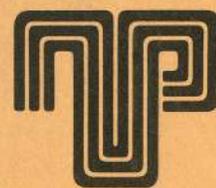


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Varieties of
Keynesianism

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VARIETIES OF KEYNESIANISM

by

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In this paper I will be concerned to put in some groundwork for the historiography of thought of Keynesianism: to formulate some categories in terms of which it may be possible to disentangle the various threads within, and document the development of, the literature of Keynesian economics. The need for this arises from allowing the term "Keynesian" to become a portmanteau category embracing all the intermingling streams of development which flow originally from the same source. Documenting the development of Keynesian thought from the point of view of the history of ideas requires greater discrimination than this.

One way of reading Keynes' *General Theory* is as a rather ponderous exercise in model building. One can see that a group of aggregative concepts are delimited; one can see that certain relationships between them are postulated; and one can see that this framework is deployed in the course of the discussion. With the benefit of hindsight, it might appear that Keynes was trying to write the first macroeconomics textbook; but, of course, as he had no established standards or reference points, it is not surprising that there is much digression, much irrelevance, much discursiveness. As Hicks remarks in the opening sentence of his classic commentary on the *General Theory*:

"It will be admitted by the least charitable reading that the entertainment value of Mr. Keynes' *General Theory of Employment* is considerably enhanced by its satiric aspect".¹

He then goes on to formulate with exactitude what he takes to be the model-building essence of the *General Theory*: the IS-LM construction which a multitude of students has since been taught as "the Keynesian model". If that is the end of the story, one doesn't have to pay too much attention to chapter 12 and the sections of the *General Theory* that are in similar vein: they may be seen as a polemical encrustation, both drawing attention to, and inhibiting direct access to, the analytical core of the work. Of course, Leijonhufvud has made heroic attempts to combat

"the view which states that a few chapters of the *General Theory* contain the meat and that the others are basically redundant and may be ignored"²

and to show what a thoroughly debilitating effect it has on Keynes' thought if the *General Theory* is read as a rather fumbling attempt to expound and formally manipulate what Leijonhufvud has called "the income-expenditure model". It is not my intention here to retrace that particular path. Rather I will be concerned to identify three different ways in which the

General Theory can be approached, each way leading to a coherent interpretation of the book. My purpose here is simply to isolate these three varieties of Keynesianism. I shall not be concerned to expound the doctrines corresponding to any of these three approaches, but only to characterise them: to show their contrasting emphases and presuppositions.

II

As G. L. S. Shackle has observed the Keynes of the *General Theory* was in two minds.³ There is, in the *General Theory*, an attempt to construct a set of relationships between clearly delimited concepts, and to use this as a vehicle for the book's discussion. But a major theme of the book is not something that can be expressed within this framework: it concerns the precariousness of the constructed framework itself. Keynes' work did not rest so much on the construction of a model as on the demolition of a model of his own construction.

Perhaps the clearest way of seeing this procedure at work is to read chapters 11 and 12 of the *General Theory*. In this way, we can see the construction of a framework and its demolition in rapid succession. Chapter 11 concerns itself with the arithmetic of investment decisions: with discounting, present values and rate of return. It shows how, given the future revenues and outlays expected to be associated with an investment project, it may be decisively established, for any particular rate of interest at which funds may be borrowed or loaned, whether the project is financially worth embarking on. Chapter 12 pulls the rug from under this construction by concerning itself with the basis on which such expectations of future market values must rest, and the procedures by which the current market values of claims on these future yield are established. It is the chapter in which stock market trading is compared to a game of Snap, Old Maid or Musical Chairs.⁴ As Shackle has summarised it:

"Chapter 11 shows us the arithmetic of the marginal efficiency of capital and its relation with the interest rates, a matter for actuaries and slide-rules. Chapter 12 reveals the hollowness of all this."⁵

I will begin the discussion of the varieties of Keynesianism by identifying a heterodox line of development: one which takes seriously and finds a place for the kind of considerations to be found in chapter 12 of the *General Theory*. These considerations, it will be recalled, were the kind which the emerging orthodoxy was to disregard, as being a polemical ornamentation which, from the point of view of the construction and formal manipulation of models, is not only expendable but a positive obstacle to clarity and precision in one's analysis. For the time being, I will have to refer to this line of development, rather unhelpfully, as "Chapter 12 Keynesianism".

