RICHARD T. ELY LECTURE

Economics and Political Economy

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May I begin by saying what an honor I feel it to be asked to lecture before this distinguished assembly on a foundation designed to commemorate the fame of one of the most influential economists of the earlier years of your great association. May I also say what an intense pleasure it is to be chaired by my dear friend William Baumol, an excolleague and, since our first acquaintance, the source of so much learning on my part and continuous inspiration.

Let me start by a word or two about my title which may have seemed to some of you formidably all embracing. This, let me assure you, would be a misapprehension: my target is comparatively restricted. At the beginning of my career, in my salad days, I wrote a slender essay entitled *The Nature and Significance of Economic Science*; and from time to time its contents have been the subject of criticism and discussion. I have seldom made any comment on this but I have gone on thinking. Thus, when I was invited to give this lecture, it occurred to me, with your approbation, Chairman, that, at the approaching end of my career, it might be a good opportunity to gather together some reflections on the subject of that essay and perhaps to put things in such a way as to make peace with some of my critics.

My remarks will fall broadly into four main parts. In the first—very briefly, you will be glad to hear—I shall resume my position on the definition of the subject matter of Economics. In the second I shall discuss its status as a science. In the third I shall examine the attempt to give scientific justification to the normative propositions known as Welfare Economics. And in the fourth I expound my own conception of what I now call Political Economy. In conclusion I shall try to sum up the main contentions of these somewhat discursive reflections and to point a moral as regards teaching.

I

To begin with subject matter, the conception that I argued in my book was of those aspects of behavior which, in some way or another, arise from the existence of scarcity. Now I am not at all indisposed to accept, for purposes of after-dinner conversation, Jacob Viner's wisecrack that "Economics is what economists do." But this only shifts the question one stage further: what is it that they do? What is the object of their investigations?

I hope I do not need to say much about what, in my youth, was probably the most widely used answer to this question, namely *the causes of material welfare*. Quite apart from the precise meaning of this ambiguous term, it is an easy matter to show that there is an economic aspect to the choice between the causes of material and nonmaterial welfare. And since William Baumol together with Bowen, has written a very persuasive and extensive work on *The Economics of the Performing Arts*, I think we must regard this conception as too narrow, and indeed misleading, and look elsewhere for a plausible description of the nature of our subject matter.

Much more interesting is the proposal put forward by my old friend and colleague, Fritz Hayek, to revive Archbishop Whately's proposal to rename our subject as the science of *Catallactics* (pp. 3–5), or the *Science of Exchanges*. I should certainly agree that, even where there is no market, the economic aspects of decisions and activities concern-

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ing scarce means and time can be regarded as the exchange of one state of affairs for another; and I think that this approach leads to very deep insights. But I do not think it makes sufficiently clear the conditions which lead to exchange, whether actual or implied.

But this, of course, is what the definition in terms of behavior conditioned by scarcity specifically does—scarcity being conceived as the relationship between objectives, either personal or collective, and the means of satisfying them. As you know, it first emerges in so many words in David Hume's *Treatise of Human Nature* (pp. 261–62) and it is made explicitly applicable to economic relationships in general in a famous chapter in Menger's *Grundsätze* where the limitation of goods confronted with conceivable demand is made the necessary condition of the activity of economizing. It covers exchanges and the instutional arrangements which arise in connection with this limitation.

Thus, coming back to Jacob Viner, I doubt very much that what economists do when they discuss what is, or what can be, the nature of such possibilities is not covered by this definition.

II

This brings me to the second division of my reflections. Let me say at once that I see no reason for denying to the study of the activities and institutions created by scarcity the title of science. It conforms fundamentally to our conception of science in general: that is to say the formation of hypotheses explaining and (possibly) predicting the outcome of the relationships concerned and the testing of such hypotheses by logic and by observation. This process of testing used to be called verification. But, since this way of putting things may involve an overtone of permanence and nonrefutability, it is probably better described, as Karl Popper has taught us, as a search for falsification—those hypotheses which survive the test being regarded as provisionally applicable. I am pretty sure that all the positive propositions of economics conform to this description. In this context, therefore, we may regard them as falling into the same category of knowledge as astronomy, physics, and biology—although, some may think, something of a poor relation.

