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LORD KEYNES AND THE GENERAL THEORY*

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THE death of Lord Keynes will undoubtedly afford the occasion for numerous attempts to appraise the character of the man and his contribution to economic thought. The personal details of his life and antecedents will very properly receive extensive notice elsewhere.

It is perhaps not too soon to venture upon a brief and tentative appraisal of Keynes's lasting impact upon the development of modern economic analysis. And it is all the more fitting to do so now that his major work has just completed the first decade of its very long life.

THE IMPACT OF THE GENERAL THEORY

I have always considered it a priceless advantage to have been born as an economist prior to 1936 and to have received a thorough grounding in classical economics. It is quite impossible for modern students to realize the full effect of what has been advisably called "The Keynesian Revolution"[1] upon those of us brought up in the orthodox tradition. What beginners today often regard as trite and obvious was to us puzzling, novel, and heretical.

To have been born as an economist before 1936 was a boon—yes. But not to have been born too long before!

> "Bliss was it in that dawn to be alive,
> But to be young was very heaven!"

The *General Theory* caught most economists under the age of 35 with the unexpected virulence of a disease first attacking and decimating an isolated tribe of South Sea islanders. Economists beyond 50 turned out to be quite immune to the ailment. With time, most economists in-between began to run the fever, often without knowing or admitting their condition.

I must confess that my own first reaction to the *General Theory* was not at all like that of Keats on first looking into Chapman's Homer. No silent watcher, I, upon a peak in Darien. My rebellion against its

* "Some Personal Impressions of Maynard Keynes," by Lord Beveridge, will appear in a future issue of ECONOMETRICA.—EDITOR.

[1] I owe much in what follows to discussions with my former student, Dr. Lawrence R. Klein, whose rewarding study shortly to be published by The Macmillan Company bears the above title.

pretensions would have been complete except for an uneasy realization that I did not at all understand what it was about. And I think I am giving away no secrets when I solemnly aver—upon the basis of vivid personal recollection—that no one else in Cambridge, Massachusetts, really knew what it was about for some 12 to 18 months after its publication. Indeed, until the appearance of the mathematical models of Meade, Lange, Hicks, and Harrod there is reason to believe that Keynes himself did not truly understand his own analysis.

Fashion always plays an important role in economic science; new concepts become the *mode* and then are *passè*. A cynic might even be tempted to speculate as to whether academic discussion is itself equilibrating: whether assertion, reply, and rejoinder do not represent an oscillating divergent series, in which—to quote Frank Knight's characterization of sociology—"bad talk drives out good."

In this case, gradually and against heavy resistance, the realization grew that the new analysis of *effective demand* associated with the *General Theory* was not to prove such a passing fad, that here indeed was part of "the wave of the future." This impression was confirmed by the rapidity with which English economists, other than those at Cambridge, took up the new Gospel: e.g., Harrod, Meade, and others at Oxford; and still more surprisingly, the young blades at the *London School* like Kaldor, Lerner, and Hicks, who threw off their Hayekian garments and joined in the swim.

In this country it was pretty much the same story. Obviously, exactly the same words cannot be used to describe the analysis of income determination of, say, Lange, Hart, Harris, Ellis, Hansen, Bissell, Haberler, Slichter, J. M. Clark, or myself. And yet the Keynesian taint is unmistakably there upon every one of us. (I hasten to add—as who does not?—that I am not myself a Keynesian, although some of my best friends are.)

Instead of burning out like a fad, today ten years after its birth the *General Theory* is still gaining adherents and appears to be in business to stay. Many economists who are most vehement in criticism of the specific Keynesian policies—which must always be carefully distinguished from the scientific analysis associated with his name—will never again be the same after passing through his hands.[2]

It has been wisely said that only in terms of a modern theory of effective demand can one understand and defend the so-called "classical" theory of unemployment. It is perhaps not without additional significance in appraising the long-run prospects of the Keynesian

[2] For a striking example of the effect of the Keynesian analysis upon a great classical thinker, compare the fructiferous recent writings of Professor Pigou with his earlier *Theory of Unemployment*.

theories that no individual who has once embraced the modern analysis has—as far as I am aware—later returned to the older theories. And in universities where graduate students are exposed to the old and new income analysis, I am told that it is often only too clear which way the wind blows.