Now, Chapter 12 Keynesianism was launched, as is entirely fitting, by Keynes himself in his *Quarterly Journal of Economics* article in February 1937.⁶ This is not to say that Keynes disowned the other strands of thought which issued from the controversy he precipitated. Insofar as other strands are traceable back to Hicks' interpretation of the *General Theory*, it is appropriate to note that Keynes did not regard this as a wholesale misconception or distortion of his views.⁷ The first disciple, however, of Chapter 12 Keynesianism, may well have been Hugh Townshend, as is evidenced by his note in the *Economic Journal*⁸ in response to Hicks' review of the *General Theory* in the same journal.⁹ In this rather impenetrable Note, Townshend grapples determinedly with the task of giving an essential role in Keynes' theory to what can rather vaguely be characterised as problems of uncertainty and expectations, but which we will attempt to characterise more carefully in due course. In the event, it was Hicks' rather than Townshend's work which became the basis for the emergent new orthodoxy. Chapter 12 Keynesianism did, nevertheless, survive, thanks almost entirely to the sustained, uncompromising and lonely efforts of G. L. S. Shackle. J. Robinson, while not sharing Shackle's views, has also maintained an interpretation of the *General Theory* centering on the issues emerging in Chapter 12. She was, of course, closely associated with Keynes during the period in which he was writing the *General Theory*.¹⁰ Referring to this period, she writes;

"... there were moments when we had some difficulty 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."¹¹

Here she refers, of course, to the *Quarterly Journal of Economics* article of 1937. She continues, in characteristically cryptic fashion:

"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."¹²

It is central to the characterisation of Chapter 12 Keynesianism that it takes the *Quarterly Journal* article of 1937 as the key to the interpretation of the *General Theory*, and, indeed, to Keynes' contribution to economic thought. (For this reason, this strand of thought could equally well be labelled *Quarterly Journal* Keynesianism). It follows that in order to appreciate this interpretation of the *General Theory*, it will be necessary to quote from the *Quarterly Journal* article rather extensively. But before embarking on this, it is worth pausing to establish that the "Chapter 12" strand in Keynes' thought by no means originates in the *General Theory*. In fact, ten years prior to its publication, we find Keynes making the following observations:

"Many of the greatest economic evils of our time are the fruits of risk, uncertainty and ignorance. It is because particular individuals, fortunate in situation or in abilities, are able to take advantage of uncertainty and ignorance, and also because for the same reason big business is often a lottery, that great inequalities of wealth come about: and those same factors are also the cause of the Unemployment of Labour, or the disappointment of reasonable business expectations, and of the impairment of efficiency and production. Yet the cure lies outside the operations of individuals, it may even be to the interest of individuals to aggravate the disease. I believe that the cure for these things is partly to be sought in the deliberate control of the currency and of credit by a central institution, and partly in the collection and dissemination on a great scale of data relating to the business situation, including the full publicity, by law if necessary, of all business facts which it is useful to know. These measures would involve society in exercising directive intelligence through some appropriate organ of action over many of the inner intricacies of private business, yet it would leave private initiative and enterprise unhindered."¹³

Let us turn now to Keynes' *Quarterly Journal* article of 1937, to find the key to Chapter 12 Keynesianism. Here we must quote at some length. Concerning the body of theorising that he has attacked in the *General Theory*, Keynes wrote as follows:

"... 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".¹⁴

After some elaboration, Keynes continues as follows:

"Actually, however, we have, as a rule, only the vaguest idea of any but the most direct consequences of our acts. Sometimes we are not much concerned with their remoter consequences, even though time and chance may make much of them. But sometimes we are intensely concerned with them, more so, occasionally, than with the immediate consequences. Now of all human activities which are affected by this remoter preoccupation, it happens that one of the most important is economic in character, namely, wealth. The whole object of the accumulation of wealth is to produce results, or potential results, at a comparatively distant, and sometimes at an *indefinitely* distant, date. Thus the fact that our knowledge of the future is fluctuating, vague and uncertain, renders wealth a peculiarly unsuitable subject for the methods of the classical economic theory".¹⁵

After insisting that the uncertainty associated with wealth holding is not of a kind that can be expressed in terms of calculable risks, but rests on matters about which "(w)e simply do not know",¹⁶ Keynes comes to the crux of his argument:

"How do we manage in such circumstances to behave in a manner which saves our faces as rational economic men? We have devised for the purpose a variety of techniques, of which the most important are the following:

1. We assume that the present is a much more serviceable guide to the future than a candid examination of past experience would show it to have been hitherto. In other words we largely ignore the prospect of future changes about the actual character of which we know nothing.
2. We assume that the *existing* state of opinion as expressed in prices and the character of existing output is based on a *correct* summing up of future prospects, so that we can accept it as such unless and until something new and relevant comes into the picture.
3. Knowing that our own individual judgement is worthless, we endeavour to fall back on the judgement 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* judgement".¹⁷

Keynes goes on immediately to draw his conclusion from this:

"Now a practical theory of the future based on these three principles has certain marked characteristics. In particular, being based on so flimsy a foundation, it is subject to sudden and violent changes. The practice of calmness and immutability, 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 boardroom 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".¹⁸

Keynes is then unable to resist a passing polemical thrust:

"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".¹⁹

These passages constitute the core of Chapter 12 Keynesianism. They express a perspective on economic affairs which is summarised by Shackle as follows:

"... Keynes was deeply seized of the *precariousness* of any effort at calculation of human affairs. For most of the time men's awareness of this is suppressed by certain schemes and conventions which give the illusion of rational foresight; but when from time to time they are suddenly driven by a too-obvious general breakdown of their plans to acknowledge it, it inhibits enterprise and the giving of employment, because there is for each individual decision-maker an apparent refuge for his reserves of wealth, namely money itself".²⁰

What, then, does Chapter 12 Keynesianism amount to? It does not provide any sort of determinate theory or model of how the economy functions at the aggregate level; it does not enable one to make any definite predictions about the likely effects of alternative policies or circumstances. On the contrary, it is a viewpoint from which such constructions would appear as rather desperate makeshifts of transient applicability. Chapter 12 Keynesianism is concerned with the texture rather than the direction, as it were, of the economic process.