But at the same time we must recognize that, within these logical criteria, the methods and problems of economic science are very substantially different from those of the so-called natural sciences. This springs from the fundamental circumstance that the subject matter is an aspect of human action and therefore must be conceived as including purpose. That is to say that our explanations must to some extent be *teleological*. This is not to argue with von Mises and some of his followers that we must regard human action, if not purely vegetative, as at all times *rational* in the sense that, given belief in the range of technical knowledge available to individuals or collections of individuals, action must be *consistent*. I confess that I have never been able to understand this contention: I should have thought that one of the main practical functions of economic science was to enable us to detect inconsistencies in plans, such as, for instance, simultaneous demands for low interest rates brought about by increases in the size of the credit base and a diminution of inflation. But, putting this conception aside, I would have thought that the contention that explanations of economic relationships must involve considerations of purposes, implicit or explicit, to be relatively noncontroversial.

Unfortunately this is not so. Influenced presumably by behaviorism in psychology, there are those who urge that in economics we must exclude any hypothesis which relies on conceptions which are not *directly observable* in the sense that they could be recorded as being perceived by the senses of an outside spectator and thus made the data of explanations of causal relationships.

I confess that I fail to see the necessity, or indeed the desirability, of the self-denying ordinance. I concede that, in the examination of simple markets, observations can be made which can be regarded as *revealing* preferences for action on the part of the persons concerned; and thus more or less determinate solutions achieved of the probable outcome. But I cannot believe that such considerations are in any way superior to those which go behind the observed dispositions to the psychological conception of *ordering* upon which the so-called subjective theory has been based in the past. And if we proceed to consider more complicated situations, I simply cannot conceive explaining to a visitor from another planet the ups and downs of a stock exchange without invoking the psychological element of expectations, not to mention error and the vagaries of fashion. According to my inadequate knowledge of physical science, I doubt whether its explanations are limited to elements which are directly observable. So long as the elements in the hypothesis are indirectly testable, they are surely scientifically admissable. Thus I ask why we, as economists, should impose on ourselves greater austerity than this?

There are, however, other differences of considerable significance between the nature of the subject matter of economics and most, if not all, natural sciences, namely, to use Paretean terms, the absence of constants both of tastes and of obstacles.

In natural science, once causal connections have been established, the quantitative relationships can usually be assumed to persist, other things being equal. It is not necessary to calculate the table of atomic weights every time particular explanations or predictions are attempted. Alas, this is not so in economics. Immense ingenuity may be devoted to establishing the conditions of demand for particular commodities; and these may sometimes help in making guesses for the future. But tastes change. A Minister of Finance would be ill advised if, in making estimates for tax purposes of the demand for cigarettes, for instance, he were to rely on computations which had been made ten years ago: he must keep himself up to date with current fashions and knowledge. The influence of the Reformation made no change in the forces of gravity. But it certainly must have changed the demand for fish on Fridays.

The same absence of persistance applies also on the side of obstacles. The human beings, whose behavior in regard to scarce goods and services is the subject of our study, are capable of learning: and learning affects conduct in various ways. Thus changes in knowledge concerning the reactions of matter in various contexts do not affect matter itself. But they may affect the possibilities of technology and therefore human action. Beyond this, knowledge concerning the results of such behavior can affect future behavior. An econometrician might discover a formula concerning the response of the Dollar Exchanges to given developments of monetary and financial policy; and if he kept it to himself, he might make a lot of money. But if he released it in the journals or the media, then it would be likely to become wrong: people would alter their financial dispositions according to the new knowledge and thus render the new knowledge erroneous.

For such reasons, quantitative prediction in economics is apt to be hazardous; much more hazardous indeed than predicting the weather. Time-series, if they have been properly collected, have status as economic history and they may serve an important rôle in testing explanations of the past. But, as a means of predicting the future, they are liable in various degrees to the vicissitudes of preferences and knowledge; and unless this is continually borne in mind, they can be seriously misleading.