Finally, and perhaps most important from the long-run standpiont, the Keynesian analysis has begun to filter down into the elementary textbooks; and as everybody knows once an idea gets into these, however bad it may be, it becomes practically immortal.

THE GENERAL THEORY ITSELF

Thus far, I have been discussing the new doctrines without regard to their content or merits, as if they were a religion and nothing else. True, we find a Gospel, Scriptures, a Prophet, Disciples, Apostles, Epigoni, and even a Duality; and if there is no Apostolic Succession, there is at least an Apostolic Benediction. But by now the joke has worn thin, and is in any case irrelevant.

The modern saving-investment theory of income determination did not directly displace the old latent belief in Say's Law of Markets (according to which only "frictions" could give rise to unemployment and overproduction). Events of the years following 1929 destroyed the previous economic synthesis. The economists' belief in the orthodox synthesis was not overthrown, but had simply atrophied: it was not as though one's soul had faced a showdown as to the existence of the Deity and that faith was unthroned, or even that one had awakened in the morning to find that belief had flown away in the night; rather it was realized with a sense of belated recognition that one no longer had faith, that one had been living without faith for a long time, and that what after all was the difference?

The nature of the world did not suddenly change one black October day in 1929 so that a new theory became mandatory. Even in their day, the older theories were incomplete and inadequate: in 1815, in 1844, 1893, and 1920. I venture to believe that the 18th and 19th centuries take on a new aspect when looked back upon from the modern perspective; that a new dimension has been added to the rereading of the Mercantilists, Thornton, Malthus, Ricardo, Tooke, David Wells, Marshall, and Wicksell.

Of course, the Great Depression of the Thirties was not the first to reveal the untenability of the classical synthesis. The classical philosophy always had its ups and downs along with the great swings of business activity. Each time it had come back. But now for the first time, it was confronted by a competing system—a well-reasoned body of thought containing among other things as many equations as unknowns. In short, like itself, a synthesis; and one which could swallow the classical system as a special case.

A new *system*, that is what requires emphasis. Classical economics could withstand isolated criticism. Theorists can always resist facts; for facts are hard to establish and are always changing anyway, and *ceteris paribus* can be made to absorb a good deal of punishment. Inevitably, at the earliest opportunity, the mind slips back into the old grooves of thought since analysis is utterly impossible without a frame of reference, a way of thinking about things, or in short a theory.[3]

Herein lies the secret of the *General Theory*. It is a badly written book, poorly organized; any layman who, beguiled by the author's previous reputation, bought the book was cheated of his 5 shillings. It is not well suited for classroom use.[4] It is arrogant, bad-tempered, polemical, and not overly-generous in its acknowledgments. It abounds in mares' nests and confusions: involuntary unemployment, wage units, the equality of savings and investment, the timing of the multiplier, interactions of marginal efficiency upon the rate of interest, forced savings, own rates of interest, and many others. In it the Keynesian system stands out indistinctly, as if the author were hardly aware of its existence or cognizant of its properties; and certainly he is at his worst when expounding its relations to its predecessors. Flashes of insight and intuition intersperse tedious algebra. An awkward definition suddenly gives way to an unforgettable cadenza. When it finally is mastered, we find its analysis to be obvious and at the same time new. In short, it is a work of genius.

It is not unlikely that future historians of economic thought will conclude that the very obscurity and polemical character of the *General Theory* ultimately served to maximize its long-run influence. Possibly such an analyst will place it in the first rank of theoretical classics along with the work of Smith, Cournot, and Walras. Certainly, these four books together encompass most of what is vital in the field of economic theory; and only the first is by any standards easy reading or even accessible to the intelligent layman.

