

The Radical Reflections of an Applied Economist*

In my lifetime I have seen economics become a profession. When I began my university studies in the 1920's, the tradition remained that political economy was a field of literary and philosophical discourse which any serious-minded and cultivated person could enter. But a rapid change was in progress. Already before the First World War the amount of statistical information was growing rapidly, under American stimulus. During the War the Government became involved in economic affairs as never before, and as economic troubles deepened after the War it accepted a new responsibility for the direction of policy. These changes created a widespread sense of the need to achieve a greater understanding of economic affairs, and to train more people to handle the materials of economic administration: so the British universities generally came to provide distinct courses in economics, supported, if not by separate departments, at least by a staff of specialised teachers. The Second World War carried the interpenetration of government and business farther. The increased attention to planning in the years that followed, with the relative expansion of that sort of function in the private as well as the public sectors, brought new openings for economists. They were able to show their usefulness in posts for which their training specially suited them. The former relations of remoteness and sometimes contempt between the practical businessman and the economist were superseded by acceptance of the economist as a necessary member of the staff.

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By the later 1950's economics had thus become distinguished and established as a profession, both academically and occupationally. Meanwhile its academic status had been enhanced by its having developed a distinct body of theory and of statistical or econometric methods. Theory was being advanced to levels of great logical rigour and complexity, mainly by the application of mathematics. The graduate schools were giving an intensive training in the newly developed methods of handling quantitative data.

It might appear that these two developments, the occupational and the academic or theoretical, were linked. To some extent they obviously were. Most evidently this was so in the training of the new profession: the equipment which gave that profession its special usefulness was derived in great part from the assembling of quantitative economic information and the development of sophisticated methods of analysing it which had raised the professional status of academic economics in recent years. But as I look back what strikes me is the extent of divergence. The conspicuous achievements of economic theorists in the last half century have been made in a rarified atmosphere: the starting point of their inquiries may have been an issue of contemporary importance, but they have abstracted only such elements as would fit into a cohesive system, and they have been more attracted by the intellectual difficulty of problems than by any application to practice. The outcome has been work of great intellectual distinction but — here appears the divergence — it has not contributed to the qualities by which during the same years the economist has gained acceptance as a staff officer and adviser.

What are those qualities? The economist who is employed in that capacity commands a body of specialised information, and is equipped to analyse, assess and present it: in particular, he is trained in statistical methods. More than this, in matters of policy he brings to bear an approach, under the title of "the allocation of resources", which though it may seem commonplace to him, often makes a fresh contribution to the decision-making of others, through the reduction of choices to marginal variations, and the calculation of opportunity costs. If he is to be valued as an adviser he must also have the ability to see situations in the round, have empathy for human nature, and be able to enter into the outlook

of the people of the country as that has been moulded by their history. But what do these assets of the economist by occupation owe to what are generally regarded as the advances made by economic theory in recent years? There seems almost to be a negative relation. One economist who had held the highest responsibilities as an adviser told me that when an able young man who had taken honours in economics at the university joined his staff, he had to begin by unlearning his advanced theory. Another adviser whose responsibilities had been no less high told me that an entrant whose graduate work had been wholly in economic history would be as eligible as one who had been drilled in economic theory and econometrics: both could learn much of their work only after entry to the service, and the economic historian would have the advantage of not being prone, as the others were, to process data in detachment from their context. But in any case, one has only to compare the content of paper after paper in the learned economic journals with the problems that confront the administrator or adviser: not even remotely can he be guided, stimulated or informed by their profound, rigorous but remote reasoning.

Again, recent years have seen the extension of business consultancy as a distinct form of professional service. Some of those who prove their worth by providing this service are economists by training; many are not. A training in economics is not found to be an outstandingly useful preparation for a consultant's work, still less an indispensable qualification. Yet an outsider coming fresh to the academic field might expect the science of economics in the universities to bear the same close relation to business consultancy as physiology and pathology bear to consultancy in medicine.

This divergence between the economics of the dons and the administrators concerns me greatly. It is the issue I most want to raise as I look back now, at the invitation of the Editor of the *Banca Nazionale del Lavoro Quarterly Review*, over the years of my own acquaintance, such as it has been, with both sides of the divide.