This is not to say that suitably qualified propositions involving numbers should not be attempted; nor that some are less liable to error than others. Still less is it to argue that explanation of causes believed to be operating in the field of economic relationships is not a worthwhile branch of intellectual activity. There are a great many things which can be said in this connection; indeed I would say many of the most important propositions of the subject fall into the category where quantification is quite out of the question. All that is intended by the remarks I have just been making is to emphasize the differences between our subject matter and the subject matter of many natural sciences, and to draw attention to the appropriate limits which it must impose on our claims. And if, by any chance, my emphasis in this respect casts any doubt on the contention that ability to predict is the sole or necessary criterion of scientific activity, I should not feel unduly depressed. I do not think that the understanding of economic phenomena hitherto achieved, although palpably imperfect, is anything to be ashamed of.

Finally, it is important to recognize that the propositions of economics, as it has developed as a science, are positive rather than normative. They deal *inter alia* with values; but they deal with them as individual or social *facts*. The generalizations which emerge are statements of existence or possibility. They use the words *is* or *may be*, not *ought* or *should be*. There can be events or institutions having an economic aspect which we ourselves regard as ethically acceptable or unacceptable. But, in so far as the explanations of their causes or consequences are scientific, they are neutral in this respect.

It is sometimes questioned whether in the discussion of any social or economic relationships this quality of what the Germans call *Wertfreiheit* is attainable. No less an authority than Gunnar Myrdal has devoted a whole book to the argument that, explicitly or implicitly, all propositions of economic theory, all classifications of happenings having an economic aspect, must involve judgments of value. I do not agree with this position. I don't think that the proposition that, if the market is free and demand exceeds supply, prices will tend to rise, has any ethical content whatever. Nor do I concede that recognition of the consequences on investment of disparity between rates of interest and rates of return depends in the least on the political prepossessions of the economist who perceives it.

Needless to say I do not at all deny that, in the course of evolution of economics as we know it, there has been a good deal of intermixture of political and ethical discussion with the scientific discussion of fact and possibility. I shall shortly be discussing this matter further in the light of certain specific instances; and it will not appear that, *provided the logical difference between the two kinds of propositions is clearly kept in mind*, I am in the least hostile to the combination. In that youthful book of mine which evoked such fervid denunciation, I expressly denied that my position involved the view that "economists should not discuss ethical or political questions any more than the position that botany is not aesthetics means that botanists should not have views on the layout of gardens." On the contrary I went on to argue, "it is greatly to be desired that economists should have speculated long and widely on these matters." As you will see later on, my position today only involves a slight purely semantic modification of this pronouncement. I still hold that the distinction of the different kinds of propositions is inescapable and that we run the dangers of intellectual confusion on our own part and justifiable criticism from outside if we do not explictly recognize it.

III

But this brings me to the next division of my subject—the status of Welfare Economics. And since, as you may suspect, my verdict is to be somewhat adverse, let me say at once that I would yield to no one in admiration of the intentions of this development and of the ingenuity with which its analysis has often been conducted. It would not be the first time in intellectual history that dedicated efforts have led to a confusion of claims; and nothing that I am about to say must be construed as contending that these efforts were not worthwhile.

The *raison d'être* of Welfare Economics is simple. How desirable it would be if we were able to pronounce as *a matter of scientific demonstration* that such and such a policy was good or bad. Take, for instance, the removal of a protective tariff. Given information about the elasticities of demand and supply of the immediate past, we can certainly make guesses, in price and income terms, about the gains to consumers and the losses to producers of the probable outcome. There are all sorts of scientific difficulties here which I have touched upon, or hinted at, already. But the guesses, such as they are, are on an objective plane. But as soon as we move to the plane of welfare, we introduce elements which are not of that order. As in the great work of Marshall and, still more, Pigou, we are assuming that comparisons between prices and incomes before and after the event can be made a verifiable basis for comparisons between the satisfactions and dissatisfactions of the different persons involved. And that, I would urge, is not warranted by anything which is legitimately assumed by scientific economics.