In any case, it bears repeating that the *General Theory* is an obscure book so that would-be anti-Keynesians must assume their position largely on credit unless they are willing to put in a great deal of work

[3] This tendency holds true of everybody, including the businessman and the politician, the only difference being that practical men think in terms of highly simplified (and often contradictory) theories. It even holds true of a literary economist who would tremble at the sight of a mathematical symbol.

[4] The dual and confused theory of Keynes and his followers concerning the "equality of savings and investment" unfortunately ruled out the possibility of a pedagogically clear exposition of the theory in terms of schedules of savings and investment determining income.

and run the risk of seduction in the process. The *General Theory* resembles the random notes over a period of years of a gifted man who in his youth gained the whip hand over his publishers by virtue of the acclaim and fortune resulting from the success of his *Economic Consequences of the Peace.*

Like Joyce's *Finnegan's Wake*, the *General Theory* is much in need of a companion volume providing a "skeleton key" and guide to its contents: warning the young and innocent away from Book I (especially the difficult Chapter 3) and on to Books III, IV, and VI. Certainly in its present state, the book does not get itself read from one year to another even by the sympathetic teacher and scholar.

Too much regret should not be attached to the fact that all hope must now be abandoned of an improved second edition, since it is the first edition which would in any case have assumed the stature of a classic. We may still paste into our copies of the *General Theory* certain subsequent Keynesian additions, most particularly, the famous chapter in *How to Pay for the War* which first outlined the modern theory of the inflationary process.

This last item helps to dispose of the fallacious belief that Keynesian economics is good "depression economics" and only that. Actually, the Keynesian system is indispensable to an understanding of conditions of overeffective demand and secular exhilaration; so much so that one anti-Keynesian has argued in print that *only* in times of a great war boom do such concepts as the marginal propensity to consume have validity. Perhaps, therefore, it would be more nearly correct to aver the reverse: that certain economists are Keynesian fellow travellers only in boom times, falling off the band wagon in depression.

If space permitted, it would be instructive to contrast the analysis of inflation during the Napoleonic and First World War periods with that of the recent War and correlate this with Keynes's influence. Thus, the "inflationary gap" concept,[5] recently so popular, seems to have been first used around the Spring of 1941 in a speech by the British Chancellor of Exchequer, a speech thought to have been the product of Keynes himself.

No author can complete a survey of Keynesian economics without indulging in that favorite indoor guessing game: Wherein lies the essential contribution of the *General Theory* and its distinguishing characteristic from the classical writings? Some consider its novelty to lie in the treatment of the *demand for money*, in its liquidity-preference emphasis. Others single out the treatment of *expectations.*

[5] This "neo-Austrian" demand analysis of inflation has, if anything, been overdone in the present writer's opinion; there is reason to suspect that the relaxations of price controls during a period of *insufficient* general demand might still be followed by a considerable, self-sustaining rise in prices.

I cannot agree. According to recent trends of thought, the interest rate is less important than Keynes himself believed; therefore, *liquidity preference* (which itself explains part of the lack of importance of the interest rate, but only part) cannot be of such crucial significance. As for expectations, the *General Theory* is brilliant in calling attention to their importance and in suggesting many of the central features of uncertainty and speculation. It paves the way for a theory of expectations, but it hardly provides one.

