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Introduction [to Handbook of Post-Keynesian Economics: Oxford University Press: USA]

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Abstract

In this Introduction, we discuss the main themes of post-Keynesian economics, and the manner in which they are dealt with by the contributors to the Handbook. In particular, the important aspects of post-Keynesian analysis are identified, and their main critiques of mainstream theory are discussed. According to Joan Robinson "*post-Keynesian* has a definite meaning; it applies to an economic theory or method of analysis which takes account of the difference between the future and the past". In other words, historical time forms the basis of post-Keynesian analysis, which also stresses the importance of history, uncertainty, society and institutions in understanding economic phenomena.

Keywords: Post-Keynesian economics, history of economic thought, economic methodology, heterodox approaches

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I

In this two volume Handbook we, as joint general editors, have tried to commission chapters which cover all the approaches and issues that come under the broad rubric of post-Keynesianism. As is inevitable with a project of this size, some of the potential authors we approached were unable to contribute. We hope that their absence is covered in the introduction and in the chapters of other authors.

When the term, post-Keynesianism, first emerged, perhaps the main guiding principle that gathered together an heterogeneous group of economists was dissatisfaction with the approach and content of mainstream economics, itself contained under the broad and still spreading rubric of neoclassical economics. Some economists who expressed dissatisfaction did so because they considered that they were continuing the mainstream itself, a mainstream derived from the classical political economists, Marx, Keynes and his "pupils", Michal Kalecki, an increasingly important figure in post-Keynesian approaches and contributions, and the original institutionalists, especially Thorsten Veblen.[1] Marshall was also important historically, especially for his views on method and his attempts to deal with time, but, increasingly for some people, also as a whipping boy.

In its first heyday great hopes were held for post-Keynesianism as an, no, the, alternative to the mainstream. This was the underlying theme of the first major survey article on the topic, written by two second generation pioneers, the late Al Eichner and Jan Kregel in the 1975 *Journal of Economic Literature*. It was subtitled "a new paradigm in economics" and was positively confident in tone.

By 1979, when the American Economic Association had its first (and only) session devoted to post-Keynesian themes, doubts in the profession at large had already begun to set in. For example, Lorie Tarshis's paper, Tarshis (1980), was subtitled "a promise that bounced?". When John King published his *History of Post Keynesian Economics* in 2002, pessimism rather than optimism had become more widespread, though King himself continued undaunted and prolifically, to which his two fine chapters in the Handbook, one on wages policy, the other on a major and increasingly influential pioneer, the late Hy Minsky, bear convincing witness. When one of the editors (GCH) concluded his account of the structure of post-Keynesian economics and the core contributions of the mainly Cambridge pioneers, Harcourt (2006), he remained intellectually but not practically optimistic. He saw the contributions of Richard Goodwin and Kalecki to cyclical growth theory, and Nicholas Kaldor's later writings, in which, inspired by Adam Smith, Thorsten Veblen and Allyn Young, he emphasised the relevance of cumulative causation processes as characterising the workings of major markets and indeed whole systems, as *the* ways to go forward (Gunnar Myrdal independently had made the same emphasis).

[1] An outstanding example is the late Athanasios (Tom) Asimakopulos who declined to be in the first edition of Philip Arestis and Malcolm Sawyer's *Biographical Dictionary of Dissenting Economists* (1992) for this reason.

Although these important pioneers of post-Keynesian economics are not with us to contribute to the Handbook, fortunately, we have a chapters by their followers, such as Mark Setterfield who has followed in Kaldor's footsteps and who has also been inspired by the writings of the late John Cornwall (himself in turn much influenced by Kaldor).[2]

We would also have liked to have had a chapter by Luigi Pasinetti, the senior living heir in the Cambridge post-Keynesian tradition, but that was not possible. Happily, there are two comprehensive chapters, one by Prue Kerr and Roberto Scazzieri, the other by Mauro Baranzini and Amalia Mirante, which relate to his contributions and which serve to justify the claim that Pasinetti is probably the last of the great system builders in the profession.

We should also note that we have a long chapter by Heinrich Bortis, whose 1997 volume, *Institutions, Behaviour and Economic Theory*, is the most convincing case so far made for the coherence of a complete system of post-Keynesian principles. Yet we must own up immediately that, as with Joan Robinson, a founding mother of post-Keynesianism and one of our principal mentors, we are not yet convinced. We still prefer to adopt a "horses for courses" approach to issues as they come up and to agree with her that a "complete" theory to take the place of neoclassical theory "would be only just another box of tricks" (*C.E.P.*, vol V, 1979, 119). Of course, we know that many of our contributors will not go along with this or even perhaps with a most succinct definition of post-Keynesian by Joan Robinson:
"To me, the expression *post-Keynesian* has a definite meaning; it applies to an economic theory or method of analysis which takes account of the difference between the future and the past" (1978; *C.E.P.*, vol V, 1979, 210, emphasis in original). But, as a broad church, we try to interact together like Malthus and Ricardo who rarely agreed but always remained the best of

[2] We would like to have had a chapter by Mark Roberts who, like Setterfield, has carried on Kaldor's work but he was alas too committed elsewhere, not least to parenting.

friends.[3] We also wish to emphasise that Joan Robinson's influence and example permeate the themes that are discussed by the contributors to the Handbook.

The Handbook is in two volumes. The first contains essays which relate to the origins of post-Keynesian theory, the critique of mainstream theory and the provision of alternatives. The second volume contains further critiques, discussions of methodology, the relationship of post-Keynesian economics to other heterodox approaches and, most importantly, the implications of the post-Keynesian approaches for the provision of policies. All our contributors regard this last as the proper, central and ultimate reason for their endeavours.

In the previous paragraphs we have tried to capture the atmosphere, opinions and perspectives in the profession at large. These do not coincide with our views on the importance of post-Keynesianism and certainly not with many of the contributors to the volumes. A typical example is contained in the following comment by Mauro Baranzini, who felt that post-Keynesianism "was not just a reaction to mainstream economics, but the natural continuation of a grand research program started by Smith [and continuing] through Ricardo, Keynes and Sraffa. [He was] sure it would have taken place even if marginalism had not been devised or born."

II

In chapter 1, volume I, "A personal view of the origins of post-Keynesian economics in the history of economics", Jan Kregel has a masterly personal account of the origins of post-Keynesianism and the provision of the bases on which its later developments could be and

[3] In his last letter to Malthus (31 August 1823) Ricardo wrote: "And now my dear Malthus I have done. Like other disputants after much discussion we each retain our own opinions. These discussions however never influence our friendship; I should not like you more than I do if you agreed in opinion with me."

were built[4]. Keynes is put at centre stage with his complaint that those he called classical economists and those neoclassical economists whom he regarded as classicals, especially Marshall and Pigou, had neglected the role of aggregate demand and its corollary, effective demand, in their account of the workings of economies. In *The General Theory* itself aggregate and effective demand were crucial, central concepts and Keynes integrated monetary and real elements from the start of his analysis of what he perceptively named monetary production economies. The role of accumulation was also central in so far as it was employment-creating (its capacity-creating effects rarely figured).

Keynes also was old-fashionedly classical in insisting that labour was a crucial variable, and that key economic variables should be measured in units of labour. Though Keynes did not systematically develop the criticisms himself, he did make some astute criticisms on which others independently elaborated, resulting in fundamental criticisms of the use of supply and demand in the Marshallian/Pigouvian sense to explain relative prices and the distribution of income, especially in its marginal productivity form. Kregel singles out Piero Sraffa in his 1925 and 1926 articles, the introduction (1951) to the Sraffa with Dobb edition of Ricardo's works and correspondence, and *Production of ... Commodities ...* (1960), as the deepest exponent of these criticisms. He links Sraffa's writings to those of Ricardo's and Marx's theories of value and distribution.

While Keynes was mainly concerned with the application of Marshall's short-period framework to the economy as a whole, in order to tackle the problem of sustained unemployment, Kregel notes that the key role of accumulation in Keynes's analysis led back to the much longer period of the classicals' analysis of accumulation and distribution. Subsequent generations of post-Keynesians have built on these long-period theories of

[4] Kregel himself is a major pioneer of the development of post-Keynesianism. He has built on and considerably added to the fundamental contributions of the original pioneers.

accumulation, distribution and growth, usually in the context of Golden Age or, sometimes, relatively tranquil growth models, see, for example, Kahn (1959), Joan Robinson (1956, 1962), Kaldor and Mirrlees (1962). As we have already noted Goodwin (1967) and Kalecki (1968)[5] departed radically from this approach by developing theories of cyclical growth. These originated in the Kalecki-Keynes short period and are extended, short period by short period, to cover long stretches of historical time. Kaldor's later models embracing cumulative causation processes and Pasinetti's theories of structural dynamics are separate and promising developments starting from the same base.[6]

Having mentioned Sraffa's contributions, it needs to be pointed out that the inclusion of them as part of the core of post-Keynesian economics is not a universal view. Both some post-Keynesians and outside critics, the most recent of whom is Christopher Bliss (2010), see no role for Sraffa or Sraffians (neo-Ricardians) in post-Keynesian developments. This is not the view of at least one of the General Editors (GCH). Both of us agree that a distinction should be made between the views and approaches of Sraffa, on the one hand, and those of his closest followers, on the other.[7] Bliss feels that Sraffa was never interested in those aspects of monetary production economies as a whole which Keynes concentrated on, hence the case for his rejection. (Bliss has forgotten Sraffa's early 1920s papers in the *Economic Journal* and *Manchester Guardian* respectively, on the banking crisis in Italy, and his undergraduate dissertation on the causes of inflation in Italy during the First World War, see Sraffa 1920, 1922a, 1922b, and (Wendy) Harcourt and Claudio Sardoni (1993)). Bliss's is a very special reading of the evidence, since we know Sraffa regarded Marx as the greatest of

[5] . In his earlier writings Kalecki had analysed trendless cycles.

