Ninth International Conference on Land Value Taxation and Free Trade, St Andrews, 13th-20th August 1955.

WHAT IS SOCIAL SCIENCE?

Scientific and technical progress unhaltingly multiplies the possible efficiency of labour. According to United States experts, by the use of the latest methods the same exertion of labour produces 20,000 times as much flour as in ancient Greece, 1,000 times as many bricks as in the Napoleonic epoch, 650 times as much smelted iron as in the beginning of the present century, 9,000 times as many electric lamps as 40 years ago. Similar progress occurs in all departments of production. Thanks to this, if in the United States only men between twenty and thirty were to work, and only for 13 hours weekly, using the latest techniques, the output would maintain an average level of comfort 10 times as high as in the latest period of prosperity there. In every country of the world similar results could be attained.

Despite this hopeful capacity of the present arts of production, men are dissatisfied. They complain, uselessly but rightly, that labour is too exhausting, wages are insufficient, savings insecure, and goods too dear; their business is risky and uncertain, success is difficult and life over-complicated. Even the most powerful governments grumble that their colossal budgets often are not enough. We all, individuals and states, lament that we cannot satisfy our desires, even our needs, although our material needs could be abundantly produced. We all are troubled or threatened by deprivation, that is, by poverty.

If honest work and honest application of savings received their abundant rewards, then all men, to escape

present or future poverty, would prefer to work and could easily save. But despite the great progress of the arts of production, remuneration is insufficient or at least out of proportion. Therefore many men, suffering from or fearing poverty, choose to rescue themselves by trickery or violence. From experience and example they learn and teach mistrust, treachery and hatred. When they conquer they acquire the vices of the tyrant. Conquered, they develop the vices of the slave. They become frivolous or hypocritical, careless or hardhearted.

These evils invade the whole of society, suffocate good-will, make it appear that nature is cruel, that man is egotistic and that fine feelings are an impediment. Justice is replaced by the cult of power and trickery. Human beings are at strife, and the noblest qualities of man are degraded.

Directly or indirectly, poverty disturbs and dehumanises us all, even people who are rich, strong, cuming, or prudent. It is the destructive force which transforms the social tendency into mistrust, co-operation into oppression, progress into a threat. Against it the art of statesmen battles in vain, as does the love for our fellow-men. Its terrible consequences are lessened by the human social instinct. But neither this inborn natural instinct, nor moral education, nor the wonderful progress of the arts of production have succeeded in abolishing poverty and its consequences.

Society is poor because insufficient is produced. But the progress of productive techniques does not remove poverty, because distribution is unsatisfactory. To abolish poverty, more must be produced and the produce properly distributed. To that end, we must know the science variously called political economy, national economy, social economy, social science, or simply economics; because this science, so diversely named, is the science that deals with the social production of wealth and its distribution in society.

If we want wages to rise, business to prosper, prices to fall, and men to live in comfort, security, harmony and peace, we must turn to political economy.

Only the spread of knowledge of this science, giving guidance towards the proper improvement of state laws, can achieve these aims.

But political economy is insufficiently understood. Its central principles are not comprehended by the untutored masses, nor have they been grasped by many persons of high rank and education, and even, which seems incredible, by many economists: In fact, the majority of persons who speak, advise, dispute or write about wages, capital, production and similar departments of that science, even do not understand clearly the meaning of those technical terms.

Regrettably, economics is often falsified, as is all human knowledge. In fact, some misguided economics have made and still make that science deceptive, overcomplex and ignoble. The famous English writer Macaulay said that even the law of gravitation would be questioned if it menaced any powerful interest. It is not strange then that some deny the most evident truths of that science which deals with the interests of everyone.

The falsity of the classical economists is shown in its foundations. Thus (1) according to Adam Smith, wages are derived from capital; (2) according to Ricardo, the increase of population compels the cultivation of soils less and less fertile; (3) according to Malthus, population increases faster than its ability to provide food; and (4) according to Darwin, humanity progresses through the extermination of the weak and the hereditary transmission of the qualities of the selected remainder.

From these erroneous doctrines it is easily concluded that wages and food will always be insufficient, and that poverty is not only inevitable but in final analysis useful, because its man-destroying consequences prevent terrible world-famines on account of over-population, and it perfects the human race.