To stress the basis of all economic activity in more or less uncertain expectations is precisely to emphasise the openness and incompleteness of economic theorising and explanation. It does not itself provide any kind of fixed mechanism according to which the unfolding of events takes place; but it does show how one would set about constructing a narrative of events. It is a view about where the gaps are in the causal chains that can be identified in the economy: the points at which the economic process is susceptible to influence. We can accordingly begin to appreciate the deep ambivalence of this viewpoint towards economic policy: on the one hand it sees potentiality for enormous leverage, the whole economic process moving in response to changing status of mind and consciousness; on the other hand the very precariousness of this vision leads very naturally to thorough-going scepticism about the predictability of the effects of attempts deliberately to apply leverage in pursuit of political objectives. It is therefore understandable that for Shackle the implications of Chapter 12 Keynesianism are entirely for how we engage in economic theorising and not at all for how we conduct economic policy: the precariousness appears to dominate the leverage.

III

In this section, I will attempt to specify a particular programme for the development of economic theory. I will do this by providing a set of instructions for carrying out the programme. These are not intended seriously as

instructions, but only as a convenient way of expressing the commitments and procedures of the programme.²¹ The instructions are as follows:

1. Seek to reduce all economic phenomena to the choice logic of individuals. That is to say, by specifying schematically the objective that each individual pursues, the constraints imposed on him in doing so, and the mode of interdependence of these choices, try to generate the phenomena of interest, at least in their broad, salient features. Regard an economic phenomenon as "intelligible" or "explained" to the extent that it may be reduced to, or generated by, a schematisation of the choice logic of individuals.
2. Take the development of economic theory as co-extensive with the *refinement* of this schematised choice logic. That is to say, surmount both internal problems concerning the consistency of the schematisation and external problems concerning its relation to the phenomena it is supposed to generate in the same way: by increased sophistication in the specification of the objectives and constraints on individuals, and their mode of interdependence, (e.g. the incorporation of stochastic elements, the adoption of an intertemporal perspective, etc.). Give absolute priority to *internal* problems of the consistency of the schematisation.
3. Take as the criterion of success in theorising the *tractability* of the scheme so constructed, its deductive water-tightness. If the scheme cannot be made to yield definite, unavoidable implications, it is to be regarded as uninteresting, irrespective of the apparent merits of the specification on which the scheme rests.
4. Avoid empirical psychology. Do not get involved in the question of how economic actors (businessmen, consumers, bureaucrats) in fact conceive of their own behaviour. That is to say, do not allow the scheme to become analytically unmanageable by importing concepts not subservient to the overall schematisation. Proceed on the supposition that a skilful deployment of choice logic is, for the purposes of economic theory, an entirely adequate substitute for empirical psychology.

These instructions, taken together, constitute a programme I shall refer to as "Reductionism". It should be evident that commitment to this programme is widespread among contemporary economic theorists, for many of whom it would not constitute *a*, but rather *the*, programme for the development of economic theory. Indeed, there is now a dominant orthodoxy for which "economising" itself is neither more nor less than acting in accordance with a properly specified choice logic, and it is only those untrained in the subject who might worry that this somehow fails to capture part of what we ordinarily mean by "economising".

Reductionism is not a theory, but a programme for theorising. It makes no particular claims about the way the economy works, so it cannot, as a programme, ever be decisively called into question by considerations external to its own development. It may, nevertheless, degenerate, or become moribund, as a programme; but if it does so it will be because of its failure to satisfy its own, internal, criteria: the *reducibility* to individual choice logic of the stereotyped economic phenomena to which it addresses itself, and the consistency of the choice logic so obtained. Reductionism is therefore much more than "methodological individualism" (although it can naturally be taken as displaying the sentiments of that view). It is committed not just to locating the ultimate source of intelligibility at the level of individual choice, but also to interpreting or representing individual choice in a particular way, in accordance with the demands of a particular style of theorising.

Having characterised Reductionism as a programme for economic theory, we are now in a position to identify a second strand within the development of Keynesian thought. This is the view that the development of Keynesian ideas consists of applying to them the set of instructions just outlined. That is to say, there is a strand in Keynesian thought which subscribes to the view that the putting of Keynesian ideas on a more secure basis consists of the reduction of those ideas to choice logic (understood in the special sense indicated above). Within this line of development, however, it is the individual choice logic which has, as it were, epistemological primacy. In other words, if the putting of Keynesian ideas on a choice-theoretic foundation results in the ideas becoming lifeless, attenuated or banal, then so much the worse for Keynesian ideas. So although Reductionism is not committed to any particular view of how the economy works, it is committed to a definite order of priorities among ideas: it knows in advance what is to be sacrificed in the event that Keynesian ideas cannot be assimilated to the reductionist programme.