[6] Cumulative causation processes are to be found in Adam Smith's writings, see Kerr (1993).

[7] In their 1988 survey of post-Keynesian economics, a considerable section was devoted by Omar Hamouda and Harcourt to Sraffa and this emphasis was maintained in the latest survey by GCH, see Harcourt 2001, essay 19. See also Harcourt (1981a) for an earlier inclusion.

them all and saw his own work as fitting into aspects of Marx's 'vision' and system, either to clarify or correct or tackle unfinished business in an overall scheme he admired and was happy to accept. We do not think Bliss could argue that Marx was uninterested in macroeconomic problems of either the short or the long period.

However, it is important to distinguish between Sraffa's positive and his negative contributions; his magnum opus was, after all, subtitled *Prelude to a Critique of Economic Theory*. This book was important both for the foundation which it laid for a critique of neoclassical theory, and for its related rehabilitation of many important classical and Marxian concepts – such as those of the surplus, of the fundamental role of distribution, and of cost-determined prices. What is less clear is the operational (and perhaps theoretical) significance of the price equations and of the general method used (Halevi and Kriesler 1991 and the chapter by Halevi, Hart and Kriesler on the traverse in this Handbook).

We have therefore three chapters discussing Sraffa's role and the relationship of his views and writings to those of Keynes, and the role of Sraffa's contributions in the development of post-Keynesian economics. Heinz Kurz, who is co-editing several volumes of Sraffa's papers, brings his detailed knowledge derived from careful archival work together with his powerful analytical mind to bear on these issues. Richard Arena and Stephanie Blankenburg bring similar backgrounds to their incisive discussion of their revisit "to the debates on a difficult synthesis". Ajit Sinha, who recently published a critical, scholarly study of theories of value and distribution from Adam Smith to Piero Sraffa, Sinha (2010), concentrates on the concept of the centre of gravitation in classical thought, ancient and modern, in a critique of the role many interpreters of Sraffa's 1960 classic have argued it plays in his book.

In his chapter, "Sraffa, Keynes and post-Keynesianism", Kurz makes the point that Keynes was more concerned with activity and employment as a whole while Sraffa was concerned with the distribution of the product in a classical context, linking the process to the formation of prices of production as well as to shares of income between the classes of capitalist society. Keynes too developed a theory of prices in the large to replace that associated with the quantity theory of money of Marshall, Pigou and Irving Fisher; but he was not much interested in the distribution of income except when it bore on the determination of consumption expenditure and the provision of total voluntary saving.[8] There was as well an unbridgeable gulf between Sraffa and Keynes – Sraffa would have no truck at all with subjectivity in economic theory, especially as a determinant of economic behaviour and activity. Keynes, though, always remained a Marshallian in this regard and put great stress on confidence, expectations and choice at the margin in the liquidity preference theory of the determination of the rate of interest; he certainly thought of it as a, if not the, jewel in his crown.

All this was alien to Sraffa's mode of thought, see Kurz (2010) for his careful archival work to establish Sraffa's "secret scepticism" about those parts of *The General Theory* where the margin and utility are prominent. Sraffa also did not approve of the use which Keynes made of the concept of own rates of interest which Sraffa had developed in order to make an *internal* critique of the analysis of Hayek's *Prices and Production* (1931) in his review article in the *Economic Journal*, Sraffa (1932).[9] How we might bring together their insights and develop them in a number of ways, e.g., institutional settings, price formation, income distribution, theories of accumulation, are themes of both these chapters. One of the most crucial issues Arena and Blankenburg consider in their chapter "Sraffa, Keynes and post-

[8] Keynes's fundamental equations in *A Treatise on Money* (1930) were thought by Keynes to be developed within the framework of the quantity theory but Kahn argued that they could be discussed independently of this context and were then the better for it, see Harcourt (1994b; 1995).

[9] A similar point could be made about Joan Robinson's "neoclassical" analysis in *The Accumulation of Capital* (1956) and her 1959 *Economic Journal* article on creeping down the production function.

Keynesians: Suggestions for a synthesis in the making", is the controversy about the short period and long period and the unexplored, perhaps impassable gulf between them, a feature of mainstream theory but also a problem to be tackled in post-Keynesian approaches. Altogether we have a comprehensive account of what has been happening and where it will be most fruitful to go in the future – exactly, we submit, what Handbooks should provide.

Ever since the Physiocrats and Adam Smith, political economists have wrestled with the relationship between observable market prices, underlying natural prices (prices of production, and long-period normal prices) and the tendency to establish the equality of sectoral rates of profit with the overall macroeconomic economy-wide rate of profits in competitive conditions. Central to this analysis has been the concept of a centre of gravitation, itself given different detailed characteristics at different points of time and in different contexts in the development of the idea, see Harcourt (1981; 1982). Common to them all is the concept of a central attractor. Many interpreters of Sraffa's 1960 classic argued that Sraffa's use of a uniform rate of profits was intimately related to these classical concepts and processes, together with equality of both classical effectual and neoclassical demands with supplies. Part of the problem with this approach is to provide an adjustment mechanism by which prices adjusted to their long-period values., in a way which did not influence those values (see, for example, Halevi and Kriesler, 1991).

Ian Steedman published a most challenging and influential article in 1984. He asked a searching question. First, we have a preamble to it. The only prices decision-makers can know or, at least, observe directly, are immediate actual prices. Crucially, both profits and capital are calculated using these prices. So, Steedman asked, how do we know, in the light of Sraffa's detailed analysis of the complex and unpredictable beforehand differences in relative long-period prices when different values of a distributive variable are considered, whether the only observations possible will signal "correct" directions for production and accumulation to take in order to converge upon (or fluctuate around) the unseen but argued to be underlying natural prices *et al*? (See also Dupertuis and Sinha 2009). The thrust of Sinha's sophisticated and careful argument in "On the notion of equilibrium or the centre of gravitation in economic theory", is that all these conjectures and perhaps unsolvable puzzles are beside the point, as far as the logic of Sraffa's system is concerned. He argues that Sraffa's system does not serve the function of providing long period centre's of gravitation, rather its function is to "account for a given distribution of income at any point of time." Sinha backs up his argument with archival evidence as well as a new look at what is already in the public domain in Sraffa's book.

III

Two of the most eminent first generation post-Keynesians in the United States are the late Sidney Weintraub and Paul Davidson who was Weintraub's pupil. Together they founded the *Journal of Post Keynesian Economics* in 1978. They were/are passionate defenders of all things Keynesian, or, we should say, Keynes. For them *A Treatise on Money* was the Old Testament and *The General Theory* was the New. Weintraub and Davidson starred together in a modern *Acts of the Apostles*, with Weintraub more akin to St Peter and Davidson, appropriately, to St Paul, even by having an "On the Road to Damascus" experience when he was taught by Weintraub. Davidson's chapter, "Keynesian foundations of post-Keynesian economics", is an admirable complement to Kregel's (who in turn was Davidson's pupil).

Davidson sets out the essence of Keynes's insights and system, why they contribute in the appropriate way to analyse the workings of a monetary production economy operating in a situation of fundamental and inescapable uncertainly. To this task he brings his well-known analysis of why a modern economy is an open or non-ergodic system so that analysis built on the basis of closed and/or ergodic foundations are inapplicable to it. He complements this narrative with his encyclopaedic knowledge of key passages in *The General Theory* and other writings of Keynes, and his pedagogically illuminating set of diagrams. One of Weintraub's many significant contributions was to bring up to date the analysis of product and factor market structures within the framework of *The General Theory*. These insights are reflected in Davidson's narrative. A significant emphasis by Davidson is to show how Keynes was able profoundly to put money and finance with all their characteristics, especially a store of value and a provider of liquidity, into the analysis in an illuminating manner. Needless to say, Say's Law, the quantity theory of money and saving's determination of investment are the major casualties of this analysis – just the very same propositions that have made a comeback in the anti-Keynes backlash of the past 40 years and more, associated with Milton Friedman and the Lucasians. What strange times we have lived through, to be sure!

Randall Wray's chapter, which is succinctly titled "Money", is on the essential properties of money as seen by different authors through the ages and now as he sees them himself. In doing so he draws on a profound statement by a great modern monetary theorist, the late Bob Clower: "Money buys goods and goods buy money, but goods do not buy goods", Clower (1965). Wray allies this with two other characteristics – money is essentially a debt and default on debt is possible. These three propositions are the bases on which he builds his arguments, taking in the role of the State, the concept and role of liquidity, the essential characteristics of banks which serve to distinguish them from other players in finance capital, and the role played in modern economies by the interplay of their real and monetary aspects.

His is a closely argued narrative which represents the coming together of great monetary theorists of the past: Keynes, Schumpeter, Hicks, Minsky and Clower together with those of the present, e.g., Augusto Graziani and the circuit school. Complementary with Wray's chapter is Geoffrey Ingham's remarkable book, *The Nature of Money* (2004), which brings up to date the treatment of money in the literature of sociology, and constitutes a major leap forward in monetary analysis. He agrees with Wray's emphasis on the essential role of the State in enabling money to be a unit of account, a medium of exchange, a store of value and a source of liquidity, all within an environment of uncertainty. (It is the failure of mainstream general equilibrium theorists to introduce uncertainty properly, or at all, into their analysis which precludes them from introducing money in a meaningful way into macroeconomic analysis. For Clower as for Hahn this meant jettisoning the idea of general equilibrium *à la* Walras in macroeconomics.)[10]

Taking Keynes's writings on money as their reference point, Victoria Chick and Sheila Dow in their chapter, "Post-Keynesian theories of money and credit: conflict and (some) resolutions", examine four approaches to theories of money and finance in the post-Keynesian literature. They document conflicts but also point the way towards some reconciliation. They also argue strongly and persuasively that the return to the old-fashioned view that deposits are the source of bank loans, a feature of Monetarism and its offshoots which has become part and parcel of recent textbooks, should be overturned, with the view that money is endogenous taking its place. This old fashioned view was associated with the ideological stances of Friedman, Hayek and Lucas on the primacy of freedom in democratic societies and so the need for simple rules rather than discretion in policy making, especially monetary policy.

