and the World War would not have been fought in vain if even a quarter of a century after it the world realises this simple fact.*

In technical language we can say that given the ends, a working knowledge of Economics enables us to choose the way with the fullest consciousness of the consequences and reactions of all the different ways for achieving those ends. Ordinarily man is a bundle of contradictory aims and motives. A conflict between ends often defeats all of them. Economics does not lead us to determine what ends we shall pursue. Whether in matters of tariffs, in monetary policy, in schemes for industrial developments,—nay in all human affairs, rationality consists in arranging our affairs in such a way as not to let a conflict of ends creep in, which should involve a great waste of energy and other resources. For extending the area of consistent and co-ordinated activities a deliberate analysis and examination of different systems and resources is necessary.

This analysis also "enables us to judge more complicated systems of society. It enables us to see what

* On this topic also read the illuminating address of Professor Cannan to the British Association (Section F.), Belfast, 1902, printed in the Economic Journal for December 1902 and also his Economic Outlook, pp. 172-194.

sets of ends are compatible with each other and what are not, and upon what conditions such compatibility is dependent . . . . . without economic analysis it is not possible rationally to choose between alternative systems of society[1] . . . . It is not rational to will a certain end if one is not conscious of what sacrifice the achievement of that end involves. And, in this supreme weighing of alternatives, only a complete awareness of the implications of modern economic analysis can confer the capacity to judge rationally . . Is it not the burden of our time that we do not realize what we are doing . . . . . Art not our difficulties due to just this fact, that we will ends which are incompatible, not because we wish for deadlock, but because we do not realise their incompatibility . . . . . As consumers we will cheapness, as producers we choose security. We value one distribution of factors of production as private spenders and savers. As public citizens we sanction arrangements which frustrate the achievement of this distribution. We call for cheap money and lower prices. fewer imports and a larger volume of trade . . . To such a situation, Economics brings the solvent of knowledge. It enables us to conceive the far reaching implications of alternative possibilities of policy . . . it does make it possible for us to bring our different choices into harmony . . . if irrationality, if the surrender to the blind force of external stimuli and unco-ordinated impulse at every moment is a good to be preferred above all others, then it is true that *raison d'etre* of Economics disappears[1] . . . .

1. On this please see the next Chapter.

1. Robbins: Nature and Significance of Economics, pp. 135-41, Macmillans 1932.

CHAPTER IX.

THE ECONOMIC ORGANISATION.

The Present Economic Organisation of Society.

Man has innumerable wants and as some are satisfied others spring up. On the other hand the means to satisfy many of these wants are very limited. He, therefore, must husband the available resources and must try to get possession of more of them so as to be able to satisfy as many of his wants as he can. Acting single-handed he can achieve very little. He, therefore, finds it advantageous to associate with his fellows and pool his own resources with theirs. Thus if it is a question of lifting weights we find that if A and B combine, together they can lift a much heavier weight than the total of the two weights which they would be able to lift separately. From this it is clear that by organising himself with his fellows man can make his resources go farther in satisfying his wants than the sum total of these resources would, in the absence of such organisation. Similarly he discovers that there are things the full use of which cannot be made at any one single point of time, *i. e*, they are *durable* economic goods. He tries to preserve (or save) these goods so that they may be available for use at a later stage and he may not have to make new efforts over and over again, every time to get them when they are wanted. He, therefore, finds it necessary not only to combine himself with others but also to organise his own life, work, and possessions in such a manner that waste of his energy and his other resources may be reduced to a minimum possible quan-

tity. As has been said many times before, Economics is the study of the principles of man's behaviour in this attempt to remove scarcity.

From this general introduction two things emerge. One is that man *organises* his work (or labour) singly as well as in combination with others. Second, that he tries to *preserve* (or save) the durable useful objects for future use. Now there are various ways of achieving both these ends. A man may divide his own personal work in so many different ways. Or, he can enter into combination with others on the basis of various principles. He can enter into a hundred per cent. combination with others in respect of work and its reward. He can evolve various schemes for the sharing of the reward of joint work. He can agree to work independently and separately and still share the reward in common with others. He can join others only for a part of the work and share the reward according to any agreed scheme of proportions.