The purpose of what follows is to argue that there is a strand within the literature of Keynesian economics which, although not presented in this way, nevertheless qualifies for the designation "Reductionist Keynesianism". I shall not be concerned with establishing that this strand *is* reductionist (I shall take this to be uncontroversial) but with examining the difficulties that arise from the authors' own characterisation of their work and showing that this alternative characterisation escapes these difficulties.

During the 1960s there emerged a school of thought, associated primarily with the names of Clower and Leijonhufvud, concerned to re-appraise Keynes' contribution to economics.²² These writers presented their work as concerned with re-establishing and re-asserting the discontinuity between Keynesian economics and its alternatives, a discontinuity that

they saw as having been blurred and finally lost to view by the various activities of interpretation, condensation, and reconstruction that came in the wake of the *General Theory*. This perspective has accordingly been the one within which the contribution of Clower and Leijonhufvud to our understanding of Keynes has been discussed and appraised. My purpose here, however, will be to present the dispute between Clower and Leijonhufvud on the one hand and those whose views they were combating on the other as a family quarrel within the reductionist programme. Most fundamentally, the family quarrel is about the expendability of the concept of equilibrium: the Clower-Leijonhufvud position being that the concept of equilibrium should be abandoned in the interests of a more thorough-going reduction of Keynesian ideas to choice logic. The thesis is that once equilibrium has been abandoned and one focuses on a process of trading at disequilibrium prices, then one has a framework that is entirely congenial to Keynesian ideas, unlike the framework of equilibrium theorising which, on this view, leaves room for them in only the most attenuated and *ad hoc* form. The problem then becomes one of providing a more sophisticated specification of the constraints on individual choices, opening up the possibilities for theoretically novel and challenging forms of market interdependence arising from a schematisation of the process of disequilibrium trading.

In order to lead up to my characterisation of the work of Clower and Leijonhufvud it is appropriate to begin by discussing each writer's own characterisation of his work: how each of them conceived of the task he had set himself. I will argue that their own characterisations are in various respects unsatisfactory, and that my alternative is not therefore gratuitous. I shall not, however, attempt to substantiate the designation of the work of these writers as reductionist. I shall take it that once the idea of what is involved in the reductionist programme is appreciated, it should be abundantly obvious to anyone familiar with it that this work falls within the programme.

Let us take Clower first. Having advanced the "dual decision hypothesis" as a basis for expecting consumer spending to depend on current income, Clower goes on to speak unguardedly of Keynes having had this theory of household behaviour "at the back of his mind when he wrote the *General Theory*."²³ Clower goes on immediately to admit that "I can find no direct evidence in any of his writings to show that he ever thought explicitly in these terms".²⁴ After advancing what he takes to be "indirect evidence" for this he concludes that "Keynes either had a dual-decision hypothesis at the back of his mind, or most of the *General Theory* is theoretical nonsense".²⁵ The picture here seems to be one of Keynes with a mind full of ideas *some* of which he got onto the pages of the *General Theory*, the task being to work out what the remainder must have been. This is a problem of reading not so much between the lines as off the edge of the page. In his conclusion, however, Clower maintains, rather more soberly, that his purpose has been "simply to clarify the *formal basis* of

the Keynesian revolution and its relation to orthodox thought.²⁶ This then leaves the task quite up in the air, for it is not explained how this relates to the previous concern with what Keynes had "at the back of his mind".

Turning to Leijonhufvud, we find that he is at some pains to try to make clear the task he has set himself. First, he makes it plain that the doctrine-historical question of "what Keynes really said" is a strictly secondary matter for his purposes.²⁷ "The primary purpose", he explains "remains . . . to provide a fresh *perspective* from which the income-expenditure theory may be reconsidered".²⁸ (The "income-expenditure theory" is Leijonhufvud's label for the "conceptual framework which has crystallized out of the debate triggered by the *General Theory*".²⁹). This seems straightforward enough. The difficulty arises from the fact that what was presented was not just "Leijonhufvud's fresh perspective", but rather the fresh perspective that Leijonhufvud claimed to have distilled from the *General Theory* itself. On the face of it, the task appears to be to get a perspective on the whole debate by going back to the origins of it. But the question arises of how the responsibility for this new perspective is to be apportioned between Keynes and Leijonhufvud. Keynes may well have provided the inspiration for the task, but if the product of the distillation is to be presented as a (purified) "Economics of Keynes" to be contrasted with the (corrupted) "Keynesian Economics" then we are back in the realms of mind-reading, especially as this "Economics of Keynes" can be read into the *General Theory* only with a great deal of ingenuity and determination. So although Leijonhufvud at first seems to be concerned with the rather modest task of finding a fresh perspective from which the development of Keynesian Economics can be surveyed or appraised, it turns out that he is in search of *the* one perspective from which the Keynesianness of these developments can be judged. What looks at first like a search for new angles turns out to be a search for authenticity.