I myself believe the broad significance of the *General Theory* to be in the fact that it provides a relatively realistic, complete system for analyzing the level of effective demand and its fluctuations. More narrowly, I conceive the heart of its contribution to be in that subset of its equations which relate to the propensity to consume and to saving in relation to offsets-to-saving. In addition to linking saving explicitly to income, there is an equally important denial of the implicit "classical" axiom that motivated investment is *indefinitely expansible or contractable,* so that whatever people *try* to save will always be fully invested. It is not important whether we deny this by reason of expectations, interest-rate rigidity, investment inelasticity with respect to over-all price changes and the interest rate, capital or investment satiation, secular factors of a technological and political nature, or what have you. But it is vital for business-cycle analysis that we do assume definite amounts of investment which are highly variable over time in response to a myriad of exogenous and endogenous factors, *and which are not automatically equilibrated to full-employment saving levels by any internal efficacious economic process.*

With respect to the level of total purchasing power and employment, Keynes denies that there is an *Invisible Hand* channeling the self-centered action of each individual to the social optimum. This is the sum and substance of his heresy. Again and again through his writings there is to be found the figure of speech that what is needed are certain "rules of the road" and governmental actions, which will benefit everybody but which nobody by himself is motivated to establish or follow. Left to themselves during depression, people will try to save and only end up lowering society's level of capital formation and saving; during an inflation, apparent self-interest leads everyone to action which only aggravates the malignant upward spiral.

Such a philosophy is profoundly capitalistic in its nature. Its policies are offered "as the only practical means of avoiding the destruction of existing economic forms in their entirety and as the condition of the successful functioning of individual initiative."

From a perusal of Keynes's writing, I can find no evidence that words like these resemble the opportunistic lip-service paid in much recent social legislation to individual freedom and private enterprise. The following quotations show how far from a radical was this urbane and cosmopolitan provincial English liberal:

> How can I accept [the communistic] doctrine which sets up as its bible, above and beyond criticism, an obsolete economic textbook which I know to be not only scientifically erroneous but without interest or application for the modern world? How can I adopt a creed which, preferring the mud to the fish, exalts the boorish proletariat above the bourgeois and intelligentsia who, with all their faults, are the quality of life and surely carry the seeds of all human advancement. Even if we need a religion, how can we find it in the turbid rubbish of the Red bookshops? It is hard for an educated, decent, intelligent son of Western Europe to find his ideals here, unless he has first suffered some strange and horrid process of conversion which has changed all his values. . . .
>
> So, now that the deeds are done and there is no going back, I should like to give Russia her chance; to help and not to hinder. For how much rather, even after allowing for everything, if I were a Russian, would I contribute my quota of activity to Soviet Russia than to Tsarist Russia.[6]

Nothing that I can find in Keynes's later writings shows any significant changes in his underlying philosophy. As a result of the Great Depression, he becomes increasingly impatient with what he regards as the stupidity of businessmen who do not realize how much their views toward reform harm their own true long-run interests. But that is all.

With respect to international cooperation and autonomy of national policies, Keynes did undergo some changes in belief. The depression accentuated his post-World-War-I pessimism concerning the advisability of England or any other country's leaving itself to the mercy of the international gold standard. But in the last half dozen years, he began to pin his hopes on intelligent, concerted, multilateral cooperation, with, however, the important proviso that each nation should rarely be forced to adjust her economy by *deflationary* means.

PORTRAIT OF THE SCIENTIST

There is no danger that historians of thought will fail to devote attention to all the matters already discussed. Science, like capital, grows by accretion and each scientist's offering at the altar blooms forever. The personal characteristics of the scientist can only be captured while memories are still fresh; and only then, in all honesty, are they of maximum interest and relevance.

In my opinion, nothing in Keynes's previous life or work really quite prepares us for the *General Theory*. In many ways his career may serve as a model and prescription for a youth who aspires to be an economist. First, he was born into an able academic family which

[6] J. M. Keynes, *Essays in Persuasion*, 1932, pp. 300 and 311.

breathed in an atmosphere of economics; his father was a distinguished scholar, but not so brilliant as to overshadow and stunt his son's growth.

He early became interested in the philosophical basis of probability theory, thus establishing his reputation young in the technical fields of mathematics and logic. The *Indian Currency and Finance* book and assiduous service as Assistant Editor and Editor of the *Economic Journal* certified to his "solidity" and scholarly craftsmanship. His early reviews in the *Economic Journal* of Fisher, Hobson, Mises, and of Bagehot's collected works gave hints of the brilliance of his later literary style. The hiatus of the next few years in his scientific output is adequately explained by his service in the Treasury during the First World War.