There is nothing sacred about any of these various combinations or systems of organisation. Any of them is as good or as bad as any other. Man adopts all these kinds at different times and on different occasions. For instance, he may so unite with his life-mate in work and reward that both of them lose all sense of their separate individual effort or possession. He may share the reward with his wife in any proportion and still may not ask her to share the work. He may go farther and sanctify his relation with a woman and call it a union of souls. He may work for his children without any motive of commercial gain from them. He may work for the satisfaction of his own physical

needs and may not care for any other man or woman or children. The criterion for determining the best kind or form of organisation at any time is the consideration of the best way of achieving of any particular aim. The question is what satisfies man most at any time.

Some people think that this or that particular form of organisation is best as it conforms to the requirements of *human nature* in the largest measure. Their conception of human nature is that it is something fixed and unchangeable. For instance, they believe that the possessive instinct is an essential ingredient of, or is inherent in, human nature. That the right of ownership is a privilege which is most ardently cherished by human beings and that it is so because of something in the nature of man himself. As a matter of fact human nature is a *variable* and *not* a constant something which is fixed for eternity. According to some other thinkers the acquisitive instinct is simply an acquired habit which has been handed down from generation to generation. It is inherited from primitive ages and not inherent in man. Whatever be the truth, it is true that there are other instincts and impulses which by common consent are said to be nobler than the grabbing habit and which very much check and control and influence the latter in many ways.

The present form of organisation of human society has grown as if spontaneously and is not the result of any deliberate plan. It has passed through several stages of development and has modified and transformed itself beyond recognition of its original

self. As a mushroom growth it has certain defects. In fact as is quite natural, all human affairs are bound to contain defects. So long as they remain human and do not become angelic or celestial they cannot be perfect. Some people, who have fixed their attention upon these defects, condemn this form as utterly hopeless. Indeed they have pointed to the signs of crumbling and decay which are creeping in it and want to scrap it altogether. This would, however, amount to cutting adrift from the past altogether. Let us first understand its underlying principles and its working. We shall then study how it has come to be what it is and then we shall see if any of the substitutes proposed is likely to serve the object better.

The principles underlying the present organisation.

The present economic organisation of society is said to be Capitalistic or Individualistic. It means that everybody is supposed to look after himself, at least, so far as the satisfaction of his wants is concerned. The term Capitalism is, however, very ambiguous and vague. Hobson defines it as, "the organisation of business upon a large scale by an employer or company of employers possessing an accumulated stock of wealth wherewith to acquire raw materials and tools, and hire labour, so as to produce an increased quantity of wealth which shall constitute profit".[1] The underlying principles are:—

(1) Free enterprise,

(2) Private property.

1. Development of Modern Capitalism, P. 1, Walter Scott Publishing Company, 1916.

"Free enterprise" (or Laissez faire) means that every body is free to follow any calling he likes. Of course this principle has never been put in force completely—nor can that ever be done. When it is said that every body is free to take up any calling, it is not meant that he has to take no account of the interests of others. So long as he does not overtly interfere with others liberty he is allowed this freedom. For instance he is not allowed to follow the occupation of a thief or a robber with immunity. Again even under the present system there are certain occupations which cannot be adopted by anyone as his means of livelihood without the express permission of the State, *e. g.*, the production and sale of liquors. There are still other occupations entry to which is regulated by law and is restricted by means of conditions imposed for passing certain examinations and tests etc. But it does, at least, mean, that apart from these very few exceptions, under the modern system, everybody is free to seize any and every opportunity which he observes and feels it to be within his reach.

The second principle is that of private property. It means that you can acquire the right of ownership in as many things as you can get hold of in a legal way. This is a natural result of the first principle. What is the use of one's following up a business opportunity if one is not allowed to remain in full enjoyment of the fruits of one's labour and enterprise. This principle of unlimited private property also is not at work in full force. For instance, monopoly rights are also a kind of property rights and these are

restricted and checked by the state in various ways. Similarly in the modern state quite a large amount of property belongs to the state and the larger the boundaries of the latter the more restricted is the field for private property. For instance, all roads, parks, railways etc. are now almost everywhere public property.

Another consequence of this principle is the right of bequeathing and inheritance. We can give all what we have earned ourself to anybody we like while living, or passing on to him when dying. If this right of bequeathing was not granted, saving and accumulation would be greatly discouraged and the production of lasting things, such as houses and factories will very much diminish. One goes on acquiring resources much beyond one's own needs which one can visualise for the whole life. This is so because of our interest in our progeny. Not only do we want to see our children being brought up and educated nicely but also that they may be comfortable even when we are gone.