Let me at once guard against a misunderstanding which has often occurred in criticisms of this position. Of course I do not deny that, in every day life, we do make comparisons between the satisfactions of different people. When the head of a family carves up a turkey, he may take account of his estimate of the satisfaction afforded to different members by different portions; and, in more serious judgments of social relationships outside the family, whenever we discuss distributional questions, we make our own estimates of the happiness afforded or the misery endured by different persons or groups of persons.

But these are *our* estimates. There is no objective measurement conceivable. Let me remind you of the fundamental issue here by comparing two situations, one of which in my judgment falls *within* scientific economics as such, and one *without*. Suppose elementary barter: *A*, who has a bottle of whisky, has the opportunity of exchanging it with *B*, who has a classical record of, say, *Fidelio*. It should be quite easy to ascertain by asking the relative valuations of the objects concerned before exchange. *A* relates that the classical record is worth more to him than the bottle of whisky; *B* contrariwise. This at no point involves interpersonal comparisons of absolute satisfaction. But now suppose that *A* and *B* fall into conversation about their respective enjoyments and *A* says to *B*, "Of course I get more satisfaction than you out of music," and *B* vigorously asserts the contrary. Needless to say, you and I as outsiders can form our own judgments. But these are essentially subjective, not objectively ascertainable fact. There is no available way in which we can measure and compare the satisfactions which *A* and *B* derive from music. Intelligent talk? But that may be misleading. Facial expression? That too may be deceptive. Willingness to make sacrifices of other things? But that clearly shifts the emphasis to the satisfactions derived from other things; and we are left with the ultimate difficulty of interpersonal comparisons that, as Jevons put it, "Every mind is thus inscrutable to every other mind and no common denominator of feeling seems to be possible" (p. 85).[1] Jevons' emphasis may be a bit extreme; we certainly think we know what other people are feeling, though opinions notoriously differ in different cultural settings and between different people. But it is surely incontestable where scientific proof or measurement is in question.

In this connection it is interesting to note the quite explicit agreement of Bentham to the proposition I am arguing. Among the Bentham papers, there is a passage, cited by Eli Halévy, which makes it very clear that the author of the most rigid exponent of the so-called Felicific Calculus was under no delusion that interpersonal comparability was anything but a convention—a convention, it is true, which he regarded as essential to practical reasoning. "'Tis in vain," he said, "to talk of adding quantities which after the addition will continue distinct as they were before, one man's happiness will never be another man's happiness; a gain to one man is no gain to another: you might as well pretend to add twenty apples to twenty pears. Which after you had done it would not be forty of any one thing but twenty of each as there was before" (pp. 495–96).

Now recognition of this difficulty led Pareto to the suggestion that we could only say that a community was better off if, all tastes remaining constant, a change took place which improved the position of one individual or group of individuals without making any of the rest worse off.[2] Personally I can't see anything much wrong in this from a conversational point of view. But it is clearly a judgment of value.[3] If the remaining groups regard their position rela-

[1] See also PhilipWicksteed, p. 68.

[2] See Vilfredo Pareto, pp. 617–18.

[3] This aspect of the fundamental Pareto proposition is well emphasized by Charles Rowley and Alan Peacock in their excellent book, pp. 7–25.

tively, they may well argue that the spectacle of such improvement elsewhere is a detriment to their satisfaction. This is not a niggling point: a relative improvement in the position of certain groups *pari passu* with an absolute improvement in the position of the rest of the community has often been a feature of economic history; and we know that this has not been regarded by all as either ethically or politically desirable.

An extension of the Pareto criterion which appeared first in the English literature in Jacob Viner's discussion of the effects of tariff changes in his *Studies in the Theory of International Trade* (pp. 533–34), but which owes its vast repute to its rediscovery by Lord Kaldor and Sir John Hicks, is the so-called *Compensation Principle*. According to this principle, we can still say that a community is better off, despite the fact of a change involving gains for one person or group and losses for others, if out of the gains it would be possible to compensate the losses and still leave a benefit for the gainer or gainers.