Chick and Dow show that when the banking system is analysed as a whole as well as analysing the behaviour of individual banks, *cet par*, endogenous money is the only logical

[10] This theme is further developed in Colin Rogers's chapter in the Handbook. Clower and Axel Leijonhufvud also recognized that to really understand and develop Keynes's insights it was necessary to return to Keynes's Marshallian way of looking at things, see, for example, Clower and Leijonhufvud (1975), Clower (1997)

outcome. Moreover, they also show that liquidity preference theory does not have to be jettisoned in the process, but only modified, contrary to the view of the more extreme proponents of endogenous money, for example, Basil Moore and even Kaldor. Their chapter complements and adds dimensions to Wray's chapter and to Rogers's chapter which follows. Rogers's principal purpose in his chapter, "The scientific illusion of New Keynesian monetary theory", is to show that New Keynesian monetary theory is a scientific illusion because it rests on moneyless Walrasian general equilibrium foundations, see Hahn (1965). Walrasian general equilibrium models require a Walrasian or Arrow-Debreu auction, but this auction is a substitute for money and empties the model of all the issue of interest to regulators and central bankers. The New Keynesian model perpetuates Patinkin's 'invalid classical dichotomy' and is incapable of providing any guidance on the analysis of interest rates on inflation targeting. In its cashless world, inflation targeting, inflation and nominal interest rate rules cannot be defined in the New Keynesian model.

Giuseppe Fontana has always been a peacemaker, an optimistic and cheery soul who sees the best in everyone, even economists. This makes him the ideal person to couple with Chick and Dow's chapter, with his contribution "Single period analysis and continuation analysis of endogenous money: a revisitation of the debate between horizontalists and structuralists". He provides a synthesis that allows him to show the analytical reasons for the differences he and others perceive between the horizontalists and the structuralists' writings as proponents of endogenous money. Basically, the answer is to be found in different assumptions about the nature of expectations held and the period of 'time' for which they are held. Thus, the horizontalists tend to be one period only persons with expectations formed at the beginning of the period and held for its length (following J.R. Hicks in *Value and Capital* (1939)); whereas the structuralists link periods together in discrete time, allowing events to feedback as they occur and so change expectations and actions in future periods.

Fontana develops an ingenious set of diagrams into which all these strands of analysis may be fitted and which spells out the essence of both approaches. As he writes, it provides an effective framework for tackling specific institutional set ups and historical episodes.

Fontana's chapter is followed by chapters highlighting the contributions of two exceptional individuals to the post-Keynesian approach to monetary theory. In "Post-Keynesian monetary economics Godley-like", Marc Lavoie writes a masterly account of the late Wynne Godley's insights, intuitions and contributions over the last 50 years and more. These were brought to a fitting culmination in the 2007 monograph that Godley authored with Lavoie. Entitled *Monetary Economics: An Integrated Approach to Credit, Money, Income, Production and Wealth*, it is a major contribution to our understanding of financial and real interactions in modern economies. It provides a relevant framework for economists to think about and develop their own analyses of these vital aspects of the processes dominating the behaviour of modern economies.

Godley was a genuinely original thinker. His method has something in common with Marshall's – the idea of long-period rest points acting as attractors and overall constraints on short-period happenings. (Stephen Marglin used the same procedure in his original work on conflict inflation in the 1980s, see Marglin (1984). (Rowthorn 1977 preceded Marglin's article on conflict inflation.) Godley, by constructing aggregate profit and loss accounts, balance sheets and flow of funds statements, and looking at their compositions and interrelationships, imposed inescapable constraints on the environments in which the various decision-making groups in economies had to operate.

The other exceptional individual is, of course, the late Hy Minsky who died too soon to witness recent episodes which many have dubbed "Minsky moments". John King, in "Hyman Minsky and the financial instability hypothesis", gives an absorbing account of the origins and characteristics of Minsky's approach and the nature of his instability hypothesis.

The latter arose from Minsky's readings of Marx, Keynes and latterly Kalecki. Even in 1975 in his book on Keynes he was really developing, within Keynes's framework, his own original take on the inevitable stages of the endogenous cyclical evolution of capitalist economies over time. As with Marx's modes of production, so each stage carried within it the seeds of its own destruction and the embryos of the stages to follow.

IV

We mentioned above that the most promising ways forward will be cyclical growth theory, preferably allied with cumulative causation processes. In an introduction to one of the volumes of his *Collected Economic Papers*, (Kaldor 1980) Kaldor laments that he had not been able to formalise his new views from the 1970s on, on the nature of the interrelated development in the world economy, in which cumulative causation played a central role as did market structures, the setting of prices and the nature of products. He hoped, as did his great friend at Cambridge, Piero Sraffa, that "someone younger and better equipped for the task", Sraffa (1960), vi, might do so. As we also mentioned above, Mark Setterfield is one such younger and better equipped person. His chapter is entitled "Endogenous growth: A Kaldorian approach".[11] In it Setterfield explores Kaldor's contributions which were inspired by Allyn Young's lectures at the LSE and his 1928 *Economic Journal* paper and developed by Kaldor's grappling with the problems which Harrod's seminal work on growth threw up – the nature of the relationships between the actual rate of growth (g_a), the warranted rate of growth (g_w) and the natural rate of growth (g_n).

Setterfield's mentor, the late John Cornwall, had from his earliest writings seen the unacceptability of the assumption that g_n could be regarded as determined by factors which

[11] This is an appropriate title in more ways than one. The conceptual basis of modern mainstream endogenous growth theory is pure Kaldor as Paul Romer but not Robert Lucas has acknowledged. However, its emasculated exposition in neoclassical terms would not have been at all to Kaldor's liking. For an overview of growth theory from Adam Smith to endogenous growth, see Harcourt (2006) Ch 7.

were independent of those determining g_w and g_a , see Harcourt and Monadjemi (1999). These interrelationships are the core of Setterfield's chapter. He discusses demand-led growth in which international trade plays a dominant role, always an emphasis of Kaldor, and how the processes result in path-dependence, sometimes but not always or inevitably with an ultimate reconciliation between g_w, g_a and g_n. Setterfield analyses many different scenarios in illuminating diagrams and with some relevant simple algebra in order to bring out the richness of this realistic vision of the nature of modern capitalist economies. We conjecture that Kaldor would have approved; we know Cornwall did.

As we noted, Pasinetti is the senior living heir in the Cambridge tradition and probably also the last of the great system builders in economic theory. He is a central figure in both Prue Kerr and Roberto Scazzieri's chapter on "Structural economic dynamics and the Cambridge tradition" and Mauro Baranzini and Amelia Mirante's chapter on "The Cambridge post-Keynesian school of income and wealth distribution". But as Pasinetti is the first to acknowledge, not only does he derive ideas from the great political economists and Marx but also from Sraffa and Keynes and his own immediate mentors, Richard Kahn, Kaldor, Goodwin, Joan Robinson and Richard Stone. In the Kerr and Scazzieri chapter, the relevant contributions of Goodwin and Stone are also discussed, especially the Stone-Brown growth model which was developed after Stone ended his term as the first Director of the Department of Applied Economics at Cambridge in 1955.

Over the years Pasinetti has developed his unique distinction between propositions that are independent of institutional settings and so in a sense are timeless; and propositions in which specific institutional settings and historical situations and episodes condition the analysis. The first set of propositions lie more deeply behind the second in this analysis.[12]

[12] Prue Kerr has pointed out that such a distinction could not be found in Marx's analysis of organic interdependence.

Pasinetti's approach is akin to Marx's schemes of reproduction as Pasinetti deduces the necessary conditions that have to hold in order that full employment of labour and capital are sustained over time in situations in which both methods of production and demands for different products are allowed to change, often due to endogenous processes. Hence the principles of structural economic dynamics are his central interests as they are too of Goodwin and Stone.

Prefacing their account of these developments is a discussion of the nature of economic theorising, drawing on Sraffa's deep views on the links between theory and reality, and how theory, application and policy were developed historically in Cambridge economics.. As has always been a feature of the Cambridge tradition, the bearing of theoretical findings on the formation of policies, not least for the medium to long term, and the need to be aware of the law of unintended consequences due to too great a concentration on the immediate present, are features of the conclusion to their chapter.

In one sense an integral part of Pasinetti's life time project and, in another sense, an offshoot of it, is his famous 1962 article in *R.E. Studs* of a theory of the determination of the long-period rate of profits (r) in capitalist society. This produced the 'remarkable' results that r was determined by the marginal saving rate of pure capitalists and, in effect, g_n. The analysis has been extended to take in the government and overseas sectors and the implications for the distribution of wealth between different classes over 'time'. The result has proved to be remarkably robust, surviving attacks from the heavy artillery of neoclassical economists, especially from Frank Hahn, James Meade (1963, 1965, 1966), and Franco Modigliani and Paul Samuelson (1966).

No one has documented this literature or made more modifications and additions to it than Mauro Baranzini. In his chapter with Amalia Mirante he modestly excludes himself from the list of pioneers, naming in particular Kaldor, Kahn, Pasinetti and GCH (despite his protests!)(or perhaps Baranzini confined the list to Cambridge as Baranzini was at Oxford?) He and his co-author evaluate the huge literature associated with the ideas under eight heads. They point out that while the debates are still continuing, this post-Keynesian school of thought has made a safe entry into the history of economic analysis. (This to be hoped that the rest is history rather than just history).