How it works.

The present organisation works through *specialisation* and *exchange*. Specialisation which is also variously known as division of labour, co-operation and competition leads to exchange. That is why the present system is also sometimes known as Exchange Economy or the Competitive Economy. A simple result of specialisation is large-scale production which, in its turn necessitates its being spread over time and therefore it is carried on in anticipation of demand. Now let us explain all this.

It is clear that every body cannot satisfy every one of his wants with his own effort. Men have different capacities and potentialities. Some have a greater aptitude for somethings, others for other things. Some have a great liking for Art, others for Mathematics, others for Engineering and so on and so forth. You cannot be your own dentist, miller, clothier, builder etc., etc. Everybody, therefore, needs the product of the labour of others. He stands to gain by producing that thing himself for which he is most capable or which, under the circumstances in which he is placed, is most advantageous to him. The whole of what he produces is not wanted by himself. Others want it and he wants what others have produced. He, therefore, exchanges his own product with those of others and thus everybody is able to get so many varied things which are wanted. This exchange is further facilitated by a common measure known as money. But of money, more later. Here we are concerned only with the principles and methods of working of the present organisation and not with the instruments with which it works. Obviously when we concentrate all our resources on the production of only a particular article or service which we can produce to our best advantage we are able to produce more than we would be, if we ourselves had to produce, all the articles we needed or were likely to need at any time. This opens the field for large scale-production. Then comes the stage when we do not wait for others, to let us know how much of our product they want. We go on producing in anticipation of their demand. Gradually we begin

to discover the possibilities of producing still larger quantities by means of combining with others and buying our raw material from distant markets and during the most suitable seasons. Thus for producing woollen cloth wool is bought from all the four corners of the earth and at a time when it is cheapest. This is carried over long distances which takes time and even then it is stocked for considerable periods before being actually manufactured. Similarly, its sale again takes a long time. That is why we say that under the modern methods production is spread over time.

It was said above that specialisation, division of labour, co-operation and even competition are simply different phases of one and the same phenomenon. A little reflection will show that this is true. Perhaps some doubts will be entertained as regards classing competition with co-operation. And yet the two are really the same thing, looked at from different angles of vision. This doubt is really based on the evil results of unrestricted competition which have become so glaring. But for the moment we are not fixing our attention upon the defects of the present organisation. Unrestricted competition is, of course, the same thing as unrestricted "Laissez faire" and in its extreme form will result in chaos and anarchy. We shall study that aspect of the question at a later stage. Here we have simply to point out that a well restricted and regulated scope for the exercise of competition is indispensable in any scheme of Exchange Economy for exploiting the possibilities of specialisation to its fullest extent. We give opportunity to competitors to

produce a certain thing at a smaller cost than the one at which it has been produced hitherto, and thus open a vista of the possibilities of new inventions, discoveries and ultimate progress. Thus competition brings down cost of production for the general benefit. Competitors, therefore, join their efforts to benefit the community.

Defects.

Now these characteristics of the modern system have created large loop-holes for some very serious defects to creep into the body politic of our society. Take, for instance, the possibilities of maladjustment and waste involved in the long process of large scale production spread over long time and therefore carried in anticipation of demand by every independent producer. When so many independent producers are anticipating demand for an article in such an unco-ordinated way, the demand is bound to be sometimes more than what was anticipated and thus a scarcity would result; sometimes it will be much less than what it was anticipated to be, and then "over-production" and consequent depression and slump will trouble the producers. Then again large scale-production necessitates the concentration of the material resources of production in the hands of a few. This concentration of material resources leads to a further concentration of power over the lives of large masses of people belonging to the working classes. These masses of people then practically lose all freedom of enterprise. The so-called system of free enterprise then comes to naught. Similarly the system of private property splits the

nation or society into two warring camps of "haves" and "have nots".

One can go on enumerating the defects of this or that system of Economy for any length of time. But when all is said and done it remains true that the present organisation which feeds and clothes and houses such a vast number of people so well cannot altogether be condemned. It has these and other defects no doubt. These defects are coming to be universally recognised and remedies are being sought out. For instance the state agency is now supplying all sorts of commercial intelligence for the exercise and expansion of the scope of private initiative—sometimes with state aid of various types such as guaranteed orders and interest etc.