Now it is obvious that, in order that such a statement can be made, it is necessary that the compensation should actually be paid. The fact that such compensation is *conceivable* is not sufficient: if it is not *actual*, the fundamental Paretean condition is violated that while the position of one person or group is improved, the position of all others is unchanged. All that we can do if compensation is not made, is to point to the change in the positions of the gainers and the losers which at once must raise distributional considerations quite obviously involving further, and more obvious, judgments of value than are implied in the original Paretean conception!

But supposing compensation is supposed to be paid, it is still germane to point out that the practical use of such judgments which it is legitimate to make on this basis, is incomparably less than the claims originally made for Welfare Economics with capital letters. I am not blind to the negative light which the Paretean criterion must throw on the omission of externalities, positive and negative, and the problems to which they give rise; for instance, the desirability of appropriate fiscal incentives or disincentives. But I am clear that the inclusion of such factors must, in most cases, necessitate assumptions involving comparisons and contrasts of individual experiences. Still more is this true of any consideration of distributional questions. I am not against such discussions. As I shall shortly disclose I am emphatically in favor of them, in the hands of qualified persons and under appropriate labels. But with the best will in the world, I cannot help thinking that John Chipman and John Moore are right in their verdict that what they call the New Welfare Economics in an article of that name, has broken down in the strictly scientific sense and left us with the fundamental implications of the passage in Jevons which I have already quoted, namely that all recommendations of policy involve judgments of value.

V

But this brings me to my last main division. Ought we to be afraid of such assumptions? Clearly there is much to be said against such austerity, at any rate from the point of view of our usefulness to society. Politics are much too important to be left to the politicians—Adam Smith's crafty and insidious animals—and, as was the intention of my original pronouncements on this subject, if they are aware of what they are doing and do not claim scientific authority for conclusions which clearly go beyond science, there is much to be said for the practitioners of scientific economics discussing such questions of policy. They may not agree on the extra-scientific elements in their arguments. But, provided the distinction is observed, there is everything to be said for the discussions of policy to be conducted by those who are aware of the objective implications of the values on which policy rests.

But manifold problems arise even here. Let us assume for a moment the explicit adoption as a postulate of Bentham's felicific calculus, namely interpersonal comparability, each subject to be treated as equally capable of satisfaction, and use that as a basis for recommendation.

Now I make no comment on the substance of this postulate. I personally do not judge that, in any scientific sense, people are necessarily equally capable of satisfaction—whatever that may mean. I readily agree that personal entitlement in equal situations to equal treatment by law is desirable; and I would go beyond that in saying that, in personal relationships, the treatment of one's fellows on a basis of equality answers my criterion of civilized behavior. But when we come to the kind of problems with which economists interested in policy are concerned, matters become more difficult.

Let us take, for instance, the problem of direct taxation. As Edgeworth showed—without, however, recommending the conclusion— the felicific calculus, applied simply to this problem of achieving the minimum aggregate sacrifice, would involve complete equality of income. But even the most hopelessly naive would hesitate to adopt this as a practical maxim of policy. Quite apart from the tangle of administrative problems of sorting out what should be regarded as equality of income in different circumstances, there arises the quite fundamental problem of incentive—should unequal contributions receive equal remuneration? I do not think we need go further than the experience of communist states to discover that so crude an application of the idea of equal capacity for satisfaction and equal rates of diminishing marginal utility of income is really not at all helpful.

Again let me revert to the example already mentioned when I was discussing Welfare Economics—the principle of compensation for improvements involving losses elsewhere. As we have seen, it must be agreed by all exponents of this principle that in order to satisfy the fundamental Paretean criterion, it is necessary that compensation should actually be paid. But very little reflection is needed to raise doubt whether this is a sensible principle. If an improvement has been made which damages the interest of producers whose output has previously been in greater demand, is it now desirable to make payments which may have the effect of preventing movement out of the group affected? Again the problem proves to be more complicated: the solution is not to be found by a simple formula. A dynamic society needs mobility. Or does it? Is compensation to be contingent on acceptance of direction of labor? Or is that an infringement of others' rights?