But I may well be told that my concern is uncalled for. The distinction between the pure and applied departments is common to many branches of study. It is common also to find within the ambit of the same science both the advanced theorist, the

exploratory and problem-solving mind on the frontiers of knowledge, and the practitioner who makes useful application of a more limited body of principles. Nor is this, the argument goes on, to admit any distinction between what is and what is not inherently capable of practical application: on the contrary, the most abstract and hypothetical trains of reasoning may lead to discoveries of practical significance. The function of economic theory, in any case, is not to provide an explanation of this or that particular set of observations, but to construct a paradigm, a complex of interrelationships, which we carry in our minds and which enables us to cast the data presented in a particular inquiry into an intelligible order. To assess the justification of advanced economic theory by simply asking what use it is to someone immediately concerned with the problem of the competitiveness of British exports, or the shortage of skilled manual workers, is simply a vulgar error.

The need for theory is not in question: theory is tantamount to explanation, and to give up careful theorising would only leave the field clear for theorising of a wild and hasty kind. But there is still a good deal of economic theorising going on that cannot avail itself of this justification. This is because of the special handicap under which the economist labours, in his inability to test his theories, especially by controlled experiment. Ideally, the need to account for certain observed occurrences should suggest a theory, and this theory, or inferences drawn from it, should then be brought back again to the test of fact: but this test can seldom be made by the economist, because the theory necessarily isolates the operation of a small number of factors, whereas the data record the effect of a great many. This drastic limitation should, as Marshall said, confine the economist to "short chains and single connecting links" of analysis and deduction, inserted at appropriate points in his empirical studies, but in practice he tends to feel that it sets him free for composing problems and building models. Since — it is no fault of his — he cannot be always working under the check of empirical relevance, he comes upon no boundary line to divide the theory that is applicable to actual situations from that which is outwardly the same, being made up of similar components, but has become artificial. Before long he is making models in which the components do indeed bear the names of entrepreneurs or holders of money balances,

trade unionists or investors, but these are such stereotypes that the patterns they form and problems they pose seem, like chess problems, to owe their interest to their intellectual difficulty, and not to any identity between the pieces on the board and the flesh and blood of those they nominally represent: nor to any help their solution will give in the world's work.

But there is another way in which the basic limitation of the economist is likely to make him more of a theorist, and this holds of those who are most anxious to be of practical use. I speak now not of the refinements of theory, but of the theory of contemporary policy. A pressing problem arises, and the economist is asked to advise: can he say only that he must be given time and resources to conduct a detailed investigation? Ricardo showed how a method lay ready to hand that might yield speedier insights. Its results, moreover, would have both generality and certainty. This method is to abstract the essential and dominant propensities of the agents concerned, and to assemble these elements in a model whose workings can be traced, if not simply in the mind's eye, then by a process of deduction from premises, very possibly with the aid of mathematics. The conclusion will have general applicability, if it has been derived from basic elements of widespread occurrence. Contrast this with the limited scope, the "ad hocery" as we call it now, of the recommendations that emerge from the study in depth of any one problem. The conclusion of the Ricardian method will also, unless the premises are wrongly selected or an error can be demonstrated in the reasoning, have certainty. Contrast this with the uncertainty and the tentative proposals which are all that is commonly attained at the last by those who have tried to take so much more into account. With a clearly thought out theory, the economist can at least approach all the tangle of contemporary problems with an assured orientation. Without it, he is floundering in empiricism, moved now this way and now that by anecdotal evidence.

Or so it has seemed; but my doubts have grown with the years. These doubts are not about the insights that models of the economic system can afford, but about the components and the comprehensiveness of these models: are the models made up of the factors and processes that enter substantially into the actual course of economic affairs, and do they therefore take account of the reactions which measures of policy will meet with in practice?

In particular, do they distinguish the variety of factors that affect the different components of the aggregates assembled under any one such heading as investment, real income, or unemployment? The Keynesian system showed how variations in effective demand could arise so as to change aggregate employment, and how within this system a high level of employment could be maintained by the use of appropriate fiscal and monetary operators. This was always subject to the constraints of the balance of payments and of cost push by trade unionists; but when in outstanding and blessed contrast to so much that had gone before, for twenty years and more after the Second World War the Western economies generally maintained a high and stable level of employment, many of us believed that the Keynesian theory had shown how to prevent the recurrence of large-scale unemployment. Only with the creeping rise of unemployment in the later 1960's was our attention brought back to the structural factors affecting employment in particular industries and regions within any one country, and to the effects on employment of a changing share of the international market; the complexities of investment decisions; and the uncertain, sometimes halting rhythm of technical advance. Western Governments are faced in common with the necessity for contracting the capacity of their steel industries: is it only for fear of cost push that they do not proceed in common to sustain effective demand? — Or consider the countries of low income, and what the economic theory of development has done for them. That the two-sector models that were formerly so plentiful had little impact on the paddy fields I think highly probable. But I wonder also whether the theory of economic development has served to shape the strategy of policy effectively as it might have done if it had dealt with the obstacles and opportunities that present themselves as salient to those charged with practical responsibilities in the field; or if it could help to explain why a given country has developed more effectively than a neighbour of similar natural endowments. — Again, we have seen the application of economic theory to the struggle against inflation in the western economies. Monetarism passes lightly over the processes by which prices, costs and incomes are fixed and changed in detail by the volition and consent of individual and collective human agents, and the inertia of those people's expectations. If the present increased reliance upon monetary constraints

produces so sharp a reaction among businessmen and trade unionists that governments draw back, we may be told that the economic policy was correct, but the short-sighted or politically motivated resistance of the public did not give it a chance.