Those doctrines console the powerful, absolve injustice and excuse the impoverishment of the masses. Therefore, the privileged support those errors, and have succeeded in popularising them in the press, in literature and in the universities, gaining their acceptance by untutored people and even by eminent philosophers.

The false teaching of modern economics is found principally in the so-called inductive schools. According to these schools, human beings cannot know truth because of the natural limits of the intellect. On account of this, or because of the different circumstances in each epoch and each country, it is said that general economic rules cannot be framed. It is concluded that economics is not a science, but only the art of collecting statistics as numerous and as complete as possible, on which basis special regulations are constructed which the directors of economic life think most fitting for each case in question. The inductive schools thus disregard the majority of individuals and support state tyranny. Denying that natural economic laws exist or can be known or applied, these schools remove all moral responsibility from the directors or their advisers, and leave them uncontrolled; they support false authority as against natural morals, and intensify the struggle to secure official posts and privileges.

Furthermore, through the over-use of formulas, graphs, statistics, historic analyses and systematisations, economics is made too complex and thus falsified. Over-burdened with details, it is presented in thick and costly volumes which make the subject incomprehensible, boring and repellent. The authors are thus able to appear scientific to those whom they frighten away from the science. But those complications, whatever may be their aims and results, are neither useful, nor true economics. Let us examine them.

The facts and phenomena of social life, materials, forces, human beings, production, distribution, exchange etc. - are so numerous, diverse, and changeable, that the intellect is incapable of reckoning them all in by mathematical formulae. At the same time, the natural laws ruling these facts and phenomena are so simple that they can be understood without such formulae. To understand this science one needs only to know the

economic truths. To defend it, all that is required is an acquaintance with the chief errors on which the false systems are based. With this knowledge, one immediately perceives the falsity of the many systems which ignorantly or cunningly have been, are being, or will be invented.

Graphs and statistics most often do not help in this science. They can be interpreted wrongly by those who do not know the subject. For example, seeing from graphs that the power of Rome grew and then lessened correspondingly with the number of Roman slaves, concubines and gods, one could wrongly conclude that slavery, polygamy and paganism established that power and that their decline ruined the empire. Whoever knows economics does not really need graphs and statistics, for only on rare occasions do they serve to emphasise facts.

Inductive economics are complex, uncertain, pessimistic and truly contemptible. They should rightly be disdained.

The true science of economics neither has nor could have those defects. If it were narrow-principled, if it did not regard the good of all men, then it would not apply to the whole of society. Consequently it would not be truly political or social but a partial and party economics. If it were uncertain, it would only be a collection of suppositions, for the most part erroneous and consequently unscientific. If it were so complex that only exceptionally gifted persons understood it, how could they prove that they comprehended it? If it were pessimistio, that is, if it should demonstrate that despite the extreme progress of the productive arts poverty will always persist, then that would prove that man never will be able to harmonise his actions, and therefore also not his thoughts, in other words, that we never could be certain of anything.

True economics must be noble, that is, magnanimous and sincere, because it must have regard to the good of all human beings, and seek and assert the truth. Its object of study is wealth; it is therefore materialist.

But its aim is justice, which is absolutely necessary for the moral progress of individuals and society. When injustice takes away our means of life, we can neither enjoy our rights nor fulfil our duties.

Economics must be encouraging. If it should prove that poverty is an irremovable evil, it would be preferable not to teach that science, so as not to sharpen social suffering through despair. In fact, pessimism is a pretence and a mask for those who gain by the evil. That is not economics. But neither do those optimists teach economics who, instead of seeking the causes of social evils in order to correct them, instead try to deceive us, making out that everything will be better itself through progress, evolution, divine help or political miracles, without our own co-operative effort. Indeed, true advice is given by the proverb: "Pray for bread, but prepare the flour". In our world nothing is attained without striving.