And so I could go on. The burden of my remarks at this point is that formulae based on the assumptions of either the old or the new Welfare Economics are unlikely to be helpful and may well miss the main point entirely. They give at once the impression of precise guidance and yet they leave out important relevant criteria. As I have urged elsewhere, they are to be regarded as a draughty halfway house. The name conveys an impression of value-free theory which it should be just our intention to avoid.

Fortunately the evolution of terminology in this sphere provides a method of eliminating such confusion. As I said earlier on, in its beginning the label Political Economy covered a *mélange* of objective analysis and applications involving value judgments. The first three books of the *Wealth of Nations* are chiefly devoted to analysis of the market economy and its vicissitudes through history; that is to say generalized *description*. The fourth and fifth are devoted to alternative systems of policy and the functions of the state: that is to say generalized *prescription*. And until even Jevons—and after—both subjects were included under the same label, although surely the difference between the title of J. S. Mill's essay "*On the Definition of Political Economy and on the Method of Investigation Proper to it*" and the title of his *Principles of Political Economy with some of their Application to Social Philosophy* indicates a clear perception of the difference. In the last hundred years, however, beginning conspicuously, perhaps, with Alfred and Mary Marshall's *Economics of Industry* (1879), we have come to describe the generalized description as *Economics* or *Economic Science*; and the label *Political Economy*, as implying judgments of value of which we do not wish to be accused, has tended to drop out of use.

My suggestion here, as in the Introduction to my *Political Economy*: *Past and Present*, is that its use should be revived as now covering that part of our sphere of interest which essentially involves judgments of value. Political Economy, thus conceived, is quite unashamedly concerned with the assumptions of policy and the results flowing from them. I may say that this is not (*repeat not*) a recent habit of mine. In the Preface to my *Economic Planning and International Order*, published in 1937, I describe it as "essentially an essay in what may be called Political Economy as distinct from Economics in the stricter sense of the word. It depends upon the technical apparatus of analytical Economics; but it applies this apparatus to the examination of schemes for the realization of aims whose formulation lies outside Economics: and it does not abstain from appeal to the probabilities of political practice when such an appeal has seemed relevant."

It should be clear then that Political Economy in this sense involves all the modes of analysis and explicit or implicit judgments of value which are usually involved when economists discuss assessments of benefits and the reverse or recommendations for policy. In particular it deserves to be noted that the whole business of choosing index numbers falls into this conception; and surely few improvements in procedure are more desirable than recognition of this fact. But, in general, the overt recognition of the extent to which the multiplicity of proximate criteria guiding considerations of policy involve judgments of value must be wholly beneficial.

The question therefore arises what should be the ultimate values guiding us in this field. The answer must necessarily be debatable: there is no agreement yet on the ultimate desiderata of the good society: consider for example the variety of opinions regarding the desirability of growth. Speaking personally, I see no objection to regarding utility in a very wide and non-quantitative sense as one of the principle criteria. As an illustration I would cite Hume's famous discussion of the circumstances in which the institution of property is, or is not, justified, in his *Enquiry Concerning the Principles of Morals*. And since I have earlier quoted Bentham's recognition of interpersonal comparisons as a *postulate* rather than a scientific possibility, I would like to say here that, in practice, his so-called felicific calculus, far from making quantitative estimates, was actually employed in Hume's sense—a matter of judging the arrangements of society *as a going concern* according as, in a broad way, they were likely to increase pleasure or diminish pain.