Similarly quite a large number of big enterprises such as railways, water works, post office etc., are now run by the state. It is realized that if left to itself the present organisation would grind and crush even some such sections of society as might prove to be very useful. More and more facilities for their uplift and improvement are therefore provided, so that these backward sections may have, at least an approximate equality of opportunity and their potentialities may be fully developed for the benefit of the whole. Thus, for example, free primary education at state expense and scholarships for poor but deserving students as well as state aid-in-grant to all kinds of education, liberal as well as vocational, free hospitals, all these and many other privileges are meant to encourage the growth of a healthy outlook on life among all.

Yet some people would not be satisfied with these improvements which they regard as mere palliatives. They would go much farther and instead of tinkering at the present organisation here and there, they would let it go, lock, stock and barrel. They would completely replace the present order of society by this or that novel scheme.

We have said that there is nothing sacred about this present form of organisation and that if some other is found at any time to serve the purpose better, we should not hesitate to overhaul it or even scrap it altogether. But there are a few considerations which should be borne in mind while attempting to reform the present system. In the first place too great a pressure must not be put on individuals' loyalty to any scheme of reform. We have no right to expect implicit obedience on the part of everybody else. Nor can we be sure of the ultimate excellence of our scheme. The present society has evolved through ages and embodies the wisdom of hundreds and thousands of generations. This principle of evolution must be recognised. Any scheme which we may formulate to-day cannot be good for all time to come. We cannot visualise the coming events and circumstances beyond a very limited range of time. Openings for organic growth, therefore, must be provided for in any scheme according to which we might seek to reorganise human society. If this is not done, then every time a new important circumstance arises, the whole society will have to be reorganised completely. Frequent revolutions are not at all conducive to the growth of prosperity. They involve an unnecessary amount of destruction and waste,

produce an unhealthy mentality of intolerance and destroy perseverance and tenacity of the people. We must gain from our past experience and build and improve upon it rather than cut ourselves altogether adrift from all that history has to teach us. Even if we wish to implant altogether new organisations on humanity, we should take care to avoid reactions as far as possible. This is best done by preparing the ground for new ideas by persuasion and permeation rather than by force and coercion. It may take a longer time to build, but by following this method we shall be laying down deeper and sounder foundations for the new order.

If this is granted, then an important conclusion follows. It is that we must find or create openings for the new order of things from within the present and not destroy it altogether in the hope of rebuilding it anew. Even if complete overhauling is necessary we should introduce and accelerate the elements of change within the present order. History shows that our present order has been transforming itself continually from the very beginning and it has often changed considerably within comparatively short spans of time. There is, therefore, absolutely no reason to be impatient. As a matter of fact the present order is decried as something hopeless and useless mostly by those whom the wheel of time has kept down or who believe they deserve much better things and amenities of life. To some extent everybody believes that he is not getting what he really deserves. But the mentality which is destructive of the present order is partly a result of the upbringing of these individuals. It has produced a

pessimistic bent of mind and the schemes propounded by them are merely councils of despair. It is but common that those who are in trouble should cry and their misery should excite sympathy. The present order gives comfort to millions and billions of people. They, however, have no need to trumpet their happiness and it is so common that people do not pause to take any notice of it. But those few who are in trouble naturally raise a hue and cry and their loud protestations cannot fail to attract attention. If we exclusively notice only these and do not take account of millions of other people who are so well-housed, well-clothed and well-fed we cannot but be led to regard the present order as something very awful.

There are various schemes of reform propounded by all sorts of people. Obviously it would be impossible to take account of these. But before we notice any one of them let us briefly survey the transformation which our present order has already undergone in the past.

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CHAPTER X.

THE ECONOMIC ORGANISATION.—(*Contd.*)

The General Evolution of the present form of Organisation.