Edward Nell's chapter, "Reinventing macroeconomics", is a *tour de force*, providing a schema for classifying approaches to macroeconomic questions in both the short period and the long period, ancient and modern, before reaching a justifiable climax with his own innovative approach, transformational growth. This last is Nell's vision of the nature of economic and social development in capitalist economies, an agenda he has been following since the late 1960s.[13] He is motivated by Joan Robinson's challenging (a challenge yet to be met) 1977 *Journal of Economic Literature* article, "What are the questions?" Nell is concerned with the links that various approaches – Keynesians of all descriptions, and also others of all descriptions – have made between short periods and long periods, to the great questions and problems of economic development originally posed by the classical economists who attempted to answer by what William Baumol (1951) memorably named their "magnificent dynamics".

Nell wishes to take in the interrelated causes of employment, output, income distribution, accumulation, growth, technical change and institutional change, as seen by the various "schools" he identifies and defines. Naturally enough, he prefers his own contributions, mainly because he tries seriously to analyse endogenous technical progress in a monetary production economy that is recognisably capitalism as Marx and then Kalecki and Keynes saw it. He discusses the various ways economic decisions are said to be made in each

[13] GCH read a draft of what eventually became Nell (1998.) for Cambridge University Press well over 30 years ago. He wrote an enthusiastic reader's report and so is delighted that the volume has at last been published.

approach, settling on being, as Marshall was said to have been, see Shove (1942, 323), "vaguely right rather than precisely wrong", as far as individual decision making is concerned. Of course, he will be accused of *ad hockery* by the mainstream and even some strands of Keynesianism but he makes a good case for why this does not matter if the resulting theory is illuminating and, in the Marshallian/Pigovian sense, fruit-bearing as well as light-bringing.

As we noted, cumulative causation processes have become an increasingly prominent characteristic of post-Keynesian approaches. Robert Blecker takes up this theme in his chapter, "Long-run growth in open economies: export-led cumulative causation or a balance-of-payments constraint?" He identifies two major strands in the approaches of post-Keynesian authors to the analysis of the long-run development of interrelated open economies. One is especially associated with Kaldor (and developed by John Cornwall and Mark Setterfield) who stressed the importance of export-led growth leading to virtuous cumulative causation expansion. The other is associated with Anthony Thirlwall (and also Dixon and John McCombie among many others), in which in the long term, export-led growth is constrained by the necessity of keeping the current account balanced (or, alternatively, keeping net capital inflows at a sustainable level) while more rapid growth of output tends to boost the demand for imports. The latter view puts special stress on the role of the income elasticities of export and import demand as constraining factors, whilst the former puts more emphasis on positive feedbacks from demand growth to productivity growth that help successful exporting countries to reinforce their international competitiveness.

It is interesting, perhaps even ironic, that Thirlwall is Kaldor's biographer and a great admirer of Kaldor's contributions, yet on this issue they seem to be at odds as Blecker carefully explains[14].Thankfully, he is able to provide at least some reconciliation between the two views so that the insights of both sides of the arguments may be retained. In doing so he has wise things to say about how equilibrium positions may have roles to play as medium-term attractors even when embedded in cumulative causation processes. He also brings out clearly the relevance of the fallacy of composition for a world in which all governments attempt to implement policies of export-led growth. As with most important propositions in economics, this seems obvious once someone else has pointed it out!

No one is more aware of the histories of the ways forward we have noted, or has made greater technical contributions to them, than Kumaraswamy (Vela) Velupillai. His chapter is appropriately entitled "Post-Keynesian precepts for nonlinear, endogenous, nonstochastic, business cycle theories". In it is a comprehensive account of the writings of the pioneers including those he calls "second generation Wicksellians" – Lindahl, Myrdal, Hammarskjöld, and Lundberg – as well as Keynes and Kalecki. He pays a heartfelt tribute (which the editors warmly endorse) to the late Wynne Godley (who died in May 2010), "one of the most original and courageous Post-Keynesian economists [he has ever] known, professionally and personally". He cites Godley's last book, co-authored with Lavoie, (2007), see chapter 11 above, as "one of the best… books in the grand tradition of Wicksell, Lindahl, Keynes and Myrdal". He expresses the hope that the precepts of his chapter reflect what he learnt from Wynne Godley.

We feel his hope is more than fulfilled in his chapter and in his many other related papers. Velupillai brings out achievements and limitations; he identifies mistakes and signals unfinished business. Most importantly, he shows the way forward in an exciting and

[14] Thirlwall does not agree, commenting (17.6.2011) that "Kaldor and I were at one on the concept of cumulative causation and balance of payments constrained growth." He cites an article published in 1979 and co-authored with Robert Dixon on "A model of export-led growth with a balance of payments constraint", which marries both concepts together. Kaldor liked the article "very much".

constructive manner. In the process he delivers a withering critique of mainstream real business cycle theory and of the method and approach of modern mainstream macroeconomists as they attempted to replace the more relevant applicable theory of Keynes, Kalecki and those who followed their lead, not least Velupillai's own mentor, Goodwin. Velupillai also finds a proper niche for Minsky's insights in his proposals for future developments. And he most sensibly suggests the inclusion of Joseph Schumpeter's insights and approach, despite the horror that this no doubt would have caused Schumpeter himself.[15]

Velupillai is at the forefront of developments in formal analysis. This brings confidence to his suggestions for ways forward. Having argued that post-Keynesianism is by its very nature "endogenously dynamic and policy orientated", he adds that to be true to the formalisation of the insights of the pioneers, we must embrace "analytical, epistemological and methodological conventions and constraints that will entail less closed, less determined, mathematical models, encapsulating the richness of undecidable propositions in incomplete formal systems, facing uncomputable functions in the natural domain of economic data, institutions and history" (22-23). As editors we can only say "Amen".

V

Economists have always minded their ps and qs, with emphasis first on one and then on the other, changing as historical situations change. Ken Coutts and Neville Norman in "Post-Keynesian approaches to industrial pricing: a survey and critique" concern themselves with both in their judicious and detailed account of post-Keynesian approaches to the theory of price setting. They compare these approaches to those of standard mainstream theories. Their chapter provides a comprehensive history of the development and characteristics of the

[15] Schumpeter, along with Wassily Leontief, were two of Goodwin's principal mentors at Harvard, see Harcourt (1985; 1993).

pioneers' contributions and their modern successors, sets out the inferences of each approach and concludes with an account of the empirical evidence on price setting. They show that post-Keynesian theories, including those associated with their own work, are much more robust when tested against actual happenings than are any of the mainstream approaches.

Their chapter has a long section on the important contributions of P.W.S. Andrews, a famous "economic exile", as King called him, see King (1988). Andrews's book, *Manufacturing Business* (1949), is now recognised as a classic. While our authors are not uncritical of it and him, they do proper justice to his original insights. They also examine carefully the procedures and findings of the 1940s and 1950s Oxford economists' enquiries into manufacturing pricing, with which Andrews was associated, reaching a more favourable assessment than did contemporary commentators at Cambridge at the time, especially Kahn (1952) and Austin Robinson (1950)[16]

Coutts and Norman have been associated with important developments in Cambridge from the 1970s on, Coutts with Godley (who was a pupil of Andrews) and Nordhaus (1978), Norman through his most original Ph.D dissertation, Norman (1974.), which was supervised by David Champernowne, see Harcourt (2001b), and then over the years in association with Coutts, see Coutts and Norman (2007). A feature of their work has been to bring in the role of international trade in the determination of prices. In the chapter they report on the full cost and normal cost hypotheses in the literature. They also refer to the post-Keynesian literature on pricing and the investment decision which has its roots in Kalecki's pioneering contributions, ably assessed, as Coutts and Norman cite, in Kriesler's definitive account of Kalecki's microeconomics, Kriesler (1987).[17] They discuss the publications of the late Alfred

[16] Michael Farrell, who had worked with Andrews at Oxford and who was then at Cambridge, mounted a valiant counter attack, see Farrell (1951).

[17] This sentence was drafted by GCH.

Eichner (1973, 1976), Adrian Wood (1975) and Harcourt and Peter Kenyon (1976) (but neglect, as did the others just named, the seminal contribution of James Ball (1964)). Except for Wood's analysis being explicitly Golden Age, all these authors complement each other's work on mark-up pricing, see Harcourt (2006, Chapter 3).

A feature of the empirical findings reported here is how robust pricing behaviour as analysed by post-Keynesian authors in very different historical situations is. In their chapter are references to the encyclopaedic work by Fred Lee in this area, especially in his very detailed history of the approaches, Lee (1998). We therefore follow their chapter with Lee's contribution to the Handbook, "post-Keynesian price theory: from pricing to market governance to the economy as a whole."

Lee draws on the themes in Coutts and Norman's chapter to move towards a comprehensive post-Keynesian theory of prices within the processes at work within the economy as a whole. (Most of the previous writings relate to firms or industries.) In a sense this is an up-to-date version of the model of the economy that Kalecki presented in his remarkable review of Keynes's *General Theory* in 1936, see Targetti and Kinda-Hass (1982) and Harcourt (2006, chapter 2). Lee's approach is also similar to Goodwin's later work in which is combined aggregative models of the trade cycle with production interdependence models, see Goodwin and Ponzo (1987), in order to understand the dynamics of capitalist economies. Appropriately Lee's chapter is subtitled "from pricing to market governance to the economy as a whole".