But it is not just a matter of authenticity. For the fundamental presumption that underlies the work of Clower and Leijonhufvud is that Keynes said something important, not only for economic policy, but for economic theory. They are saying "Let us read the *General Theory* in a search for theoretical innovation". In other words, far from being engaged in disinterested exegesis (as the concern for authenticity might suggest) they were concerned with reworking with a view to rejuvenating (by which standards they must be judged to have had some success).

How, then is the task that Clower and Leijonhufvud set themselves to be expressed and understood? The view I want to advance is that they were setting themselves the task of constructing a framework that would provide room or *scope* for Keynesian ideas. This quite rightly takes it for granted that we already have a good rough idea what Keynesian ideas are: of what the *General Theory* was driving at. What was being sought was a framework which is capable of accommodating these ideas rather than filtering and straining them: a framework that is *congenial* to them. In

a word, what was wanted was a theoretical *niche* in which what were taken to be Keynes' insights could take root and thrive. The motive for this search was evidently the recognition that the framework of general equilibrium theory that has been widely adopted for attempts at precise expression of Keynesian ideas leaves practically no room or scope for them: they may appear in only the most attenuated and *ad hoc* form.

On its own terms, then, the essence of the Clower-Leijonhufvud position is this: that in order to accommodate Keynesian ideas we have to abandon equilibrium theorising and address ourselves to an understanding of the process of disequilibrium trading. But in my terms, it is not just equilibrium theorising that has been shown to be uncongenial to Keynesian ideas, but rather equilibrium theorising within the reductionist programme. And one can see why this should be so without even taking any detailed view about the workings of the economy. For within Reductionism everything boils down to acts of choice within a well-specified system of objectives, constraints and forms of interdependence; and in equilibrium theorising we confine our attention to situations in which all the independently arrived at choices can be simultaneously realised. It then follows rather naturally, irrespective of any details of market forms or institutional arrangements, that such a system leaves no room for the "unintended" and "involuntary": for malfunctioning and disorder. It follows, however, from my characterisation of such theorising as "equilibrium Reductionism" that there are two distinct possibilities for the accommodation of Keynesian ideas: (i) the abandonment of equilibrium and (ii) the abandonment of Reductionism. Clower and Leijonhufvud consider only the former possibility. We can see, however, that the claim that equilibrium theorising *must* be abandoned in order to accommodate Keynesian ideas would require that it be established that theorising *must* be carried out in accordance with the reductionist programme; but this is something that Clower and Leijonhufvud simply take for granted.

These considerations bring us back to the Chapter 12 approach. For in terms of the categories that have now been introduced, we can see that the Chapter 12 approach stems precisely from a radical break with the reductionist programme. And once one has abandoned Reductionism, the concept of equilibrium is really neither here nor there, for it has no foundations on which to stand. (In the next section we will consider an alternative programme to Reductionism in which the concept of equilibrium may be rehabilitated.) The man in the street, and, in particular, the man in the dole queue, has no difficulty in understanding the concept of involuntary unemployment, nor even the idea that aggregate spending may be insufficient to maintain full employment. These ideas are puzzling only within the context of reductionist theorising.

The whole question of whether Keynesian ideas should be accommodated by abandoning equilibrium theorising rather naturally raises the question of what use Keynes himself made of the concept of equilibrium. It is

certainly true that Keynes made use of the term "equilibrium". But before we conclude that if Keynes could express his ideas in these terms then they must be perfectly compatible with equilibrium theorising, we must pause to consider the meaning of equilibrium and the uses to which an equilibrium concept might be put. We must bear in mind that it is entirely in keeping with Keynes' eclecticism that his use of the term equilibrium could have been a rather desperate improvisation at one stage in the "long struggle of escape".

An equilibrium is a configuration which, once attained, will be maintained, provided the underlying circumstances (formally, the parameters and exogenous variables) remain unchanged. Accordingly, the interest and usefulness of an equilibrium construction, as an end in itself, depends on a question which is, in principle, an empirical one, namely: what is the range of variability of the underlying circumstances over the order of magnitude of the time involved in the adjusting (near enough) to its equilibrium configuration?³⁰ That is to say, if the underlying circumstances are fairly stable relative to the speed of adjustment of the endogenous variables, the equilibrium configuration of the system becomes a matter of some interest in itself, and may provide a reasonably useful substitute for becoming involved in the complexities of the adjustment process. It is something to know where we are heading, provided we have some grounds for believing that we will get most of the way there before we start heading somewhere else.