Economics must be true and certain. If it were a collection of tests, doubts or suppositions, and therefore uncertain, it would not be worth studying. It must be a science and follow the rules of science. It must not study principles that are uncertain, fallible and changeable, dictated by caprice, ignorance or bias, but must discover the unchangeable natural laws which rule economic phenomena, and must seek through those laws the causes of those phenomena. Its principles must be completely proved, its deductions must be fully logical its conclusions irreproachably correct, and all its subject matter must be in harmony.

Faced with the natural laws ruling the lives of the people, trickery and violence are inappropriate, and goodwill is not enough. There is no remedy but to chey those laws, and for that, we must understand them. Thus the study of economics differs from other sciences in that it must not be entrusted to a few specialists, whose mistakes or delusions could have tragic consequences. It must be known, if not by absolutely everyone, at least by the great number of people who are capable of understanding it, whatever their social position. The more such people there are, the more will theoretical exactitude and the proper application of the science be

fostered, and the less it will be possible that misunderstanding am malice can falsify and corrupt it theoretically or practically. But for the majority of men to understand it, it must be very simple.

If then economics must be noble, encouraging, certain and simple, does this science exist? There shall we find it? Yes, it does exist. It is contained in the works of the American sociologist, economist and philosopher, Henry George. These works, apart from short booklets, lectures and speeches, are: "Progress & Poverty", "Protection or Free Trade?", "The Science of Political Economy", "Social Problems", "A Perplexed Philosopher", and "The Condition of Labour".

In the United States, Britain, France, Germany, Spain, and many other countries, the followers of Henry George have created associations to distribute his books and promulgate his doctrines. In Australia, Denmark, Canada, New Zéaland and SouthAfrica, the practical reform George advocates is applied through laws, with a success proportionate to the extent of application.

The economics taught by Henry George perfectly fulfils the conditions previously mentioned. It is noble because its aim is justice, which we must observe before we can love our fellow-men, and which is necessary to make our lives worth while and to elevate our thoughts. It is encouraging, it stimulates and fortifies our minds, because it proves that poverty and its pains do not derive from the niggardliness or enmity of nature, but from the ignorance of or inattention to natural laws. And it proves that by obedience to those laws we can attain a social state freed from those evils. It is simple, because it needs neither the complications wrongly introduced into the subject, nor a special or wide culture. It demands only common sense, which we all possess if only we are taught the truth systematically and clearly.

And it is true, because it studies natural laws by the most suitable method. Of course, it is not enough to assert. It is to justify that assertion. We must explain what a natural law is, which natural laws economics must explore, how one discovers them and how one

proves their correctness. Only by knowing these things can one judge about the scientific truth of the economic doctrines of any author. Let us then develop the matter.

Lawmakers endeavour, often unsuccessfully, to direct human conduct by legal decrees more or less temporary, and they uphold these decrees by penalties, which often are not applied or are ineffective. As a contrast, nature appears to direct everything that happens, all phenomena, the behaviour of all existing things, always and everywhere without help of penalties, by means of unchanging uniformities which we call laws of nature. These natural laws show an apparent constant relationship between cause and effect, so that there is neither an effect without a cause nor a cause without an effect, and every phenomenon is an effect of a previous cause and is the cause of a following effect. Science is the systematically arranged knowledge of natural laws, including the causes and effects of phenomena, and comprises all our knowledge of the origin and qualities of objects, since man knows all things that exist only through their phenomena.

Economics is the science that deals with wealth and its production and distribution in society. According to the above-stated principles common to all sciences, economics must explore:

- 1. The qualities of wealth, i.e. the qualities that distinguish what is from what is not wealth.
- 2. The origin of wealth, i.e. the factors of production.
 3. The phenomena named production and distribution.
- 4. The causes, effects and natural laws of those phenomena.
- 5. The causes that control those phenomena in right or wrong social functioning.

Only by such progressively attained explanations can we discover and understand the solution of the social discorder that keeps poverty persisting in spite of the advance of the arts of production.

Regrettably neither classifical nor modern economics has solved the momentous problem of the correct use of the

economic specialized words. Terms so necessary and so often used as "wealth", "capital", "money", "production", etc., are wrongly understood and applied, not only by persons who have never studied their meanings, but also by many professors, even famous masters of economics. We need not stress the various doubts, confusions, unnecessary disputes and erroneous conclusions brought into existence through the wrong use of special terms. If we do not apply to everything, to every phenomenon or group of phenomena, its precisely defined name, then not only shall we not understand one another, but we even cannot think properly, since then the word will not express its conformable idea. Just as the metre would not serve as a measure if it did not have a definite and constant length, in the same way a word will not serve for thinking if it is not without a precise and fixed meaning.