The first extreme departure from an academic career comes, of course, with the Byronic success of the *Economic Consequences of the Peace*, which made him a world celebrity whose very visits to the Continent did not go unnoticed on the foreign exchange markets. As successful head of an insurance company and Bursar of King's College, he met the practical men of affairs on their own ground and won the reputation of being an economist who knew how to make money. All this was capped by a solid two-volume *Treatise on Money*, replete with historical accounts of the Mycenean monetary system, and the rest. Being a patron of the ballet and theater, a member of the "Bloomsbury Set" of Virginia Woolf and Lytton Strachey, a Governor of the Bank of England, and peer of the realm simply put the finishing gilt on his portrait.

Why then do I say that the *General Theory* still comes as a surprise? Because in all of these there is a sequence and pattern, and no one step occasions real astonishment. The *General Theory*, however, is a mutant notwithstanding Keynes's own expressed belief that it represents a "natural evolution" in his own line of thought. Let me turn, therefore, to his intellectual development.

As far back as in his 1911 review of Irving Fisher's *Purchasing Power of Money*,[7] Keynes expresses dissatisfaction with a mechanical Quantity Theory of money, but we have no evidence that he would have replaced it with anything more novel than a Cambridge cash-balance approach, amplified by a more detailed treatment of the discount rate. All this, as he would be the first to insist, was very much in the Marshallian oral tradition, and represents a view not very different from that of, say, Hawtrey.

[7] *Economic Journal*, Vol. 21, September, 1911, pp. 392–398. This is a charactertistically "unfair" and unfavorable review, to be compared with Marshall's review of Jevons, which Keynes's biography of Marshall tries weakly to justify.

Early in life he keenly realized the obstacles to deflation in a modern capitalistic country and the grief which this process entailed. In consequence of this intuition he came out roundly against going back to the prewar gold parity. Others held the same view: Rist in France, Cassel in Sweden, *et al.* He was not alone in his insistence, from the present fashionable point of view vastly exaggerated, that central-bank discount policy might stabilize business activity; again, compare the position of Gustav Cassel. Despite the auspicious sentence concerning savings and investment in its preface, the *Tract on Monetary Reform* on its analytical side goes little beyond a quantity-theory explanation of inflation; while its policy proposals for a nationally-managed currency and fluctuating exchange are only distinguished for their political novelty and persuasiveness.

In all of these, there is a consistency of pattern. And in retrospect it is only fair to say that he was on the whole right. Yet this brief account does not present the whole story. In many places, he was wrong. Perhaps a pamphleteer should be judged shot-gun rather than rifle fashion, by his absolute hits regardless of misses; still one must note that even when most wrong, he is often most confident and sure of himself.

The *Economic Consequences of the Peace* proceeds from beginning to end on a single premise which history has proved to be false or debatable. Again, he unleased with a flourish the Malthusian bogey of overpopulation at a time when England and the Western European world were undergoing a population revolution in the opposite direction. In his controversy with Sir William Beveridge on the terms of trade between industry and agriculture, besides being wrong in principle and interpretation, he revealed his characteristic weakness for presenting a few hasty, but suggestive, statistics. If it can be said that he was right in his reparations-transfer controversy with Ohlin, it is in part for the wrong reasons—reasons which in terms of his later system are seen to be classical as compared to the arguments of Ohlin. Again, at different times he has presented arguments to demonstrate that foreign investment is (1) deflationary, and (2) stimulating to the home economy, without appearing on either occasion to be aware of the opposing arguments.