Looking back at the prehistoric times we can very well imagine that at one stage man must have been making very crude efforts for satisfying his animal wants. At that stage he must have been making use of natural things as he found them and in no way changing their shape or size. Gradually he found means to cultivate friendship with other creatures of his own kind as well as other animals. Thus he must have discovered that there were some animals who suckle their young ones just like human beings and that these are less fearful and more friendly and helpful to man. He began to rear and own them. This second stage may be described as nomadic and pastoral. He gradually discovered that for his own sustenance and of that of other creatures certain kinds of vegetation were more useful than others and that it was in his interest to remove and check the growth of herbs and plants which were harmful. Here then the elements of transformation of the natural objects for the use of man began to show themselves in a negative form.

By experience he must have discovered the ways of cultivating the ground and growing corn. This third stage may be described as the Agricultural Stage. The beginnings of the system of private property can be very well imagined to have been made in the pastoral and agricultural days. When grazing the sheep, people must have felt some right of owner-

ship of certain pastures. There must have been wars for pasture lands between individuals and families and tribes. Yet as in the pastoral economy they were mostly nomadic in their habits, the system of private property in land must have been very crude and that in sheep etc. a little better. Under agricultural system, however, private property is known to have developed rapidly and here we have so many different systems of land tenures.

Then came the handicraft stage. Of course, even for the earlier stages, man must have required implements. Yet under the agricultural stage we can very well imagine that a need for providing common implements and instruments must have been felt. People must have observed each other at work and must have compared notes about the usefulness of certain methods and instruments. They must have found ways of producing other necessary things besides the articles of food.

Later, we have various attempts at the organisation of society. In some countries, first, they took the form of guilds which were sometimes associations of independent producers of different articles and sometimes those of merchants. Their aim was to control and regulate and standardise qualities. Then was developed what was known as the "Domestic system" which meant that the work was distributed by merchants to the workers who worked at home. There was no question of permanent employment of anybody by anybody. This led the way to the "factory system," where large masses of people are

employed by a few. The "Factory system" itself has undergone many changes. At one time employers were opposed to the associations of workers known as Trade Unions. Gradually again the evils were recognised and remedies were tried. We have schemes of labour co-partnership and profit sharing. We have various "Council and Committee" plans, welfare works, co-operative production and state regulations, first, in the interest of female and child labour and then in the interest of labour as a whole. Last but not the least important has been the tendency of the state undertaking many of these enterprises which are either essential for the protection of life and health of the masses or are in the general interest of the body politic.

Thus we have seen how great changes have taken place in the past in our economic system. It has proved itself capable of change and is still undergoing transformation. But as has been said some people would altogether change it and put a new one in its place. Various schemes have been proposed. One is actually tried in Russia. We cannot discuss them all here at any considerable length. But their underlying principles can be mentioned and their practicability or otherwise discussed.

The reform proposed by collectivists.

The central idea of reformers is that of socialism or collectivism. The meaning of these terms also are not quite fixed and definite. Many schemes for reorganisation have been proposed. The idea of joining individuals together for this or that object runs through them all. This joining

is different from what an employer of large masses of people does under the factory system or what is done by two or more individual business men when they enter into some sort of a partnership etc.

The collectivists will replace individualism *i. e.* every body working in a manner he likes for his own private gain, by making people work together for the common good and sharing out of the common gain. The idea appears to be very attractive. The present organisation of society is, of course, defective. As we have already seen, this form also is not the original one. In fact our present form of society took shape as a result of protests against its predecessor under which we had slavery, serfdom, manorial system and all sorts of class privileges for the few chosen ones in society.

These ideas became prominent as a result of the 18th century Revolutions (Political in France and Industrial in England) which had very far-reaching unsettling social effects. Two tendencies were very conspicuous (1) In dividualism (2) Socialism.

Adam Smith had started the discussion of laissez faire and it had led to individualistic ideas in discussion, legislation and reform propaganda. The outcome of this individualistic tendeney was that new social and economic order under which the middle classes (bourgeois) were greatly benefited at the expense of the great mass of landless, moneyless, wage earner.

This new order of things displaced an old society in which men were bound down by feudal, manorial, commercial, industrial, fiscal, ecclesiastical and political ties. "It was inevitable that in reaction against a social system under which but a very small minority of men were free from obnoxious bonds and restraints the creators of the new order should incline rather strongly towards the opposite extreme. Ties which were helpful and even indispensable, were severed along with those which had proved to be fetters. The individual was to be emancipated from both private and public control and made to stand upon his own feet. Universal individualism and universal selfishness would be universal prosperity and contentment.