VI

For many economists who are regarded as post-Keynesians, Kalecki is as important an influence as Keynes; for some Kalecki is the single most important modern pioneer of post-Keynesianism.[18] Certainly his influence has been growing fast in the relevant literature. Two economists who have important roles in this development are Robert Dixon and Jan Toporowski. They are the co-authors of the next chapter, "Kaleckian economics". Dixon's work has always been characterised by a Kaleckian approach and his style is akin to Kalecki's – sparse, clear, with arguments stripped to their essence and there is no fluff or unnecessary detours or digressions.[19] Toporowski is Kalecki's biographer. He was a friend of Kalecki's widow, Adela. His own work has the fearlessness and independence of mind that were characteristics of Kalecki's personality and writings.

In their chapter Dixon and Toporowski set out the essence of Kalecki's approach to both the short period and the trade cycle, which along with theories of accumulation, were always Kalecki's major preoccupations in his analysis of how modern capitalism works. As with Keynes, he saw investment expenditure as the dominant cause of both activity levels and fluctuations in them. Their theories had different emphases. Keynes put more weight on the influence of long-term expectations and the rate of interest. Kalecki stressed the role of current profits and eventually came to argue that the rate of interest was beside the point as far as fluctuations were concerned because the long-term rate of interest, which Keynes believed was the key financial determinant of investment, did not vary that much. Kalecki also provided a macroeconomic theory of income distribution which was related to capitalist expenditures and the differing marginal propensities to save of profit-receivers and wage-earners. Keynes was content in *The General Theory* to go along with an adaptation of Marshall's theory of distribution, even though in *A Treatise on Money* he had provided the rudiments of a Keynesian theory of distribution as Kaldor (1955-56) highlighted. Dixon and

[18] See Harcourt (2006, Appendix 1) where it is argued that Kalecki was the most important all round economist of the Twentieth Century.

[19] No doubt Robert would tell us that Henry James could have written this last sentence.

Toporowski link Minsky's instability hypothesis and his endogenous theory of the cycle resulting from the interplay of real and monetary forces, especially realised cash flows differing from expected ones, to Kalecki's account of the determination of employment and distribution, including his mark-up theory of pricing. They close with a discussion of Kalecki's remarkable 1943 paper, "Political aspects of full employment", pointing out that it is still, indeed, even more so, required reading today.

VII

In *A Tract on Monetary Reform* (1923), Chapter 1, Keynes compared the social evils due to inflation, on the one hand, and deflation, on the other. He felt those of deflation were socially more damaging and therefore more to be avoided than those of inflation (not hyperinflation, though). He also argued that the role of policy was to secure a stable price level and to avoid the consequences of both these alternatives to it. (This may be one reason why Friedman was said to admire *A Tract* more than any other of Keynes's books. Of course, the fact that Keynes's analysis was an application of the quantity theory is also significant, for Keynes was then an avid supporter of it, regarding failure to accept it as evidence of stupidity, ignorance or both, see Keynes (1923, *C.W.*, vol IV, 1971, 61)).

How times have changed! While mainstream macroeconomists still look to the quantity theory as the explanation of inflation, King in his chapter on "Wages Policy" argues that post-Keynesians look to the formation of money incomes, especially money wages but also the costs of raw materials as the initiating cause of inflation and recently, King warns us, of deflation.

King takes the Kaleckian dilemma, Kalecki (1943), as the crucial background to his discussion, that attempts to sustain full employment in capitalism will eventually come to grief unless permanent incomes policies could be established. These policies should follow the Kaldor-Russell-Salter rule of linking changes in money incomes to changes in overall prices and overall productivity. He points out that incomes policies have no role in either Friedman or Lucas's guides to policy but are essential in post-Keynesian thought. He takes us through the views of Keynes himself, then Joan Robinson and Kaldor and latter day economists influenced by Keynes, including Kaldor in the UK and Eric Russell and Wilfred Salter in Australia, and, independently, Scandinavian economists.

There have been similar analyses but rather different policy suggestions designed to achieve the same ends in the USA. King discusses especially the analysis and suggestions of Weintraub who also recognised the origins of inflation in cost-push phenomena associated with money wage bargains. Weintraub with Henry Wallich suggested carrot and stick measures, his tax-based incomes policy (TIP) scheme, to induce capitalists and wage-earners to bring about results that coincided with those produced by the more hands on measures of the Australians and Europeans.

King takes us through the Golden Age of capitalism, stagflation and the rise of neo-liberalism with its accompanying or preceding disappearance of unions and union power. He draws out the implications for tackling both inflation and deflation in these different historical settings, of combining acceptable wages policies with the maintenance of full employment as all post-Keynesians argue for.

Another aspect of labour market operations to which post-Keynesians have made significant contributions relates to discrimination associated with race, sex, and age in these markets. The co-authors of the chapter, "Discrimination in the labour market", Peter Riach and Judy Rich, are pioneers in the use of field experiments, whereby employers are sent pairs of applications for jobs in which all the characteristics of the applicants are identical except for their race or sex or age. They compare their theoretical views on discrimination with orthodox views in which race, sex or age are negative arguments in discriminating employers' utility functions. A consequence of this for orthodox theory is that, in competitive conditions, there will ultimately be the elimination of discriminating employers and the end of discrimination. As Riach and Rich note, we have been waiting a long time for this to happen, indeed, we are still waiting.

In the meantime these carefully controlled field experiments and those of sociologists and like-minded economists have given rise to a rich empirical literature which the authors succinctly but tellingly present. This field experimental approach is more adept at detecting discrimination than is the inferential method of the econometricians.

VIII

Next we have three chapters on post-Keynesian approaches and contributions to the economics of less-developed economies. The authors are Peter Kriesler, Anthony Thirlwall and Amitava Dutt. Peter Kriesler's chapter, "Post-Keynesian perspectives on economic development and growth", is an example, *par excellence*, of the application of the post-Keynesian "horses for courses" strategy in analysis. He shows how theoretical understanding evolves and changes as the dynamics of different historical episodes, in, principally, capitalism are examined. He stresses interrelationships between history, politics and institutions. He starts with an appraisal of the classical political economists, highlighting the central organising concept of the surplus – its creation, extraction, distribution and use. He then examines the 1954 Lewis model of development with unutilised supplies of labour. Kriesler agrees with Lewis that, when the surplus labour has been absorbed, other principles and institutions come to the fore. Parallel to this are, first, the characteristics of competitive capitalism, especially as analysed by Marx, then, the Keynesian era where the principal cause of unemployment changed from a scarcity of capital goods to a scarcity of aggregate effective demand. While these characteristics remain, capitalism itself has evolved into its monopoly era, as described by Baran, Sweezy and Steindl, and finally the period of the dominance of large multinational oligopolies coupled with the dominance, in deregulated markets, of financial capital. A central implication of this evolution is that national governments are becoming less and less able to control powerful and destabilising forces[20].

Thirlwall, in "Keynes and economic development", rightly points out that while Keynes was not a development economist as we understand the description today, his theoretical apparatus about what drives capitalist economies as set out in *The General Theory* in particular, and his proposals at Bretton Woods for a new international monetary order, alas, never properly put into practice, bear fully on the current debates on development theory and policy. Thirlwall takes a more favourable view of Keynes's relevance than did A.K. Dasgupta when Dasgupta wrote a series of papers on the nature of development, growth and effective demand which contains many aspects of Lewis's model, see Harcourt (2012).

Thirlwall agrees with Lewis and Dasgupta that much of the unemployment in less-developed economies arises from a failure of the growth of the stock of capital goods to keep up with the growth of population and the potential work force. He neatly analyses the consequences of this in terms of Harrod's g_w and g_n. He points out that Keynes was aware of the consequences of discrepancies between them (though he did not name the two rates of growth) before Harrod published his classic *Economic Journal* article in 1939. Thirlwall uses a neat diagram to analyse the implications of the differences between g_w and g_n in the context of less-developed economies and discusses how key parameter values may be changed in order to bring them closer together. One of these is the saving rate and Thirlwall points out that Keynes could never have accepted the mainstream take on this, that it must be increased first in order to raise the rate of accumulation. He also thinks Keynes would have been

[20] Perhaps it should be pointed out that GCH drafted these paragraphs and cleared them with his co-editor before they were included in this Introduction.

scornful of the mainstream argument that a pre-condition for growth and development is price stability because inflation itself is largely a function of structural change.

He criticises the undue emphasis on supply constraints in mainstream theory, old and new, and discusses the much more important role, in his view, of demand. In his discussion he also reminds us that Keynes was aware of the adverse implications of fluctuations in the prices of commodities and made relevant policy suggestions to counteract them. As with Keynes, so Thirlwall stresses the built-in contractionary biases in both the operation of economies and policies suggested and applied by the IMF and World Bank over past decades. He criticises their view that inflation is demand-led rather than structural "because ultimately structural change is the only solution to poverty and underdevelopment" (14).

Amitava Dutt's chapter , "Post-Keynesian economics and the role of aggregate demand in less-developed economies", is a comprehensive discussion of the role of post-Keynesian economics in understanding the problems of less-developed economies of all varieties. It provides a framework in which a "horses for courses" approach is relevant for specific economies and issues. Dutt provides an historical view of the changing view on development under the post-Keynesian rubric.

To carry out this task formally, Dutt starts with a simple model which was initially developed by Rowthorn (1982) and Dutt (1984) himself. It explicitly has its origins more in Kalecki's independent discovery of the principal propositions of *The General Theory* than in Keynes's formulations. He then enlarges the scope of the model, issue by issue, in order to take in the major problems and constraints facing less-developed economies. He allows a place for supply constraints but points out that these alone lead to limited explanations of problems and, more seriously, to misguided policy recommendations,[21] which is also the major thrust of Kriesler's and Thirwall's chapters.

Dutt's framework allows the impact of expected profitability, financial constraints, international trade and capital movements, dual sector developments, the choice of techniques and fiscal constraints to be included and analysed. One important emphasis, which comes from the work of Amit Bhaduri and Marglin (1990), is whether growth in particular instances is profit-led or wage-led. The strengths of these countervailing forces are a major issue and affect what will be regarded as suitable policies in particular cases.