None of these are of vital importance, but they help to give the flavor of the man. He has been at once soundboard, amplifier, and initiator of contemporary viewpoints, whose strength and weakness lay in his intuition, audaciousness, and changeability. Current quips concerning the latter trait are rather exaggerated, but they are not without provocation. It is quite in keeping with this portrait to be reminded that in the early '20's, before he had an inkling of the *General Theory*, or even the *Treatise*, he scolded Edwin Cannan in no uncertain terms for not recognizing the importance and novelty of modern beliefs as compared to old-fashioned—I might almost have said "classical"—theories.

Where a scientist is concerned it is not inappropriate, even in a eulogy, to replace the ordinary dictum *nihil nisi bonum* by the criterion *nihil nisi verum*. In all candor, therefore, it is necessary to point out certain limitations—one might almost say weaknesses were they not so intrinsically linked with his genius—in Keynes's thought.

Perhaps because he was exposed to economics too young, or perhaps because he arrived at maturity in the stultifying backwash of Marshall's influence upon economic theory—for whatever reason, Keynes seems never to have had any genuine interest in pure economic theory. It is remarkable that so active a brain would have failed to make any contribution to value theory; and yet except for his discussion of index numbers in Volume I of the *Treatise* and for a few remarks concerning "user cost," which are novel at best only in terminology and emphasis, he seems to have left no mark on pure value theory.[8]

Just as there is internal evidence in the *Treatise on Probability* that he early tired of somewhat frustrating basic philosophic speculation, so he seems to have early tired of theory. He gladly "exchanged the tormenting exercises of the foundations of thought and of psychology, where the mind tries to catch its own tail, for the delightful paths of our own most agreeable branch of the moral sciences, in which theory and fact, intuitive imagination and practical judgment, are blended in a manner comfortable to the human intellect."[9]

In view of his basic antipathy to economic theory, it is all the more wonder therefore that he was able to write a biography of Alfred Marshall, which Professor Schumpeter has termed not only one of the best treatments of a Master by a Pupil but one of the best biographies ever written.[10] Never were two temperaments more different than that of the two men, and we can be sure that the repressed Victorianism and "popish" personal mannerisms which Keynes found so worthy of reverence in a Master and Father would have been hardly tolerable in a contemporary.

[8] Indeed only in connection with Frank P. Ramsey's "A Mathematical Theory of Saving" (*Economic Journal*, Vol. 38, December, 1928, pp. 542–559) does he show interest in an esoteric theoretical problem; there he gave a rather intricate interpretation in words of a calculus-of-variations differential-equation condition of equilibrium. His reasoning is all the more brilliant—and I say this seriously!—because it is mathematically unrigorous, if not wrong. The importance which Keynes attached to this article is actually exaggerated and can be accounted for only in terms of his paternal feeling toward Ramsey, and his own participation in the solution of the problem.

[9] *Essays in Biography*, pp. 249–250.

[10] Keynes's discussion of Marshall's monetary theory is much better than his treatment of Marshall's contribution to theory.

From Marshall's early influence, no doubt, stems Keynes's antipathy toward the use of mathematical symbols, an antipathy which already appears, surprisingly considering its technical subject, in the early pages of the *Treatise on Probability*. In view of the fact that mathematical economists were later to make some of the most important contributions to Keynesian economics, his comments on them in the *General Theory* and in the Marshall and Edgeworth biographies merit rereading.[11]

Moreover, there is reason to believe that Keynes's thinking remained fuzzy on one important analytical matter throughout all his days: the relationship between "identity" and functional (or equilibrium-schedule) equality; between "virtual" and observable movements; between causality and concomitance; between tautology and hypothesis. Somewhere, I believe in the 1923 *Tract*, he already falls into the same analytic confusion with respect to the identity of supply and demand for foreign exchange which was later to be his stumbling-block with respect to the identity of saving and investment.