It is in the light of these considerations that we can say why Keynes' use of equilibrium constructions was a peculiar one: he was concerned to discuss, among other things, the instability of the underlying circumstances of his construction. That is, one of his focuses of interest was precisely the failure of his equilibrium construction to satisfy the conditions for the routine usefulness of an equilibrium construction. Therefore, in arriving at an appreciation of Keynes' method, it is not enough to ask the nature of his construction; we must enquire also into its mode of *animation*. When we have reason to expect relatively stable underlying circumstances, the construction may be animated according to the method of comparative statics (or better, "comparative equilibrium"). When the animation is endemic, when one is concerned, as it were, with the restlessness of the underlying circumstances, the use of the construction becomes less straightforward, and certainly less mechanical. Whether, in this case, there is anything much left of the concept of equilibrium is a matter of no particular importance. What is important is to see that, just as one does not expect to quell a riot by taking a photograph of it, neither did Keynes' makeshift use of the equilibrium concept involve the expectation that he could freeze the economy in a particular state. Shackle has expressed this idea with characteristic elegance:

"At each curtain rise, the *General Theory* shows us, not the dramatic moment of inevitable action, but a tableau of posed

figures. It is only after the curtain has descended again that we hear the clatter of violent scene-shifting".³¹

IV

During the nineteen forties and fifties, there appeared a number of expositions of "Keynesian economics", attempting to make the ideas accessible to students, and even to intelligent laymen. What these works had in common, quite apart from matters of substance, was an unmistakable enthusiasm for (what were taken to be) Keynes' ideas. This enthusiasm was at times so unrestrained that it verged on excitement; it was the authors of these works who spoke without reservation of a "Keynesian revolution", one of the books in fact having this title.³² It is not my intention here to attempt to chart the process of the diffusion and popularisation of Keynes' ideas,³³ although mention should be made of the key part played in this process by A. Hansen.³⁴ It is some indication of the level of enthusiasm reached by these expositors and popularisers that one of them, Jan Pen, could write a book setting out and discussing a particular specification of a static "Keynesian" model of relationships between a small number of macroeconomic aggregates, and give it the title *Modern Economics*.³⁵

The period of Keynesian enthusiasm was really the post-war period: the ideas went cantering briskly through the fifties and early sixties; faltered sometime in the middle sixties and stumbled into the seventies.³⁶ This, at any rate, is the picture as it emerges at the level of popular influence, at the level of widely and influentially-held views on macroeconomic policy; at the level, that is, of Keynesianism as a doctrine about how a largely decentralised economy may be subject to broad (as opposed to detailed) central control or influence through the instrument of the Budget. It is tempting to adopt the practice of referring to this doctrine as "Fiscalism" to show that it is a particular variant (and perhaps a corruption or vulgarisation) of Keynes' ideas. At any rate, it is important to keep distinct the ups and downs of Keynesianism as a policy doctrine from those of Keynesianism as an academically respectable theory of the functioning of a capitalist economy at the aggregate level. Indeed the esteem in which the two aspects have been held has tended to move in opposite directions, the period when "Fiscalist" policy enthusiasm was at its height being a time at which the intellectual interest in the underlying theory had become moribund. Again, the demise of "Fiscalism" in the late sixties and early seventies was accompanied by a re-awakening of interest in the underlying theoretical conceptions, as a result of what I have already referred to as the wave of reductionist Keynesianism.³⁷

All this should not be allowed to give the impression, which would be quite mistaken, that the fiscal enthusiasm stemming from Keynes' ideas did not

include, or could not provide, a theory in support of its policy doctrine. It could and it did. The important point, however, is that the theory associated with fiscal enthusiasm bears only a tenuous relationship to the strands of Keynesian thought that have been discussed so far. That is to say, there is no clear or obvious basis in either Reductionist or Chapter 12 Keynesianism for establishing both the need for and the potency of vigorous discretionary fiscal policy. What, then, we are led to ask, is the theoretical basis for fiscalist enthusiasm? How is it to be characterised as one of the strands in the development of Keynesian thought? It is to these questions we now turn.

The theoretical content of the body of ideas that has been propagated through the educational system in the West since World War II as "Keynesian Economics" has been characterised in various ways. It is referred to, confusingly, as it turns out, as "the Neo-Classical Synthesis" by Samuelson, in his (from a pedagogic point of view) enormously influential textbook.³⁸ It is referred to by Leijonhufvud rather more helpfully, as "the income-expenditure model". It could easily be labelled, with some etymological propriety, "vulgar Keynesianism". I shall however, dispense with all these usages and refer to it instead as "Hydraulic Keynesianism". This designation reflects the view that the natural and obvious way to regard textbook Keynesianism is as conceiving of the economy at the aggregate level in terms of disembodied and homogeneous flows. Of course, conceiving of the macro-economy in this way will be fruitful only to the extent that there exist stable relationships between these overall flows. And it is my contention that the central characteristic of "Hydraulic Keynesianism" is the belief that such stable relationships do exist at the aggregate level. (Or that there is at least one such stable relationship at the aggregate level). It is this belief which gives some point to the hydraulic conception; without such a belief the conception would simply be a matter of national income accounting, not of economic theory.