He has an important section in which he contrasts post-Keynesian views on labour market flexibility with those of the mainstream. He shows that there is no clear cut outcome but that the profit-led, wage-led distinction is an important factor. In his concluding section Dutt points out that though post-Keynesians have concentrated on macroeconomic linkages in this area, careful empirical research within the post-Keynesian agenda can be used "to analyse the pricing and financing of firms, as well as the decisions of individuals and groups such as peasant cultivators, informal sector proprietors, migrants, asset holders and consumers" (35).

IX

Volume II is concerned with further post-Keynesian criticisms of mainstream economics, methodological issues (*not* the last resort of scoundrels but a necessary preliminary in order to provide coherent approaches to analyses of major issues in political economy); the relationship of post-Keynesianism to other heterodox approaches; and a necessary and appropriate finale, post-Keynesian policies. This last reflects the view that the

[21] Dutt points out an ironic finding that in his work on developing economies, Kalecki played down the role of aggregate demand, and put stress on capacity constraints and inflationary pressures due to wage good constraints.

ultimate *raison d'être* for being an economist (and even more so, a political economist) and doing economics and political economy, is to arrive at sound, humane and potentially realistic and realisable policies, especially overall package deals. These should take into account the interrelated nature of modern economies, both internally and externally. It is not an accident that Kaldor's "last will and testament" to the profession, Kaldor (1996), which was based on his 1984 Mattioli Lectures, was entitled *Causes of Growth and Stagnation in the World Economy*. The last chapter contained comprehensive policy proposals, based on Kaldor's post-Keynesian vision, for the world economy as a whole, see Harcourt (1997; 2001a).

The volume starts with Abu Rizvi's definitive essay, "On microfoundations of macroeconomics". Rizvi has contributed seminal critical articles to this large literature which developed in the postwar period, see, for example, Rizvi (1994a), including a sceptical evaluation of the promise of game theory in both micro and macro areas, Rizvi (1994b). As with Marx so with Rizvi, he did not put critical pen to paper until he had thoroughly absorbed the approaches of those he ultimately criticised, for example, by teaching game theory for a number of years before reaching the view that doubted that it was the appropriate tool to come to our rescue. So, along with Alan Kirman (1989, 1992) and others, we are provided with a thoroughly researched evaluation of the microfoundations project.[22]

Rizvi follows Minsky's classification of macroeconomics after Keynes into three types – the neoclassical synthesis (both Keynesian and Monetarist), the new classical approach and the fundamentalist Keynes scholars, Minsky (1981). Rizvi concentrates on the

[22] Both editors have been much concerned with these issues, GCH since his undergraduate dissertation (1953) and Ph.D dissertation (1960). In 1977 he edited a volume of a small IEA conference held in 1975 and inspired by John Hicks who sadly but with foresight ended the conference in despair, see the Introduction to Harcourt (ed.) (1977).We have already referred to PK's book on Kalecki's microanalysis, Kriesler (1987), while elsewhere he has written on "Microfoundations: a Kaleckian perspective" Kriesler 1996. They both think the role model for a constructive approach to the issues raised may be found in Kalecki's work, especially his review in 1936 of *The General Theory*, Targetti and Kinda-Hass (1982), Harcourt (2006, 21-25)..

first two, though near the end of the chapter, he discusses why the last category has had difficulty in finding acceptance, suggesting that the explanation is to be found in the dogmatism of its critics. He concentrates on the first two strands because they explicitly concern themselves with microeconomic foundations. After the 1970s especially, they were goaded into doing so by the Lucasians and others who felt that to do otherwise – provide micro foundations and/or goad – was to commit the economist's sin against the Holy Ghost, by being *ad hoc*.

Rizvi discusses the limitations of representative agent models and then turns to where he has made a profound critical contribution, the general equilibrium theory of maximising individual agents. In moving from these foundations to the behaviour of the economy as a whole we have to deal with aggregation problems, the implications of the results of the Cambridge-Cambridge capital theory controversies, and Keynes's major insight that the whole may be more than the sum of its parts, see Harcourt (1987), complemented by James Crotty's argument (1980) that the macroeconomic foundations of microeconomics, an approach which is derived from Marx, is of far greater moment, (see Kriesler 1996).

Rizvi reviews the history of these developments, starting with Jevons and taking in *Value and Capital* (1939). But the central critique arises from spelling out the implications of the Sonenschein-Mantel-Debreu findings, see Rizvi (2006), about excess demand functions in general equilibrium theory, "a spectacular series of impossibility results" (9), for the micro foundations of macroeconomics, see Rizvi (1994a).[23]

Rizvi's discussion leads him to ask what are the ways forward. Kriesler (1996) and King (Forthcoming) suggest, on the basis of Kalecki's work, amongst others, that micro and macro analysis "lie side by side, existing interdependently, that is, on an equal footing. Some

[23] GCH was overwhelmed with admiration when he read this paper, his first introduction to Rizvi's work.

things are determined at the micro level …some things are determined at the macro level." (Kriesler 1996 66), with both clearly influencing the other. . Rizvi has some sympathy with this view. He looks at how other disciplines have analysed similar problems. This leads to an eminently sensible conclusion: that since the micro foundations project in all its forms has been shown to be "'demonstrably' problematic", we need "a clear discussion of when economies can be studied as a whole, much like one would study institutions or ecology knowing that the macro level of analysis is irreducibly distinct from its parts" (27).

X

The first chapter on methodological issues, "Post-Keynesian economics, rationality and conventions", is by Thomas Boyle and Paschal O'Gorman. It concerns a central theme of both Keynes's and post-Keynesian thought: rationality and conventions. It is also linked to the growing importance of the revolutionary impact of taking the existence of inescapable fundamental uncertainty explicitly into account in economic analysis. This is peculiarly a contribution of Keynes and post-Keynesians; the mainstream uses either an "as if" analysis which allows a direct application of theory built on an assumption of certainty to be applied to actual situations, or treats uncertainty as akin to an, albeit sophisticated, genus of the specie risk, so that the standard theories of probability may be applied. From *A Treatise on Probability* on (it was published in 1921 but originally written in the first decade of the Twentieth Century as his Fellowship Dissertation for King's), Keynes had puzzled about probability, uncertainty, and the province of logic as applied to decision-making. He was influenced by Marshall's innovative analysis of sensible (sometimes not) persons doing the best they could in situations of uncertainty and he recognised that sometimes rational behaviour was consistent with such an environment, and sometimes it was not.

In theorising about the determination of the rate of interest and of investment expenditure, the role of conventions became increasingly important in Keynes's thought. This has continued on in post-Keynesian analysis built on this base, with vigorous debates about specific issues by leading post-Keynesian figures.

Boyle and O'Gorman provide a masterly overview of these developments and of preceding and parallel developments in philosophical views on conventions in the light of Hume's scepticism and later David Lewis's seminal work, first published in 1969. This leads them to bring to the fore the fundamental importance of Henri Poincaré's writings on conventions and conventionalism. They argue that his revolutionary reinterpretation provides the most sound justification for regarding conventional behaviour by decision makers in economics as consistent with rational – and actual – behaviour. They show that non-ergodicity is not peculiar to the social sciences, as it also occurs within the domain of pure geometry. They conclude that "since geometry is a core paradigm of rationality, recourse to convention [such as Keynes and post-Keynesians have explored] is *ipso facto* rational" (26). This finding has "major significance for post-Keynesian analysis" (26).

Sheila Dow has made major contributions to our understanding of the role of methodology in the post-Keynesian project, as well as to our understanding of money and finance in post-Keynesian theory. Her chapter, "Methodology and post-Keynesian economics", provides an overview of the developments in post-Keynesian discussions on methodology in the past and suggests how these will be of major importance in ways forward, not least in post-Keynesians making themselves clear as they try to persuade others with different approaches and structures what they are about and how it is relevant to their concerns.

Dow starts with Keynes's views on method and points out how essential they are for an understanding of the links between Keynes's philosophical views and his economics. This enables her to evaluate the post-Keynesian contributions to this discussion, especially by Rod O'Donnell, Anna Carrabelli, John Coates, Bradley Bateman, John Davis and Jochen Runde. She emphasises the open system, closed system distinction and the vital role for plurality in approaching economic issues. She worries that the renewed interest in Keynes and post-Keynesianism because of mainstream limitations in getting to grips with causes and cures of the current crisis, may nevertheless allow post-Keynesian views to be misinterpreted, just as Keynes's views were in the rise of the neoclassical synthesis.[24] In order to avoid this, Dow argues that a clear understanding of the role of methodology is essential for *all* economists, even if only a subset work specifically on its development.

For many years Gay Meeks offered a superb option on philosophical issues in economics in the M. Phil degree in economics at Cambridge. Students who took the option almost always nominated it as the most rewarding, challenging and interesting of the courses they took in the M.Phil. Not only were the discussions guided by Gay's wise and knowledgeable counsel, she also asked other outstanding economists, Robin Matthews and Frank Hahn, for example, to lead sessions. Simultaneously she was doing research on the link between Keynes's philosophy and his economics and discussing these issues with others at Cambridge who were doing research on the same issue: Rod O'Donnell, Anna Carabelli, John Coates, Jochen Runde, Tony Lawson, for example. Because of her selflessness in reading other peoples' drafts, her deep and painstaking scholarship and her laudable devotion to teaching, her seminal and innovative writings took a long time to enter the public domain. So it is more than appropriate that the Handbook now includes her definitive account of these fundamental issues, in her chapter, "Critiques, methodology and the relationship of post-Keynesianism to other heterodox approaches".