This new order of things meant freedom, opportunity, business prosperity and wealth to some men and to others it meant disappointment defeat and new forms of dependency. To the wage earning population the reforms of the revolutionary era had brought little benefit and thus class distinctions were accentuated and very unsatisfactory conditions of subsistence were imposed upon the Proletariat which enormously increased during the 19th century all over Europe.

From such conditions sprang the earliest movements for the amelioration of the lot of the working classes by national legislation. People began to see that a society in which every man is free to do as he likes barring a few generally recognised offences against life and property might be very far

from the ideal. And yet the Adam Smithian individualising was too strongly and deeply rooted in the minds of the people and the relief was given very sparingly and in a miserly way. This led the people to think of ways of reform beyond the pails of legislation. They became convinced that no amount of a simple reforming measures based on the existing social order would assure labouring men a position in society to which they are entitled."

The Socialists' Schemes.

These people came to the conclusion, therefore, that private property and inheritance must go. They said that land is of the "Lord" and no man has the right to appropriate it. It is a free gift of nature and must be utilised for the benefit of all the sons of God. Besides the rise in the value of any piece of land is often quite independent of any effort on the part of the landlord and the community should stop these idle drones from sucking the life blood of the toiling masses. That means the abolition of rent. Now these people argued that capital is nothing but the saved up labour, *i.e.* something that really belonged to the labourer and ought to have been given to him but which was wrongly appropriated and saved by the capitalist. It means that interest should go. Now profits in so far as they are the reward for management, they may remain because they are not essentially different from wages. But in so far as they are the result of exploitation of ignorance of the consumer, they are immoral and must be wiped out.

It must be admitted that in so far as these people urged that everybody should work and that the rich people should also not remain idle, they were perfectly right. In most cases it is also true that combinations of capitalists have deprived large number of men of a substantial part of their freedom and have made them dependents. It is also no doubt true that many fortunate inheritors have squandered their property in a most wasteful way which is harmful to society at large. The very fact that the principles of progressive taxation and death duties have been accepted all the world over shows what a tremendous influence has been wielded by the socialistic ideas. Most probably Rignano's plan of inheritance may also be adopted sooner or later in a more or less improved and modified form. The plan, briefly, is that the tax on inheritance may go on increasing from son to grandson and from grandson to great-grandson and so on according to the age and changing of hands of the property.

But when all this has been said, the problem remains as to how the socialists will plan the scheme of production and distribution. Upon this there is no unanimity and the socialists have differed widely among themselves. Some of them have proposed the centralised system of production. This is what distinguishes the state socialists from others. The process of co-ordination according to this must be left to the state. Others have proposed independent associations of men. This may give rise to co-operative workshops or guild socialism.

The Christian socialists have proposed that land alone should be nationalised. Others say that both land and capital must be nationalised. Still others say all Governments should be destroyed altogether, men are essentially virtuous and it is the existence of the Governments that make them vicious. These people are termed as anarchists.

There is yet another school of socialists who declare that p roduction need not be interfered with. It may be let alone to follow its course. It does not matter what you produce so long as the state sees to it that you do not injure the interest of others. This may be done by taking away from you what you have produced and distributing it among the whole people in a manner most advantageous to all and giving you what you need. It means that not production, but distribution will be planned by the state. You may possess any amount of land and capital in the name of the state but all that you produce with their help will not belong to you but to the community. It means that distribution will not take place according to deserts, but according to sacrifice or needs.

The three principles of Distribution.

Distribution according to sacrifice involves labour theory of value. Standing on the deck of a ship you throw a boulder into the sea and the diver dips into the bottom of the sea and fetches that boulder. You are ready to pay him a pice or two for satisfying your curiosity. But he asks you to pay a thousand rupees because he has put in so much labour and sacrifice in bringing out that piece of stone. You say that that stone has no

value for you, it would have been different if it were a diamond. But no, the sacrifice theory of distribution will entitle him to have a lion's share, whether his sacrifice has benefitted the community or not. The Sadhus and Allahus bury themselves under the ground and sometimes have knife bruises on their bodies. Whether their sacrifices satisfy any demand or not a socialistic state based on distribution according to sacrifice must provide a handsome share for them out of the national dividend.

