I

What has become of the Keynesian Revolution?

Joan Robinson*

WHAT WAS the dominant orthodoxy against which the Keynesian revolution was raised? The General Theory of Employment Interest and Money was not published till 1936 but the revolution began to stir in 1929, lurched forward in 1931 and grew urgent with the grim events of 1933.

In those years British orthodoxy was still dominated by nostalgia for the world before 1914. Then there was normality and equilibrium. To get back to that happy state, its institutions and its policies should be restored—keep to the gold standard at the old sterling parity. balance the budget, maintain free trade and observe the strictest laissez faire in the relations of government with industry. When Lloyd George proposed a campaign to reduce unemployment (which was then at the figure of one million or more) by expenditure on public works, he was answered by the famous ‘Treasury View’ that there is a certain amount of saving at any moment, available to finance investment, and if the government borrows a part, there will be so much the less for industry.

In 1931, when the world crisis had produced a sharp increase in the deficit on the U.K. balance of payments, the appropriate remedy (approved as much by the unlucky Labour government as by the Bank of England) was to cut expenditure so as to balance the budget. These were the orthodox views that prevailed in the realm of public policy.

In the realm of economic theory, orthodox doctrine comprised two distinct branches—Principles and Money. In the department of Principles, the main topic was the behaviour of markets under the influence of supply and demand and the determination of the

* Emeritus Professor, University of Cambridge.
relative prices of commodities and the relative earnings of ‘factors of production’. In so far as there was anything that would nowadays be called a macro theory, that is, an analysis of the operation of the economy as a whole, it was dominated by the conception of a natural tendency to equilibrium under the free play of market forces. General unemployment was a contradiction in terms.

Marshall had a foxy way of saving his conscience by mentioning exceptions, but doing so in such a way that his pupils would continue to believe in the rule. He pointed out that Say’s Law—supply creates its own demand—breaks down when there is a failure of confidence, which causes investment to fall off and contraction to spread from one market to another. This was mentioned by the way. It was not meant to disturb the general faith in equilibrium under laissez faire.

The department of monetary theory was quite different. This dealt with the general price level and had to include awkward subjects like inflation and the trade cycle. According to this theory movements in prices were determined by changes in the quantity of money. It is a strange fact that, when it came to pronouncing in public affairs, the economists everywhere derived their advice from the department of Principles and forgot all about Money. In those days (unlike now) the leading symptom of a recession was a fall in prices. If all that was needed to raise prices, and so get production going again, was to print some bank notes, why did not the economists advise their governments to do so at once? No. The money cranks were saying: It can all be done with a fountain pen, but the orthodox economists thought them very wrong. The orthodox line was that nothing can be done, that nothing should be done; that in good time, equilibrium will be restored.

Keynes started life as a monetary economist. When he was working on his *Treatise on Money*, he thought that he had to be concerned strictly with the general price level. He rejected the suggestion that his subject was connected with the problem of unemployment. But in 1929 he had descended from this high theoretical plane to practical policy, supporting Lloyd George’s campaign for public works. The pamphlet which he wrote with Hubert Henderson, *Can Lloyd George Do It?*, sketches out the theory that investment generates saving, so that a budget deficit can reduce unemployment without generating inflation.

The analysis is very sketchy. R. F. Kahn took it up, worked out the theory of the multiplier in a more coherent manner, and per-
suaded Keynes that he and Henderson had been perfectly right. The ink was not dry on the first copies of the *Treatise* before Keynes began to acknowledge that employment was after all the central point. The quantity of money fell into place in the theory of interest rates. Changes in activity were seen to be governed by changes in expenditure on investment and the purchase of consumption goods. The price level had nothing to do with banking policy, it depended on money-wage rates. So the old dichotomy was broken down and 'monetary theory' was absorbed into the analysis of output as a whole.

Meanwhile the Nazis had been proving Lloyd George's point with a vengeance. It was a joke in Germany that Hitler was planning to give employment in straightening the Crooked Lake, painting the Black Forest white and putting down linoleum in the Polish Corridor. The Treasury view was that his unsound policies would soon bring him down. But the little group of Keynesians was despondent and frustrated. We were getting the theory clear at last, but it was going to be too late.

II

There will soon be an account in the latest volume of the *Collected Writings of John Maynard Keynes* of the upheavals and reformulations that led from the *Treatise* to the *General Theory*. It will be seen that there were moments when we had some trouble in getting Maynard to see what the point of his revolution really was, but when he came to sum it up after the book was published he got it into focus.¹

On the plane of theory, the revolution lay in the change from the conception of equilibrium to the conception of history; from the principles of rational choice to the problems of decisions based on guess-work or on convention.