Economic theorists seized on the Phillips curve as a demonstration of the determination of the movement of the general level of wages by the market forces of supply and demand; they were taken aback when the number of unemployed — their index of the excess of supply over demand — and the rate of rise of wages doubled side by side. They would have avoided their misinterpretation if they had remembered what Marshall said long ago about the propensity of Ricardo and his followers to suppose "that the world was made up of city men". This propensity, he said, "caused them to speak of labour as a commodity without staying to throw themselves into the point of view of the workman; and without dwelling upon the allowances to be made for his human passions, his instincts and habits, his sympathies and antipathies, his class jealousies and class adhesiveness, his want of knowledge and of the opportunities for free and vigorous action. They therefore attributed to the forces of supply and demand a much more mechanical and regular action than is to be found in real life; and they laid down laws with regard to profits and wages that did not really hold even for England in their own time".¹

In sum, I doubt whether the economist by building models whose components are believed to be general propensities of economic agents, can come close enough to the actual economic component of human affairs for the working of his model to be a guide to policy. We do not know how far the assumptions out of which the model is built represent accurately so much as it covers; and we do not know how much it leaves out.

But here, it may be said, econometrics comes to our aid: it can draw out relations from the data, and check hypotheses by testing inferences from them against the facts. The great value of the range of statistical studies now included within econometrics is not in question, but in the particular use proposed for it here econometrics operates under severe constraints. Because economic time series are affected by common causes, like sticks floating

¹ ALFRED MARSHALL, *Principles of Economics* (1890), Appx B, § 6.

together down a stream, regressions between them must have interpretations placed upon them from without — the theory must be imported into the statistics and not drawn out from them. The Phillips curve was a notable example of this. In cross-section analysis the difficulties remain of determining the direction of causality, and knowing whether a variable appears in its own right or as a proxy for a latent factor. It seems to me therefore (so far as a layman is entitled to an opinion) that the wide and vigorous extension of econometrics has been a mixed blessing. It has brought great benefits by its concentration of interest on quantitative evidence and methods of making the fullest use of it. But the availability of the computer, and the fascination of getting numerical answers out of it to the most complicated questions, have led economists too often to be cavalier in reducing their problem to a computable form, and naive in interpreting their findings.

But by now many of my colleagues will have had too much from me. They will have seen me not only turning away from advanced theory, but calling in question the use of theory at any level in order to draw measures of policy directly out from it for practical application. For good measure I have even thrown in some thoughts about the limitations and temptations of econometrics. My colleagues will feel that these judgements are at best highly subjective. "This surely is a peevish fellow", they will say. "He objects to other people doing things after their own style, because it's not the style that suits himself. He presumes to erect his personal preferences into general laws. He does not realise that in the methodology of economics, all debates in the end are only about tastes, and manifestos come down to little more than advice on "how to be more like me."

There is force in this, as an observation of what does tend to happen. Because methods are hard to assess by their results, they are likely to gain their acceptance instead by the intellectual satisfaction they give to those who use them, and of course this varies with each user's own talents and temperament. It seems the most efficient arrangement, moreover, that each person should work in the way that comes most naturally to him. It must also be observed that, given the diversity of talents, the highest prestige attaches inherently to the intellectual power of the masterly theorist. The rest of us recognise his gifts as outstanding. It may

be that there are gifts of handling complex detail and forming sound practical judgements, that are actually no less rare, but because their application is hedged around by the circumstances of particular cases they do not stand out like the ability to prove a new theorem. The more abstract the material, the more evident is the intellectual power of those who master it. For this among other reasons the economic theorist moves among his fellows with a certain majesty.