It should be noted that the flows involved in this conception are flows of expenditure, income or (the market value of) output. That is to say, neither prices nor quantities per period make a separate appearance: they appear inextricably in the contribution each makes to the overall flows of (money) spending and receipts. It should now be apparent why the belief in the existence of, and the attempt to establish, stable relationships between the overall flows is radically inconsistent with Reductionism. For any reductionist programme must give a crucial role in its theorising to *prices as such* (not to the contribution they make to overall spending flows). The grounds for this are that it is prices as such which provide the incentives that individuals face in making the choices on which the whole scheme is to rest. This does not mean that Hydraulic Keynesianism can allow no part at all to be played by prices; when we come to think of such prices as wage rates and interest rates we can see that this cannot be so. Correspondingly, it does not mean that Reductionism is incapable of allowing flows to play any part in its scheme. Since these are alternative

programmes for theorising, rather than alternative theories, they revolve around matters of emphasis. They do not concern what can or cannot play a part in a theory, but what can or cannot play a *central* part.

In fact, contrary to the viewpoint associated with Reductionism, Hydraulic Keynesianism is a scheme in which there is only one agency making deliberate acts of choice; that one agency is "the government". And it is the belief that there are indeed stable relations among the various overall flows in the economy which provides a basis for "the government" to pursue its policy goals regarding the overall level of economic activity and hence, relatedly, of the level of employment. It is the stability of these aggregate relationships which provide "the government" with the leverage it needs to influence those flows which are not under its *direct* control. By making deliberate choices for the flows it does control (via the budget), and bearing in mind the (allegedly) stable relationships between this and the other flows which are objects of concern for economic policy, "the government" can, in principle, exercise an indirect control on the overall level (although not the composition) of the flows which are not the objects of anyone's deliberate choice. That is the story. On the face of it, it may appear a major triumph in the march of human reason: a dramatic and irreversible extension of the boundaries of political responsibility. Instead of unemployment and depression being seen and accepted passively, like the weather, it is to be seen as a matter for human will and design, something human agency, through the instrument of central government, could actually resist and remedy.³⁹ As an idea it looked both simple and good; accordingly, it was, at the end of the war, rapidly assimilated to both the policy statements and rhetoric of all major political parties.⁴⁰

I shall pause at this stage to give, without comment, only one example of the attitude of Hydraulic Keynesianism, in this case at its most enthusiastic:

"It has been my conviction for many years that the great contribution of Keynes' *General Theory* was the clear and specific formulation of the consumption function. This is an epoch-making contribution to the tools of economic analysis, analogous to, but even more important than, Marshall's discovery of the demand function".⁴¹

It is evident, then, that Hydraulic Keynesianism involves an excursion into the realm of political economy. From the perspective of Reductionism, its theoretical formulations must appear crude. The consumption function, which for Hansen is an "epoch-making contribution" is, for the reductionist programme, an embarrassment.⁴² But although reductionists may wince notably at what they take to be the crudity of the Hydraulic Keynesian conception, the fact remains that it is the conception which, for good or ill, has guided the policy of demand management. And, as has already been remarked, Chapter 12 Keynesianism, having remained a heterodox form, has not enjoyed the benefit of widespread development within the economics

profession. So, at the level of practical policy, there is really no competition. Crude it might be, but at the policy level the hydraulic conception appears to be the only strand in Keynesianism of any consequence.

It follows from all this that, except where Keynes himself was involved, the influence of Keynesian thought on economic policy has been through Hydraulic Keynesianism. It is not my purpose here to recount and document the form that this influence has taken: this has been done with great thoroughness elsewhere.⁴³ I am concerned here with the developments within the stream of Keynesian thought, with the internal relationships of its various strands.

V

The object of this paper has been to try to disentangle some of the diverse strands of thought that have their origin or inspiration in the work of J. M. Keynes. My argument has been that three broad strands can be identified: the "Chapter 12", the Reductionist and the Hydraulic approaches. I have indicated, furthermore, that the contrasts between these approaches are to be found not primarily at the level of claims about how the economy works but of claims about how theorising about the economy is to be carried forward. The three strands identified correspond to alternative programmes for theorising.