In traditional teaching, it was assumed 'that the amounts of the factors of production in use were given and that the problem was to determine the way in which they would be used and their relative rewards.'

Keynes’s contemporaries ‘like their predecessors were still dealing with a system in which the amount of the factors employed was given and the other relevant facts were known more or less for certain. This does not mean that they were dealing with a system in which change was ruled out, or even one in which the disappointment of expectation was ruled out. But at any given time facts and expectations were assumed to be given in a definite and calculable form; and risks, of which, though admitted, not much notice was taken, were supposed to be capable of an exact actuarial computation. The calculus of probability, though mention of it was kept in the background, was supposed to be capable of reducing uncertainty to the same calculable status as that of certainty itself.’

Keynes drew a sharp distinction between calculable risks and the uncertainty which arises from lack of reliable information. Since the future is essentially uncertain, strictly rational behaviour is impossible; a great part of economic life is conducted on the basis of accepted conventions.

‘Knowing that our own individual judgment is worthless, we endeavour to fall back on the judgment of the rest of the world which is perhaps better informed. That is, we endeavour to conform with the behaviour of the majority or the average. The psychology of a society of individuals each of whom is endeavouring to copy the others leads to what we may strictly term a conventional judgment . . . Being based on so flimsy a foundation, it is subject to sudden and violent changes. The practice of calmness and immobility, of certainty and security, suddenly breaks down. New fears and hopes will, without warning, take charge of human conduct. The forces of disillusion may suddenly impose a new conventional basis of valuation. All these pretty, polite techniques, made for a well-panelled board room and a nicely regulated market, are liable to collapse. At all times the vague panic fears and equally vague and unreasoned hopes are not really lulled, and lie but a little way below the surface . . .

Though this is how we behave in the market place, the theory we devise in the study of how we behave in the market place should not itself submit to market-place idols. I accuse the classical economic theory of being itself one of these pretty, polite techniques which tries to deal with the present by abstracting from the fact that we know very little about the future.’
The existence of money is bound up with uncertainty, for interest-earning assets would always be preferred to cash if there was no doubt about their future value. In this light, the nature of interest becomes clear. Keynes was able to resolve a deep-seated confusion in traditional teaching by emphasising the distinction between the rate of interest, as the price of finance, and the rate of profit expected on an investment, for which he unfortunately devised a new term—the marginal efficiency of capital.

It is uncertainty that accounts for ‘the liability of the scale of investment to fluctuate for reasons quite distinct (a) from those which determine the propensity of the individual to save out of a given income and (b) from those physical conditions of technical capacity to aid production which have usually been supposed hitherto to be the chief influence governing the marginal efficiency of capital.’

Once we admit that an economy exists in time, that history goes one way, from the irrevocable past into the unknown future, the conception of equilibrium based on the mechanical analogy of a pendulum swinging to and fro in space becomes untenable. The whole of traditional economics needs to be thought out afresh.

After the war, Keynes theory was accepted as a new orthodoxy without the old one being rethought. In modern text-books, the pendulum still swings, tending towards its equilibrium point. Market forces allocate given factors of production between alternative uses, investment is a sacrifice of present consumption, and the rate of interest measures society’s discount of the future. All the old slogans are repeated unchanged.

How has this trick been worked? First of all, simplifications in Keynes’s own exposition, which were necessary at the first stage of the argument, have been used to smooth the meaning out of it. Keynes sometimes talked of total output at full employment as though it was a simple quantity. Obviously, the maximum output that can be produced in a given situation depends on the productive capacity in existence of plant and equipment for labour to be employed with, and productive capacity exists in concrete forms available for producing particular kinds of output. The notion of ‘the level of investment that will ensure full employment’ presupposes the existence of productive capacity for investment and consumption goods in the right proportions.
Moreover, it presupposes a particular ratio of consumption to investment. But the level of consumption from a given total income depends upon its distribution between consumers, and this depends on the distribution of wealth among households, the ratio of profits to wages, relative prices of commodities and the system of taxation.

All this is ignored in the vulgarised version of Keynes' theory. At any moment, the text-book argument runs, there is a certain amount of saving per annum that would occur at full employment. Let the government see to it that there is enough investment to absorb that amount and then all will be well.