And more than this: those of us who prefer to see each problem in its circumstantial setting may have to be warned that instead of priding ourselves on our fidelity to the facts we should examine ourselves for mental laziness. We like information for its own sake, we are naturally readers of the press, we like to envisage what has been going on in lively colours and in the round. We are responsive to the play of personality, aware of the variety of human nature as it is moulded in different societies and periods, and we are constantly reminded of how the actual course of events differs from the determinate composition of forces in a mechanical model. Our inquiries convey the feeling which the war correspondent gains when he reaches the front line, that he is looking directly into the springs of action. Yet any intelligible account of transactions, any reasoned history, implies a theory: any user of our studies is bound to be concerned with the firmness and representativeness of the evidence, and the rigour and generality of the reasoning. It is here that the impulse towards realism may be defective. When we recreate a scene before our eyes, we are not abstracting, we are not reasoning: we may be missing connections and constraints, we may make statements that analysis would show to be downright fallacies. But for the type of mind that likes to see things as they are, that sort of hard thinking may be uncongenial; and the realist's criticism of the unreality of theory may only provide a rationalisation of his own reluctance to make the mental effort that theory would require of him.

There is force in these remonstrances that I hear my colleagues making. In particular I agree with them on the temptations of empiricism, and the need for the application of a framework of analysis, with the consequent value to be set upon a rigorous training in theory — even though, as will appear shortly, I do not think that this training should be carried to such advanced levels as it commonly is carried today. But I cannot agree that when we

have pointed out how different methods appeal to different temperaments we have said the last word about their relative usefulness. Perhaps that would be so if we were concerned with the nature of economics: economics is what economists do? But it certainly is not so if we raise the question that, I realise now, has underlain the disquiet of these reflections of mine — the question, namely, of what is the object of the economist.

This is a different question from that of the scope and method of economics. It is also a more embarrassing question. If the object of the economist is simply to study economics as that subject now stands, then he is free to occupy himself within a wide range of intellectual tasks, and suit his personal inclination in both his choice of subject and the way he works. But suppose we ask what is the use of all this, and consider whether the foremost object of the economist should not be to gain an understanding of the economic aspect of human affairs so as to be able to contribute to their healthier development? That seems a very natural and widely acceptable object; but if we really believe in it, we are calling in question the validity of much contemporary work. The difficulty lies not in the abstraction of economic processes from their social setting, but in the return from that abstraction to policy applied to human affairs. The mental process that the economist performs has no counterpart in daily life: advice based on the separation of economic from other influences on human behaviour is liable to be stultified by what it has abstracted from. I have heard an eminent economist say that he could only recommend the policy that was economically advisable: whether it was socially acceptable was for others to say. But this seems to me as if a medical specialist were to recommend a drug as the best treatment for neuritis, but add that whether the patient's stomach would revolt against it was for a dietitian to advise. Economic "aspects" may be detached analytically; "the economy" may be separated conceptually from society, but the behaviour of "economic agents" is affected by influences from which the theorist abstracts. Effective policy recommendations must take account of those influences.

This is to rediscover the obvious: it is to say that what actually happens in the economy occurs as a process of history. It depends upon human attitudes and expectations, cultural inheritance, waves of feeling, the power of personalities, the impact of

particular events, sometimes on sheer chance. Any one problem on which the economist is called to advise is part of the ongoing affairs of a society. He needs an understanding in which the quantitative relations established within the framework of economic analysis are combined with empathy and imaginative insight.

If we ask what training is appropriate for the entrant whose object is to be an economist of this kind, our findings are disturbing. For it does not appear that training in the great intellectual advances that have been made in economic theory in recent years are helpful to this end. The insights yielded by economic analysis are essential but they are those of quite elementary analysis. My contention is that the economist who is best equipped to understand the working of the economy around him and to advise on policy needs in point of analysis the equipment that is needed by the economic historian, and no more. I take this to be the analysis of demand and supply, distribution, international trade, and money, as these are developed in a text for undergraduates. It stops short even of what is expected nowadays of the most able undergraduates in their final examination. I doubt whether more concepts or relationships than are contained here will in practice be drawn upon even by those who can handle them with facility, in work upon particular problems at the highest level of responsibility. The entrant would also receive thoroughgoing training in statistical methods. For the rest, his course would include much economic, social and political history: this is essential. The course would also provide for the study in detail of some contemporary societies and their recent changes.

This marks a conception of the professional economist different from that which prevails today in our universities. But I believe it agrees with the habit of thought and the working equipment actually used (whatever their academic training) by those economists who have gained experience in posts of responsibility as advisers on issues of practical policy. A divergence between what the academics like to teach and the training that practical men wish they would give is an old story, and economics would not be the first faculty to hear it. But the professionalisation of economics is still recent. The economics of the chair has less grounds for self-confidence than it might have relied upon

some years ago. Our metal may not yet have set in the mould. We may be moved to some reassessment and reformation. Our conception of the professional economist may yet become that of the economist who is equipped to understand mankind — as Marshall said, mankind and not economic man — to understand mankind in the ordinary business of life.

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