Henry George gave fundamental attention to this problem. He solved it by the most exact analysis of the sense of each term. Using each special word most precisely, he answered more exactly than Adam Smith the questions about what is the wealth of nations, what are the factors of its production and how should it be justly shared. Thus the task of economics becomes simple.

To find these natural laws there are three methods usually used, not only by scientists but by everyone, namely:

1. To infer them <u>inductively</u>, by generalization from particular observed instances; as when after observing that each stone, which we let go, falls, we conclude that all unsupported stones unfailingly fall.

2. To <u>deduce</u> these laws as special cases of a more general law; as when, knowing that each animal breathes, we conclude that all cats breathe.

3. To <u>frame hypotheses</u>, that is, from insufficient observations to form by induction a provisional law, and verify it through deductions which facts supports for example, that the earth revolves round the sun is a hypothesis supported by all astronomical observations.

In fact, we can neither observe all particular happenings nor trust too facilely to our deductions. It follows that each discovered law would be only a hypothesis if we did not prove that it is, if not an absolute truth, at least certain in practice, that is, as trustworthy as is necessary for its proper application to be The ultimate convincing proof is experiment, which consists in applying the cause in the right circumstances, so that if the law is true there will result the phenomenon that we deduced in advance. For example, to prove that all unsupported stones fall, we might take a stone, assert that when we release it it will fall, then let it go and it does fall. Since whenever we repeat the experiment with the same or another stone the same result occurs, we become fully convinced that the law is true.

Neverthless experiment, which usually is easy and safe in the so-called natural sciences, is difficult and cruel in the social, political and moral spheres, because it is neither possible nor right to act with human beings as if they were naterial in a laboratory. Collective social experiments are often only tests without scientific guidance, like the blows of a blind man, powerful but ineffective. Even to gain experience they are unnecssary, for there is enough experience in the history of mankind and in the daily life of every human being.

For economics to be a true and useful science, it must use the most suitable method and replace experiment by the most effective means of proof. Since they fail to fulfil these two conditions, both classical and modern economics are unsuccessful.

Classical economics rightly preferred the deductive method, but unfortunately based itself on an erroneous induction, namely, that the fundamental force behind human conduct is egoism. This is an error. Human conduct at bottom always derives from desire, which can be egoistic or altruistic. Man acts from the instinct to self-preservation, from the instinct to preserve the species, and according to circumstances of security, status, education, etc. Let us not forget that, even if only because of his individual weakness, man is a fully social being. Although it is most effective and so best for

rather than of others, mevertheless only respect for everyone's rights, which is the highest form of love of humanity, permits the social co-operation that makes most effective all our acts, including care of ourselves. Erring thus in its theoretical basis, classical economics drew wrong conclusions which led to its failure in practice.

That failure helped the acceptance of the inductive method, despite the fact that induction never can foresee the extremely complex and changeable economic facts that are to come. Because of this, the modern systems of economics, persistent collectors of statistics and investigators of absurdities, vegetate in perpetual provisionality, condemning both individuals and nations to unending adversity. Thus has the highly important science of economics degenerated into an empirical art which is both clumsy and destructive.

The fundamental law of human conduct in economics is the natural law of least endeavour, that is, that man seeks to gratify his desires with the least exertion. On this natural law, correctly inferred by induction, proved by everyone's experience and easily provable by experiment, Henry George founded economics as a science, deducing from this law the other laws that govern the production and distribution of wealth and the progress and decline of peoples.