So we return to the classical world where accumulation is determined by saving and the old theory slips back into place. But here there is a difficulty. Investment every year is to be just enough to absorb the year's savings. What about the new equipment that it creates? Will that be just enough to employ the labour then available, when investment is absorbing saving next year? The long-period aspect of investment, that it creates capital goods, must be considered as well as the short-period aspect, that it keeps up effective demand.

Never mind! Never mind! Cry the bastard Keynesians. We can pretend that capital goods are all made of putty. They can be squeezed up or spread out, without trouble or cost, to give whatever amount of employment is required. Moreover, there is no need to worry about mistaken investments or about technical change. Not only the putty added this year, but the whole lot, can be squeezed into any form that is needed so as to re-establish equilibrium instantaneously after any change.

There has been a lot of tiresome controversy over this putty. The bastard Keynesians try to make out that it is all about the problem of 'measuring capital'. But it has nothing to do either with measurement or with capital; it has to do with abolishing time. For a world that is always in equilibrium there is no difference between the future and the past, there is no history and there is no need for Keynes.

III

The other half of the Keynesian revolution was to recognise that, in an industrial economy, the level of prices is governed primarily by the level of money-wage rates.
To clear some details out of the way, let us first look at Keynes’s theory of the behaviour of prices with given wage rates. First, he accepted the idea of competitive market prices. Neither Roy Harrod nor I could get Maynard to take an interest in ‘marginal revenue’. He therefore had to find an explanation of the obvious fact that prices do not immediately fall to the level of average prime cost whenever sales are below full capacity output. This was the point of ‘user cost’. The modern concept of gross profit margins as a mark-up on prime cost would really have suited him much better. Second, following Marshall’s notion of ‘cost at the margin’, he took it for granted that there is a tendency for prices to rise somewhat with an upswing in activity and to fall in a recession, when money-wage rates do not change. This was a question of empirical fact that had no particular logical importance in the theory; it led to unnecessary complications in the definition of ‘involuntary unemployment’ and it led to the view that a rise in employment normally leads to a fall in the level of real-wage rates, which Keynes had to emphasise was by no means the same as the view that a fall in real wages causes an increase in employment. Thirdly, in the Treatise Keynes made a great point of the shift to profit that occurs when effective demand rises. He did not deny this in the General Theory but there he generally dealt with a rise in incomes overall without much emphasis on distribution.

These are all minor points compared to the main argument, that the level of prices in terms of money is a reflection of the level of money-wage rates.

This was a greater shock to notions of equilibrium even than the concept of effective demand governed by volatile expectations. The level of money wages in any country at any time is more or less an historical accident going back to a remote past and influenced by recent events affecting the balance of power between employers and trade unions in the labour market.

Then there is no meaning whatever in the idea of an equilibrium value of money. This was such a blow to orthodox ideas that almost all those who were ready to welcome the Keynesian diagnosis of unemployment somehow refused to take it in until it became too painfully obvious to be ignored any longer.

I believe that the extraordinary revival of the quantity theory of money in recent years (in an even more hollow form than of old) must be accounted for by the longing to have some kind of theory that provides something to tether the value of money to, some
defence against the horrid thought that under laissez faire the private-enterprise system does not tend towards equilibrium in any way at all.

There was another attempt to tame Keynes's theory of prices and bring it into the orbit of a mechanical analogy—that was the late-lamented Phillips curve. It is obvious enough that a rise in wage rates occurs more often after a recent rise in the level of employment than after a fall. When employment has recently risen, bargaining power of trade unions has improved, there has been an increase in profits, and often an increase in the cost of living. In a buoyant market, employers are reluctant to lose output through a strike and are confident of being able to recover costs by raising prices if they have to grant a rise in wages. On the other hand, in a deep slump, when there is heavy unemployment and at the same time real wage rates for those in work have recently improved because of reduced prices of primary products, wage rates rarely rise and may even be cut in some cases.

From a hasty run over of the statistics reflecting this historical experience is derived an econometric law relating the level of unemployment (not changes in it) to changes in wage rates. From this can be read off the amount of unemployment associated with a constant level of prices, and then policy can be framed in terms of the 'pay off' between unemployment and inflation.

The simplicity of this faith in the econometrician's magic numbers is matched by the remarkable cynicism of the proposals derived from it.