FOOTNOTES

1. J. R. Hicks, "Mr. Keynes and the 'Classics': A suggested Interpretation", *Econometrica*, Vol.5, 1937, reprinted in M. G. Mueller (ed.) *Readings in Macroeconomics*, Holt, Rinehart and Winston, 1966, p.137.
2. A. Leijonhufvud, *On Keynesian Economics and the Economics of Keynes*, Oxford University Press, 1968, p.17.
3. G. L. S. Shackle, *Epistemics and Economics*, Cambridge University Press, 1972, p.218.
4. Unfortunately, this discussion is not as clear as it might have been as Keynes conflates the holding of capital goods with the holding of titles to a part of the income arising from their use, and slides from the former to the latter in the course of the two chapters without establishing the relations between them.
5. G. L. S. Shackle, *The Years of High Theory*, Cambridge University Press, 1967, p.130.
6. J. M. Keynes, "The General Theory of Employment", *Quarterly Journal of Economics*, Vol.51, 1937, pp.209-223.
7. See Keynes' letter of March 31, 1937, to Hicks in J. R. Hicks, "Recollections and Documents" *Economica*, Vol.XL, 1973, pp.9-10.
8. H. Townshend, "Liquidity - Premium and the Theory of Value", *Economic Journal*, Vol.XLVII, 1937, pp.157-169.
9. J. R. Hicks, "Mr. Keynes' Theory of Employment", *Economic Journal*, Vol.XLVI, 1936, pp.238-253.
10. Joan Robinson's written comments on the *General Theory* together with Keynes' written replies to them are to be found in D. E. Moggridge (ed.), *The Collected Writings of John Maynard Keynes*, Macmillan, 1973, Vols.XIII and XIV.
11. Joan Robinson, "What has become of the Keynesian Revolution", In J. Robinson (ed.) *After Keynes*, Basil Blackwell, 1973, p.3.
12. Robinson, *loc. cit.* For further discussion, see J. Robinson "History versus Equilibrium" *Thames Papers in Political Economy*, Autumn 1974.
13. J. M. Keynes, *The End of Laissez-Faire*, The Hogarth Press, 1926, pp.47-48.
14. J. M. Keynes, "The General Theory of Employment", *Quarterly Journal of Economics*, Vol.LI, 1937, pp.212, 213.
15. *Ibid.*, p.213.
16. *Ibid.*, p.214.
17. Keynes, *loc. cit.*
18. *Ibid.*, pp.214-215.
19. *Ibid.*, p.215.
20. Shackle, *op. cit.*, p.14 (emphasis in original)
21. Professor F. H. Hahn, in an attempt to spell out the procedures and commitments of the variant of this programme based on general equilibrium theorising does so in terms that are simply inconsistent with the procedures and commitments themselves: terms such as "falsification", "description", etc. See F. H. Hahn, *On the Notion of Equilibrium in Economics*, Cambridge University Press, 1973, and my "The Rationale of General Equilibrium Theory", *Economic Inquiry*, Dec. 1975.
22. See R. W. Clower, "The Keynesian Counter-Revolution: A Theoretical Appraisal" in F. H. Hahn and F. Brechling (eds.) *The Theory of Interest Rates*, Macmillan, 1965, reprinted in R. W. Clower (ed.) *Monetary Theory*, Penguin, 1969, and Leijonhufvud, *op. cit.*

23. Clower, *op.cit.*, p.290.
24. Clower, *loc. cit.*
25. Clower, *loc. cit.*
26. *Ibid.*, p.259, emphasis added. Of course, the use of categories like "revolution" and "orthodox" are entirely question-begging from our present point of view.
27. Leijonhufvud, *op. cit.*, p.9.
28. *Ibid.*, pp.9.10.
29. *Ibid.*, p.6.
30. There is a further question of whether a system may approach an equilibrium configuration without shifting the equilibrium that is being approached, but that need not detain us here.
31. Shackle, *op. cit.*, p.182.
32. L. R. Klein, *The Keynesian Revolution*, Macmillan, 1949.
33. But see J. K. Galbraith's "How Keynes came to America", for some interesting insights into the way Keynesian ideas made their entry into the U.S. academic economics establishment, in his *A Guide to Economics, Peace and Laughter*, Andre Deutsch, 1971.
34. See A. H. Hansen, *A Guide to Keynes*, McGraw-Hill, 1953.
35. J. Pen, *Modern Economics*, Penguin, 1965, (published in Dutch in 1958).
36. For an attempt at intellectual stock-taking at that time, see my "Re-thinking Economic Policy", *Political Quarterly*, Vol.45, 1974, pp.426-438.
37. Reflecting on the fragmentation of Keynesian thought, Leijonhufvud makes the following remark: "For some time now, contentment with this state of the arts has rested on the motto 'The Theoretically Trivial is the Practically Important and the Practically Important is the Theoretically Trivial'. It is a disturbing formula which can hardly be a permanent basis for the further development of the field", Leijonhufvud, *op. cit.*, pp.34-35.
38. P. A. Samuelson, *Economics: An Introductory Analysis*, McGraw-Hill, 1964, (6th edition).
39. This changed attitude did not come easily, or quickly, and fundamental attitudes had been undergoing a process of erosion for some decades by the time Keynes came on the scene. For a painstaking documentation of this process in Britain, see Jose Harris, *Unemployment and Politics*, Oxford University Press, 1972.
40. The major bridge in Britain between Keynesian doctrine and political platforms was W. H. Beveridge, *Full Employment in a Free Society*, George Allen and Unwin, 1944.
41. A. H. Hansen, "The General Theory" in Seymour E. Harris (ed.) *The New Economics*, Dennis Dobson Ltd., 1948, reprinted in Mueller *op. cit.*, pp.16-23.
42. See Clower, *op. cit.*, p.290, Leijonhufvud *op. cit.*, pp.4-44, 187-188, 193, 208.
43. See, most importantly, D. Winch, *Economics and Policy*, Fontana, 1972.

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