Distribution according to need is the most (scientific and) economic in the short run. This is so according to the principle of the diminishing marginal utility. But in the long run it is likely to prove very wasteful. It implies the golden law of wages. To increase your income or to raise your wages all you have to do is to raise your standard of life or increase your needs by producing an unlimited number of children. In this case the Malthusian difficulty becomes a real danger. Thus real merit *i.e.*, productivity or inventive faculty will be at a discount and idleness at a premium. The very fact that the product of your labour or genius is taken away from you and you are not allowed to enjoy the full advantage of it discourages the exercise of your faculties and encourages the increasing of needs. The doors for human progress are then closed down.

We adopt a particular plan to-day for the whole community. This implies several things. In the first place we must assume that the individual has no choice but to accept the national plan. This amounts to a loss of individual liberty. Then it remains nobody's

interest to suggest improvements. If it was desirable to make men virtuous by compulsion, then God would have done so and could have done so very easily. It implies, therefore, that you do not leave people alone to commit mistakes and then learn. True that prevention is better than cure in many cases. But this cure is such that both the patients and the disease are destroyed in so far as the individual is deprived of his individuality altogether and becomes a mere tool.

The socialists do not deny that saving is necessary. But they say that private saving should be discontinued. No doubt it is true that private saving is very unsystematic and very wrongly distributed into its various kinds *i. e.*, material and non-material. The socialists propose that saving should be done collectively by the state. But experience shows that states have been invariably extravagant and in debt rather than being saving machines.

As regards inventions it is proposed that laurels such as titles etc., may be provided to encourage them where the pure love of humanity is found insufficient to serve as an impetus. This is all good. But looking at the world as it is to-day, we realise that only an infinitesimal amount of inventive work is done out of purely noble motives. Man is both flesh and intellect. And it is no good to ignore flesh and say that man can be made to work altogether with the philanthropic motives. His flesh requires personal satisfaction. We cannot do away with our flesh and still live. We must provide some scope for the exercise of individuality in our work and enjoyment. The expectation that people will submerge their individuality altogether in the common

mass is neither desirable nor based on a sufficiently keen observation of facts. Socialists, on the other hand, say that human nature is not constant and invariable. It is very changeable. It can change. Now there are two ways of changing human nature (*i*) persuasion and encouragement (*ii*) coercion. The latter is advocated by the communists. Those who advocate coercion assume that they are all wise. The other side must be wrong. In fact many of them believe so much in their own infallibility as to deny the existence of any such thing or creature as God. They deprecate all religion. It must be admitted that in some cases coercion becomes necessary to change human nature as in the case of compulsory primary education. But in all fairness what should be done is that the state should impart unbiassed education up to a standard possible for such impartial instruction and then let people who have grown up, think out any plan for themselves. Let there be persuasion and propaganda of all sorts without let or hindrance and let human beings grow either rank individualists or rank socialists or a middling sort. But the decision whether what is impartial instruction must be left to the state. All that you can do is to ensure that state must not flout the public will in this case as well as in other respects. But here we leave economics and enter politics.

Conclusion.

In conclusion we can say that the reformers would replace the principle of *service* for the principle of free enterprise and gain as incentive to work. But the question is what is the criterion of judging the worth of service except through exchange? And if exchange disappears who

is to judge the worth of every body's services? This work left to a body of individuals forming the state cannot naturally be performed very satisfactorily as the question of service does not depend upon sacrifice, but satisfaction yielded to consumers. And as enjoyment of satisfaction is a subjective phenomenon, the state cannot measure it for the whole body of its subjects. There is no measure to judge how great a sum total of satisfaction will be obtained from any particular article consumed by so many individuals separately over such a long period of time.

Besides, although we may admit that such a great inequality of means and possessions as prevails at present is not desirable on the whole, yet absolute equality also is not altogether desirable. It will remove that incentive to work which comes through emulation. Under the present form some people achieve great success and gain therefrom. Others feel encouraged to follow and thus progress of the whole body is carried out. Under socialism there would result a stunting equality which will produce stalement and drab and depressing uniformity.

But the modern tendencies cannot be ignored. Indeed there is ground for the belief that there is yet a vast field for collectivism to exploit legitimately for the benefit of man without crippling his individuality. The springs of ideas coming from individuals must not be dried up. And individuals must be allowed to benefit considerably from their contributions. And yet the scope for expansion of the area for collective action and sharing of gain is still very large.

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