Perhaps he was always too busy with the affairs of the world to be able to devote sufficient time for repeated thinking through of certain basic problems. Certainly he was too busy to verify references ("a vain pursuit"). His famous remark that he never learned anything from reading German which he didn't already know would be greeted with incredulity in almost any other science than economics.[12] What he really meant was that his was one of those original minds which never accepts a thing as true and important unless he has already thought it through for himself. Despite his very considerable erudition in certain aspects of the history of thought, there was probably never a more ahistorical scholar than Keynes.

Finally, to fill in the last little touch in this incomplete portrait of an engaging spirit, I should like to present a characteristic quotation from Keynes:

> In writing a book of this kind the author must, if he is to put his point of view clearly, pretend sometimes to a little more conviction than he feels. He must give his own argument a chance, so to speak, nor be too ready to depress its vitality with a wet cloud of doubt.

[11] Keynes's critical review of Tinbergen's econometric business-cycle study for the League of Nations reveals that Keynes did not really have the necessary technical knowledge to understand what he was criticizing. How else are we to interpret such remarks as his assertion that a linear system can never develop oscillations?

[12] Around 1911–1915, he was the principal reviewer of German books for *E.J.*; also he must have read—at least he claimed to have—innumerable German works on probability. That he could not speak German with any fluency is well attested by those who heard him once open an English lecture to a German audience with a brief apology in German.

Is this from the *General Theory*? No. From the *Treatise on Money* or the *Tract*? No, no. Even when writing on so technical a subject as probability, the essential make-up of the man comes through so that no literary detective can fail to spot his spoor.

THE ROAD TO THE GENERAL THEORY

It was not unnatural for such a man as I have described to wish as he approached fifty to bring together, perhaps as a crowning life work, his intuitions concerning money. Thus the *Treatise* was born. Much of the first volume is substantial and creditable, though hardly exciting. But the Fundamental Equations which he and the world considered the really novel contribution of the *Treatise* are nothing but a detour and blind alley.

The second volume is most valuable of all, but it is so because of the intuitions there expressed concerning bullishness, bearishness, etc. and even these might have been prevented from coming into being by too literal an attempt to squeeze them into the mold of the Fundamental Equations. Fortunately, Keynes was not sufficiently systematic to carry out such a program.

Before the *Treatise* was completed, its author had already tired of it. Sir Isaac Newton held up publication of his theory for twenty years because of a small discrepancy in numerical calculation. Darwin hoarded his theories for decades in order to collect ever more facts. Not so with our hero: let the presses roll and throw off the grievous weight of a book unborn! Especially since a world falling to pieces is ripe to drop Pollyanna and take up with Cassandra on the rebound.

Perhaps not being systematic proved his salvation. A long line of heretics testifies that he is not the first to have tried to weld intuition into a satisfactory, unified theory; not the first to have shot his bolt and failed. But few have escaped from the attempt with their intuitions intact and unmarred. In an inexact subject like economics, concepts are not (psychologically) neutral. Decisions based upon ignorance or the equiprobability of the unknown are not invariant under transformation of coordinates or translation of concepts. Simply to define a concept is to reify it, to breathe life in it, to create a predisposition in favor of its constancy; *vide* the falling rate of profit and the organic composition of capital, the velocity of circulation of money, the propensity to consume, and the discrepancy between saving and investment.

The danger may be illustrated by a particular instance. Shrewd Edwin Cannan in characteristic salty prose throughout the first World War "protested."[13] At first his insights were sharp and incisive, his

[13] E. Cannan, *An Economist's Protest*, 1927.

judgments on the whole correct. But in the summer of 1917, to "escape from an almost unbearable personal sorrow," he undertook to set forth a *systematic* exposition of the theory of money. The transformation of Cinderella's coach at the stroke of twelve is not more sudden than the change in the quality of his thought. Here, I am not so much interested in the fact that his voice becomes shrill, his policies on the whole in retrospect bad—as in the fact that his intuitions were perverted and blunted by his analysis, almost in an irrecoverable way! Not so with Keynes. His constitution was able to throw off the *Treatise* and its Fundamental Equations.