Thus for instance if I were today to respond to Roy Harrod's challenge how to judge the repeal of the Corn Laws, I should not attempt to justify it in terms of the gain of utility at the expense of the producers. I should not know how to do this without comparisons which, to put it mildly, would be highly conjectural. I should base my vindication on the general utility of the extension of markets and the resulting enlargement of liberty of choice. And, as I imagine Hume would have done, I should allow for specific exceptions and stipulate conditions of tolerable and intolerable rates of change.

But, even interpreted in Hume's sense, utility is not enough—at any rate to my way of thinking. There might be utility in the broad sense in the working of the institutions of a well-run slave state, and yet the assumptions behind my Political Economy would reject them. And this would not be for the reason that the attribution of utility to such institutions was wrong—though I suspect that empirically it would be. It would be for the far deeper reason—or principle you may call it—that *acts which are not free are not acts which are capable of having value in the ethical sense*. We do not regard the movement of a herd of cattle as falling under ethical categories any more than the heat of the sun or the furious winter's rages. Only where conditions of human freedom, in some sense or other, are present do such judgments have meaning.

But the conception of liberty itself involves complications. Liberty is not anarchy. It is not a free for all—often as it is said to be by those who hate it. The idea of individual liberty does not involve liberty to curtail other people's liberty. That is why the necessity of a framework of law and an apparatus of enforcement is an essential part of the conception of a free society. But this is no facile criterion. In this connection I would cite the work of the great man after whom this lecture is named. No candid reader of Richard Ely's famous *Property and Contract* can come away believing that the sections of the law with which it deals are capable of being inscribed on two tablets of stone, or that the weighing of considerations of utility, in the sense in which I have defined it, and of the claims of liberty as the essential of conduct coming under the categories of ethics, is an easy matter.

Thus both as regards utility and liberty we are eventually involved in questions relating to the coercive powers of government and the basis of consent. I have no doubt that in the discussion of such problems considerations of Political Economy are relevant. Consider, for instance, the whole range of Adam Smith's third function of the state: "the duty of erecting and maintaining certain public works and certain public institutions which it can never be for the interest of any individual, or small number of individuals, to erect and maintain, because the profit would never repay the expense to any individual or small number of individuals, though it may frequently do much more than repay it to a great society" (pp. 687–88). Indeed, without in any way subscribing to the so-called Marxian theory of politics, I suspect that such considerations must play a very large part in any articulate theory of the state, its evolution and its activities. I welcome the growing recognition of the duty of political economists to extend their systematic investigations in this sphere; and thus, in my conception at any rate, we have quite enough on our plate in this connection to occupy us for many generations to come.

VI

Let me sum up the main points of these discursive reflections. As regards the subject matter of Economic Science, I adhere to its description in terms of behavior conditioned by scarcity. As regards its status as a science, I see no reason to deny its susceptibility to the usual logical requirements of a science, though I have emphasized the peculiar nature of its subject as concerned with conscious beings capable of choice and learning. I see no reason why we should be terrified into thinking that such analysis necessarily involves ideological bias. But beyond that, in the application of Economic Science to problems of policy, I urge that we must acknowledge the introduction of assumptions of value essentially incapable of scientific proof. For this reason, while not denying the value of some thought going under that name, I have urged that the claims of Welfare Economics to be scientific are highly dubious; and I go on to argue the lack of realism which is involved by some of the inferences which may be drawn from its assumptions. Instead I recommend what I call Political Economy which, at each relevant point, declares all relevant non-scientific assumptions; and I furnish some indications of the leading criteria and fields of speculation which should underlie this branch of intellectual activity.

One final word concerning the implications of this conception of the task of Political Economy. I venture to suggest that, as teachers of the subject, our instructions will be more fruitful if, side by side, they run parallel with suitable courses in Politics and History—Politics because it deals systematically with philosophical and constitutional matters which as regards Political Economy only arise incidentally; History, because while it certainly does not lay down laws by which we can foretell the future, it does give a feeling for the possibilities of action which confining our attention to the present certainly fails to convey. I fancy that such exhortations are more at home in my own country where excessive specialization in the first-degree stage, productive of one-eyed monsters, is too frequently the order of the day. But the general principle seems to me to be sound.

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