[24] Lance Taylor's recent book, Taylor (2010), and his chapter in these volumes show clearly and forcefully how such a misinterpretation could and should be avoided.

Her chapter, she says, is “a story of detection and … interpretation – of how philosophical elements in Keynes’s economic thought came to be teased out, especially in the last thirty years of the twentieth century, and of reactions to them.” (1). She starts with an historical account of how Keynes came into contact with philosophical issues, initially through his father, John Neville Keynes, and his father’s friends; then on his own account as an undergraduate and as a member of the Apostles just when G.E. Moore’s *Principia Ethica* (1903) was published (Moore was an older Apostle); and also through Keynes’s friendship with Frank Ramsey in King’s (they were both Fellows) in the 1920s.

Meeks describes the emergence in the late 1970s, 1980s and 1990s of interest in this, and in Keynes’s early philosophical papers and his dissertation for King’s which, as we saw, became Keynes (1921). Part of the impetus was the emergence of the editions of the *Collected Writings* of Keynes from 1971 on, which were intensively used by Meeks herself and O’Donnell, Carabelli and Coates in particular in their research for their doctorates, together with the Keynes papers, mostly in the King’s Archives but also in the Alfred Marshall Library of Economics, many of which had not been included in the *Collected Writings* volumes.

Meeks herself came to these debates through her research on chapter 12 of *The General Theory* and the interpretations that arose from the chapter in the writings of Joan Robinson and G.S.L. Shackle, and the illumination that Matthews provided in her seminar. Matthews’s paper was published as his chapter in the important volume Meeks edited, see Meeks (ed.) (1991). The volume contains a much shortened version of her own research work that had been discussed for several preceding years in her M. Phil course.

In her Handbook chapter she discusses the major differences between Shackle’s and Dow’s interpretations, refers to Hume’s views on induction and the meaning of reason in his day (principally deduction) and its influence on modern debates, on this see also Boyle and

O'Gorman's chapter above. She makes a subtle distinction between when economists' views on philosophy are directly relevant to their economics and when philosophical arguments are relevant even if the economists concerned are not aware of their origins in philosophy.

This discussion leads onto the contributions of Tony Lawson and his then pupil Jochen Runde, who emphasise weight of argument and confidence. She also refers to Coates's wider philosophical perspective (Coates was an outstanding philosopher before he became an outstanding and then practical economist who made a fortune on Wall St., so that he is now a gentleman scholar in Cambridge, developing seminal ideas in neuroeconomics). After her thorough scholarly documentation of the controversies that arose and possible explanations of why, she reaches the sensible and essential conclusion: to obtain definitive answers, we cannot do better than to return to Keynes himself, a course of action she has consistently followed in her own work and in this chapter.

In the late 1970s, early 1980s, Rod O'Donnell wrote a scholarly and extremely clear PhD dissertation at Cambridge on the links between Keynes's philosophical views and his economics, which culminated in crucial aspects of Keynes's analysis in *The General Theory* and after. The dissertation was the basis for his well-received book, *Keynes: Philosophy, Economics and Politics, The Philosophical Foundations of Keynes's Thought and Their Influence on His Economics and Politics,* (1989). He has since written many articles on these themes and he draws on this large amount of careful analytical discussion for his chapter "Two post-Keynesian approaches to uncertainty and irreducible uncertainty".

The two approaches are the Human Abilities / Characteristics (HAC) Approach and the Ergodic / Non-Ergodic (ENE). Each approach is set out in terms of its conceptual foundations, key components and logical interconnections. The HAC approach draws primarily on Keynes's writings in both philosophy and economics, while the ENE approach, of which Paul Davidson is a prominent exponent, uses ideas drawn from Knight, Shackle and stochastic process theory to understand Keynes's ideas. The chapter provides the basis for readers to make up their minds on the issues raised and how they may wish to proceed in their own work - exactly what a Handbook should offer.

As with Keynes, so with some of the deepest and original post-Keynesian scholars, a training in philosophy has enriched their economics. This is certainly the case with Wylie Bradford. His chapter is concerned with "The interdisciplinary application of post-Keynesian economics". He documents the frequent claim that post-Keynesian economics is much more appropriate than other approaches to cooperate with other disciplines in explanations of economics and other issues. He points out that in fact the output of such exercises is disappointingly meagre. Part of his chapter is to explain why. In doing so he points to the growing economic and/or social science imperialism of the mainstream which earlier was documented by Lester Thurow (1977) and Harcourt (1979; 1982).

He then illustrates the worthwhileness nevertheless of such an approach by examining the role of neoclassical economics as represented by Tjalling Koopmans in his *Three Essays* (1957) as the economic base of John Rawls's *Theory of Justice* (1971). Bradford argues convincingly that the economic base of Rawls's central arguments is rendered incoherent by the insertion of Koopmans's system into Rawls's system. Had Rawls, though, inserted the rival system of Pasinetti (1981, 1993, 2007), or indeed the system of Pasinetti (1962), incoherence would not have occurred. The nature of the economic society being assumed would have become relevant for working out the essential principles of justice.

This argument links back to Bradford's earlier comment that Lionel Robbins's influential definition of economics as a theory of choice in situations of scarcity, Robbins (1932), means that the principles of economics relate to an aspect of all life[25], rather than a

[25] This is the course strongly advocated by Phillip Wicksteed in 1910 as Robbins acknowledged.

part of life such as is implied by Marshall's definition that "Political Economy or Economics is a study of mankind in the ordinary business of life", Marshall (1890; 1961, 1). Bradford argues that Marshall's definition more fittingly underlies the post-Keynesian approach. So while the results so far advanced may be meagre, Bradford's case study shows what substantial rewards lie in wait for post-Keynesians if they follow his lead.

One of the most important and influential recent developments in method and the theory of knowledge, especially for graduate students and others dissatisfied with the approaches and findings of mainstream economics, is the huge and growing literature on critical realism. At Cambridge this development has been led by Tony Lawson through his long-running and well-attended weekly seminar for critical realists (and others) and in more recent times, his discussion groups with those interested in ontology. Lawson has published two influential books, Lawson 1997 and 2003, and many papers, some of which relate to the place of post-Keynesian economics in the critical realism project, e.g. Lawson (1994, 2009).

One of the most important people in these developments is Stephen Pratten who thus is ideally placed to discuss the subject matter of his chapter, "Post-Keynesian economics, critical realism and social ontology". Pratten's doctoral dissertation (Pratten 1994) applied the principles of critical realism to an explanation of Marshall's dilemma – that his analysis was usually static, with supply and demand functions used to discuss the market, short and long periods, but his 'vision' was dynamic, of economies as organic evolving systems, to the application of which his formal analysis was limited and unsatisfactory as Marshall recognised.[26] Pratten, having adopted a critical realist approach, moved immediately to less abstract, more applied and policy topics where he used the approach to advantage. Pratten has worked very closely over the years with Tony Lawson and others, he has long been a joint

[26] Neil Hart's superb Ph.D dissertation, Hart (2009), on Marshall and evolution, which will be published in two volumes by Palgrave Macmillan,(Hart 2012 is the first volume), is the most profound explanation of these issues; but this should not detract from the importance of Pratten's much earlier contribution.

editor of the *Cambridge Journal of Economics* and in recent years, its highly effective managing chair.

In his chapter Pratten uses his understanding of critical realism to illuminate the weaknesses and limitations of the approach of mainstream economics – its overwhelming dependence on maximisation under constraints – and to show why post-Keynesians and other heterodox developments are more promising ways to proceed.

Critical realists, he argues, are concerned with the nature of social reality and this dictates their views on how to do theory and applied work. This in turn provides the background to the critique of how the mainstream approaches these pursuits. It also helps us to understand more specific issues e.g., the role of institutions, gender, technology and social processes.

Joseph Halevi, Neil Hart and Peter Kriesler have written an illuminating account of the origin and central importance of the concept of the Traverse in economic theory. (The chapter's gestation period could almost persuade one co-editor (G.C.H.) that the Austrians were right to regard the input of time as productive.) The authors relate the concept, basically what happens to the economy either out of equilibrium or between two equilibria, to the traditional concept and role of equilibrium in economic analysis. They start with the concept of natural prices in classical political economy (prices of production in Marx) and how market prices determined by other forces than those responsible for natural prices, lead to either fluctuations around or convergence on natural prices. These processes crucially do not affect the values of natural prices which act, therefore, as centres of gravitation, as attractors.

The authors then trace through the literature the rise of criticisms of these constructions and the emergence of path-dependent processes whereby where systems ed up are fundamentally influenced by the path they they take to get there. Here the outstanding pioneers are John Hicks and Adolph Lowe. These considerations are associated with the emergence and analysis of cumulative causation processed, which were first to be found in Smith – what is not? – and then, in the modern era, in the writings of Veblen, Allyn Young, Kaldor, Myrdal, Lowe, Joan Robinson, (late) Kalecki and Richard Goodwin. The contributions of these economists are compared, rightly, more than favourably with those of the mainstream, and, especially, those of its more extreme proponents, such as Robert Lucas and his surrogates. They are trapped within the confines of equilibrium and steady state growth analysis masquerading as descriptive analysis of the actual world.

Complexity theory is one of the many exciting developments in recent years in both natural and social sciences. One of the pioneers of its application in economics is Barkley Rosser Jr. He was asked to contribute a chapter on "Post-Keynesian elements in the development of economic complexity theory and its application to policy". Due to unavoidable circumstances he was only able to let us have a summary of his proposed narrative. Though it is succinct, it is so chock a block full of insightful history, evaluations and ways forward that we wish to publish it as a personal view of the elements of his proposed title.