In order to replace experiments made by man, Henry George ingeniously used a very effective method which can be called mental experiment. In the same way that an inventor foresees and tests a machine which still does not exist, we all can make all kinds of experiments - by the use of imagination. Henry George himself explains what mental or imaginative experiment is by the following example:

"When I was a boy I went down to the wharf with another boy to see the first iron steamship which had ever crossed the ocean to our port. Now, hearing of an iron steamship seemed to us then a good deal like hearing of a leaden kite or a wooden cooking stove. But, we

had not been long aboard her, before my companion said in a tone of contemptuous disgust: 'Pooh! I see how it is. She's all lined with wood; that's the reason she floats'. I could not controvert him for the moment, But I was not satisfied, and sitting down on the wharf when he left me, I set to work trying mental experiments. If it was the wood inside of her that made her float, then the more wood the higher she would float; and mentally I loaded her up with wood. But, as I was familiar with the process of making boats out of blocks of wood, I at once saw that, instead of floating higher she would sink deeper. Then I mentally took all the wood out of her, as we dug out our wooden boats, and saw that thus lightened she would float higher still. Then, in imagination, I jammed a hole in her, and saw that the water would run in and she would sink, as did our wooden boats when ballasted with leaden keels. And thus I saw, as clearly as though I could have actually made these experiments with the steamer, that it was not the wooden lining that made her float, but her hollowness, or as I would now phrase it, her displacement of water".*

Similarly, we can in imagination separate, combine and change the circumstances and scale of social phenomena, and so prove the principles, deductions and conclusions of economics. These mental experiments are just like the suppositions that we often use to guide our actions. They are very easy to make and are harmless. They require only one controlling precaution - common sense.

With regard to the moral viewpoint, the economists are divided into two groups. According to the one, economics must present only truth, not seeking social betterment, which they believe impossible. According to the other, economics must improve society, without regard to natural laws, which they believe non-existent, unknowable or inapplicable. Both groups are ignorant of the essential qualities of society and of economics.

^{*} Lecture on "The Study of Political Economy" at University of California, 9th March 1877.

Society is neither so perfect that it does not need reform, no so bad that it is not reformable, nor so powerful that it can change natural laws or go its way regardless of them. And economics is neither a useless amusement, nor an all-powerful magic, nor a device only for economists. Like all sciences, it is a discovery to be used for the good of all mankind.

Nevertheless, because it is a science, economics itself is as independent of morals as are the physical sciences. The good or bad intentions of human beings influence the unchangeable natural laws of economics as little as they do the natural law of gravitation. A stone knocks down a slinking criminal in the same way that it strikes a guiltless child or an inattentive professor. The sun equally ripens the wheat of an honest agriculturist and that of a rascally countryman. Economics can meither foolishly oppose, nor immorally deny nor hide natural laws in the name of morality.

Still, the aims and ends of economics cannot disagree with those of natural morals, for that would in effect deny the harmony of the universe and consequently our own capacity to understand the truths contained in economics. If economics is true, it must fulfil its moral purpose, which is the good of all. Just as carping at our fellow-citizens neither makes them better nor is sound psychology, so it is not scientific economiss to follow fashion in collecting statistics or to complain about human beings and wish to change their natural qualities, instead of exploring natural laws to use the knowledge of them for the good of all. If society and natural laws clash, society neither has the right to blame them nor can change them, but can and must investigate its own conduct in order to adapt itself to the natural laws. Nature is conquered only by obedience to them.

It is important to realise that progress irresistibly creates new conditions and new requirements which demand changes in our institutions. Just as boiling water in a wholly closed container will burst it, so the growing forces brought into being by progress cannot remain quietly contained in the old social forms. Progress has begotten machines, aviation, radiation and atomic energy, all potent to the highest degree for construction as also for destruction. And it has given them to a society maddened by fear and suffering caused by poverty. It is like presenting a charge of dynamite to a child.

In the first chapter of his book "Social Problems" Henry George wrote:

"To adjust our institutions to growing needs and changing conditions is the task which devolves upon us. Prudence, patriotism, human sympathy, and religious sentiment, alike call upon us to undertake it."

Right as he was in that statement, he was equally right, when in the last chapter of the same book he declared that

"social reform is not to be secured by noise and shouting; by complaints and denunciations; by the formation of parties, or the making of revolutions; but by the awakening of thought and the progress of ideas. Until there is correct thought there cannot be right action; and when there is correct thought, right action will follow".

(Translated from the Esperanto original by F. R. Jones and condensed).