While Keynes did much for the Great Depression, it is no less true that the Great Depression did much for him. It provided challenge, drama, experimental confirmation. He entered it the sort of man who might be expected to embrace the *General Theory* if it were explained to him. From the previous record, one cannot say more. Before it was over, he had emerged with the prize in hand, the system of thought for which he will be remembered.

Right now I do not intend to speculate in detail on the thought-process leading up to this work, but only to throw out a few hints. In the 1929 pamphlet, *Can Lloyd George Do It?*, written with H. D. Henderson, Keynes set up important hypotheses concerning the effects of public works and investment. It remained for R. F. Kahn, that elusive figure who hides in the preface of Cambridge books, to provide the substantiation in his justly famous 1931 *Economic Journal* article, "The Relation of Home Investment to Unemployment." Quite naturally the "multiplier" comes in for most attention; which is in a way too bad since the concept often seems like nothing but a cheap-Jack way of getting something for nothing and appears to carry with it a spurious numerical accuracy.

But behind lies the vitally important consumption function: giving the propensity to consume in terms of income; or looked at from the opposite side, specifying the propensity to save. With investment given, as a constant or in the schedule sense, we are in a position to set up the simplest determinate system of underemployment equilibrium—by a "Keynesian savings-investment-income cross" not formally different from the "Marshallian supply-demand-price cross."

Immediately everything falls into place: the recognition that the *attempt* to save may lower income and actual *realized* saving; the fact that a net autonomous increase in investment, foreign balance, government expenditure, consumption will result in increased income *greater* than itself, etc., etc.

Other milestones on the road to Damascus, in addition to the Lloyd George pamphlet and the Kahn article, were Keynes's testimony before the Macmillan committee[14] and his University of Chicago Harris Foundation lectures on unemployment in the summer of 1931. In these lectures, Keynes has not quite liberated himself from the terminology of the *Treatise* (*vide* his emphasis on "profits"); but the notion of the level of income as being in equilibrium at a low level because of the necessity for savings to be equated to a depressed level of investment is worked out in detail.

From here[15] to the *Means to Prosperity* (1933) is but a step; and from the latter to the *General Theory* but another step. From hindsight and from the standpoint of policy recommendations, each such step is small and in a sense inevitable; but from the standpoint of having stumbled upon and formulated a new system of analysis, each represents a tremendous stride.

But now I shall have to desist. My panegyric must come to an end with two conflicting quotations from the protean Lord Keynes between which the Jury must decide:

> In the long run we are all dead.

> . . . the ideas of economists and political philosophers, both when they are right and when they are wrong, are more powerful than is commonly understood. Indeed, the world is ruled by little else. Practical men, who believe themselves to be quite exempt from any intellectual influences, are usually the slaves of some defunct economist. Madmen in authority, who hear voices in the air, are distilling their frenzy from some academic scribbler of a few years back. I am sure that the power of vested interests is vastly exaggerated compared with the gradual encroachment of ideas . . . soon or late, it is ideas, not vested interests, which are dangerous for good or evil.

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[14] Young economists who disbelieve in the novelty of the Keynesian analysis on the ground that no sensible person could ever have thought differently might with profit read Hawtrey's testimony before the Macmillan Committee, contrasting it with the Kahn article and comparing it with Tooke's famous demonstration in his *History of Prices*, Volume I, that government war expenditures as such cannot possibly cause inflation—*because what the government spends would have been spent anyway, except to the extent of "new money" created.*

[15] I should like at this point to pass a clue on to the future historian of economic thought. What was happening in Cambridge in the months between Mrs. Robinson's patient elucidation of an aspect of the *Treatise* entitled "A Parable on Savings and Investment," *Economica*, Vol. 13, February, 1933, pp. 75–84, and her publication of "The Theory of Money and the Value of Output," *Review of Economic Studies*, Vol. 1, October, 1933, pp. 22–26? Could it be that Mrs. Robinson was let in on a little secret in between?