Perhaps the publicity given to the Phillips curve contributed to falsifying its predictions. It was natural for the trade unions to resolve to demonstrate that it is not true that when a certain proportion of their members are unemployed they are incapable of demanding higher wages. However that may be, it is clear enough that the 'pay off' is a cheat. We can have a recession and say goodbye to full employment without inflation being any the less.

Already before the war, Keynes was pointing out that wage-bargaining in conditions of continuous near-full employment was going to present an extremely awkward political problem. Now everyone agrees with the theory, but the political problem has not become any easier to solve.
IV

What about the influence of the General Theory on practical affairs?

There is a kind of simple-minded Marxist who has a great resent¬ment against Keynes because he is held responsible for saving capitalism from destroying itself in another great slump. This is often made an excuse for not understanding the theory of effective demand, although Michal Kalecki derived pretty well the same analytical system as Keynes from Marx’s premises. Moreover it implies that capitalists are so stupid that they would fail to learn from their experiences during the war that government outlay maintains profits, unless they had Keynes to point it out to them.

But what was the political tendency of the General Theory? Keynes himself described it as ‘moderately conservative’ but this was intended as a paradox for the whole book is a polemic against established ideas. His own mood often swung from left to right. Capitalism was in some ways repugnant to him but Stalinism was much worse. In his last years, certainly, the right predominated. When I teased him about accepting a peerage he replied that after sixty one had to become respectable. But his basic view of life was aesthetic rather than political. He hated unemployment because it was stupid and poverty because it was ugly. He was disgusted by the commercialism of modern life. (It is true he enjoyed making money for his College and for himself but only as long as it did not take up much time.) He indulged in an agreeable vision of a world where economics has ceased to be important and our grandchildren can begin to lead a civilised life.

At the time when the General Theory was being written, Keynes, projecting the situation of the slump into the future, threw out the suggestion that the need for accumulation could be overcome in thirty years of investment at the full-employment level, provided that wars were avoided and population ceased to grow. (He was taking an insular view. The Third World had not yet come to mind.) Alvin Hansen took this up and turned it into a horror story. With the closing of the frontier in North America, there would not be sufficient outlets for the saving that capitalism generates and chronic stagnation will set in. This was not Keynes’s attitude. He welcomed the euthanasia of the rentier. He was only afraid that the prospect might
be spoiled by failure to get the rate of interest to fall fast enough. This part of the argument in the *General Theory* is not at all clear. It seems to contain an undigested lump of what Keynes called classical theory. In a long-run sense the ‘marginal efficiency of capital’ means both prospective profits to a business and the real usefulness of investment to society. There is no hint that these might not always be the same thing. But, in any case, Keynes is arguing that, if a private-enterprise system cannot deal with potential abundance, we must turn it into a system that can. Certainly, the last chapter of the *General Theory* tries to make out that such a change could be easy and painless but it does not suggest, like Hansen, that if capitalism is incompatible with plenty, plenty ought to be sacrificed to keep capitalism going.

Of course, it has all turned out to be a daydream. The twenty-five years after the war that passed without a major recession has been called the Age of Keynes, but it was not much like his vision. It turned out closer to Kalecki’s sardonic description of the regime of the political trade cycle.

Unemployment is a reproach to a democratic government. When it gets too big, steps are taken to reduce it. Besides, unemployment is associated with low profits. But when unemployment falls too low, inflation sets in. So policy is always alternating between go and stop. This is not using resources for rational ends; it is making employment, or rather avoiding much unemployment, an end in itself.

When we were up against sound finance and the Treasury view, we had to argue that any expenditure is better than none. Dig holes in the ground and fill them again, paint the Black Forest white; if men cannot be paid wages for doing something sensible, pay them to do something silly.

‘“To dig holes in the ground”, paid for out of savings, will increase, not only employment but the real national dividend of useful goods and services. It is not reasonable, however,’ Keynes adds ‘that a sensible community should be content to remain dependent on such fortuitous and often wasteful mitigations when once we understand the influences upon which effective demand depends.’

As it has turned out, employment has been kept up by expedients that are not just silly. The self-styled Keynesians in the United States...
boast of having overcome the rule of sound finance. The consequence has been to facilitate deficit expenditure on armaments; it has helped to keep up the cold war and promoted hot wars here and there around the world.

Now, it seems that the bastard Keynesian era is coming to an end in general disillusionment; the economists have no more idea what to say than they had when the old equilibrium doctrine collapsed in the great slump. The Keynesian revolution still remains to be made both in teaching economic theory and in forming economic policy.