In his outline he mentions the links to contributions and themes already discussed in previous chapters. In particular, Goodwin's, Kalecki's and Velupillai's writings are especially relevant, as well as those of the original pioneers in Keynes, Joan Robinson and Piero Sraffa. In his opening paragraph, he explicitly concentrates on the three schools of post-Keynesian thought: dynamic/Kalecki, Sraffian neo-Ricardian and uncertainty/Davidson and two schools of economic complexity theory: dynamic and computational. He concludes that these links allow us to see "elements of unity among the often sharply contesting post-Keynesian perspectives." (1)

XI

Underlying the post-Keynesian critique of mainstream economics have been the issues associated with the Cambridge-Cambridge controversies in capital theory, see Cohen and Harcourt (2003), Harcourt (1969, 1972, 1976, 2006, Appendix 2). The concept of the aggregate production function and its use, and of the form of the marginal productivity theory of distribution associated with it, have figured prominently in the literature. Though it is generally agreed that Cambridge, England, won the debates of the 1950s, 1960s, see Paul Samuelson's generous "summing up" in 1966, that has never stopped the use of the aggregate production function in both theoretical and empirical work, especially when endogenous growth theory emerged as all the rage in the 1980s. Nor did it lead leading mainstreamers such as Samuelson and Robert Solow ever to doubt the validity of their general approach, only that some details needed to be modified, extended or cast aside.

Jesus Felipe and John McCombie's chapter, "How sound are the foundations of the aggregate production function?", address these issues. McCombie, recently with Felipe (who also has collaborated with Franklin Fisher) have provided a long running critique of the use of the aggregate production function in both theory and empirical work, especially in a critique of the approach in Solow's 1956 and 1957 articles and the surrogates that arose from them. A dispassionate reading of the exchanges (though Solow has never replied directly to McCombie as Solow mounted his defence principally against Anwar Shaikh, one of the earliest critics, see Shaikh (1974, 1980, 1987, 2005)) would show that McCombie's arguments (which incorporate the insights of Henry Phelps Brown, Herbert Simon, Franklin Fisher and Shaikh in particular) have carried the day. Yet

> "He who is convinced against his will,
> Is of the same opinion still."

This literature contains both an internal and external critique. The internal one, of which Fisher's writings are excellent and telling examples, Fisher (1971, 1978, 1972, 2006), are concerned with aggregation problems, not with the validity of the underlying concepts of the mainstream theory of value, production, and distribution. The external critique concerns the unacceptability of the conceptual basis of mainstream theory. The meaning as well as the measurement of capital and the robustness of simple relationships which reflect the neoclassical intuition that all prices are indexes of scarcity are centre stage as well as the essential "vision" of what makes capitalism run, see Harcourt 1995 for a succinct statement.

Running through the discussions is the finding that "goodness of fit" of production functions cannot bear on the robustness or otherwise of marginal productivity relationships as an explanation of the distribution of income between wages and profits because the specifications are akin to the national income *identity* that $Y \equiv W + \Pi$. Fitting production functions (of all forms) to data should always therefore result in very good fits (in the limit $R^2 = 100$ per cent) because the specification is akin to the identity. No notice then should be taken of subsequent estimates of elasticities of substitution or factor shares as being consistent with empirical findings. The basic cause of the problem as illustrated by Fisher's 1971 findings is that causation runs from (say) constant shares to the putative Cobb-Douglas function, not vice versa (22-23)

So relying on aggregate production functions whether in theory or in empirical work is deeply problematic. What should be put in their place? The most promising developments are associated with the writings of Duncan Foley and Tom Michl and their concept of the classical model of growth and distribution, see, for example, Foley and Michl (1999).

XII

As has often been argued, post-Keynesians find their inspiration in the classical political economists including Marx, as well as in Keynes and Kalecki. In 1987 Claudio Sardoni published the definitive work on the relationship between the ideas of Marx and

Keynes. (A second edition which now takes in Kalecki was published in 2011.) Sardoni elaborates on these connections and similarities in his chapter, "Marx and the post-Keynesians". His perspective concerns the relationship of Marx's schemes of reproduction to post-Keynesian developments, an emphasis which he points out was highlighted by Joan Robinson (who also pointed out to Harrod that in his work on long-term rates of growth he had rediscovered Marx, volume II).

Sardoni argues that this framework is an appropriate context in which to present in a simple and straightforward way some fundamental characteristics of market economies (2). He first sets out the schemes of reproduction and then introduces money, all the time looking for the conditions that are consistent with a balanced process of expanded reproduction. There is no suggestion that capitalist economies left to themselves would bring these conditions about. He compares his findings with a Kaleckian three departmental model and poses a central (but often neglected) question: Where do the capitalists get the funds to finance their increased investment and/or consumption, a question posed by Marx and Kalecki with very similar answers. (Sardoni in his 1987 book had also shown that when Keynes and Marx asked the same questions, adjectives and mode of approval aside, they usually came up with the same answers.)

Sardoni then examines Harrod's and Domar's theories of growth and compares them with those of Marx. The key point is that I → S, so that the larger is voluntary saving out of any given level of income, the higher must I be to create it. Finally he examines the literature on Marx and post-Keynesians, showing that links between them have usually been neglected, that each have gone their own way rather than collaborating. The most notable exception is Amit Bhaduri's remarkable macro text published in 1986, which follows the approach Sardoni has outlined. Had recent generations of economics students been brought up on Bhaduri's book, we may have avoided, or at least seen coming, the disasters of recent years.

For these simple models bring to the fore not only the mainsprings of growth but also the susceptibility of market economies to instability and crisis.

XIII

James Forder has a background in philosophy and politics as well as economics. As someone who understands and approves passionately of democratic values, he has written a number of important papers, see, for example, Forder (1996, 1998, 2004, 2005), criticising the setting up of independent central banks in democratic societies. He brings this broad background to an incisive discussion of the foundations of macroeconomics in the 1950s and 1960s in his chapter, "The L-shaped aggregate supply curve, the Phillips curve, and the future of macroeconomics". The chapter is an exemplary example of the value of a thorough knowledge of the preceding literature in a subject such as economics. Too much of the training of economists in recent decades proceeds as if only the literature of recent years is worth examining, so that accumulated economic knowledge consists of what has occurred in the past decade (with a moving peg). This often results in the discovery of inferior wheels, just because the important contributions of past greats are no longer known of or taught. (Some suggest this results from we economists suffering from physics envy.)

Forder's chapter avoids these pitfalls through his in-depth discussion of views about labour market behaviour and the role of non-economic factors in it. It may surprise many modern economists who use aggregate production functions and simplistic versions of marginal productivity theory to read Forder's survey of marginal productivity theory and the scepticism in which it was held by general and labour economists alike.[27] He reminds us of the views expressed on the notion of fairness in establishing relative wage structures and of

[27] They also would profit from reading John Pullen's comprehensive critical history of the development of the theory, Pullen (2010).

the possibility of collusion between unions and management in the setting of wages and prices (those were the days!). He refers to the debates between Richard Lester (1946) and Fritz Machlup (1946) on the relevance of economic theory especially as applied to labour markets. All this is the backdrop to the discussion of the L-shaped aggregate supply curve initially postulated by Keynes as a (very) special case in order to distinguish starkly between the impact of a change in aggregate demand on output and employment up to full employment, on the one hand, and the change in prices at full employment and above when excess demand changes, on the other.

This leads Forder onto his discussion of the Phillips curve and Friedman's misleading description of it as the missing equation in Keynes's system as though Chapter 21 of *The General Theory*, "The theory of prices", had never been written and that Keynes had never responded to John Dunlop, Kalecki and Lorie Tarshis in the late 1930s with a modified view, see Keynes, *C.W.*, vol VII, 1973, Appendix 3, 394-412. Forder discusses the various views on whether a sharp distinction between demand-pull and cost-push inflation can be made coherent, and on whether the Phillips curve can be regarded as a stable long-run relationship. He absolves Samuelson and Solow from any such claim in their much quoted 1960 *American Economic Review* article, the mis-interpretation of which was used to great effect to discredit Keynesianism and its policies in the stagflation episodes of the 1970s. He goes explicitly through the misinterpretations of the 1950s and 1960s, precipitating out a more coherent interpretation, which, he concludes, "would surely bring rewards." (15).

Joerg Bibow is an outstanding scholar of Keynes. He has a detailed knowledge of Keynes's contributions and the huge literature, pro and con, that has been erected on them. He has a fine critical analytical mind and well thought out views on appropriate approaches to theory and policy, which, taken together, make him one of the most serious and important economists writing under the post-Keynesian umbrella today. His chapter, "A post-Keynesian perspective on the rise of central bank independence: a dubious success story in monetary economics", is concerned with the weighty issues surrounding the concept of an independent Central Bank and the cases for and against its existence. In particular, as with Forder, he is much concerned to examine the legitimacy of such an institution in a democratic society, an important issue usually neglected by the mainstream (who are often unstructured technocratic social engineers) and, with some exceptions, by post-Keynesians, too.

Bibow sets out the dimensions of the concept, of the various forms it may and has taken in practice, and of its relationship to the making and implementing of monetary policy and of economic policy in general. He is especially concerned to examine the relationship of the functions of a central bank to the operations of the state, the provision of a national currency and to fiscal policy.

Bibow provides stringent criticisms of the mainstream analysis of the need for and role of an independent central bank, arguing that these are placed within structures that make their conclusions virtually inapplicable and irrelevant. He discusses the world-wide rise of this convention and especially the influence of the pioneering institution in Germany on other, mostly European, economies. He also documents Keynes's views on the desirability or otherwise of an independent central bank and how it could effectively be fitted in with the provision of overall economic policy. As Bibow makes clear, Keynes was not completely averse to the establishment of this institution but did nominate constraints that would make it an effective institution. Bibow suggests that post-Keynesians should take Keynes's views into account within their own approach and a commitment to establish whether or not it properly belongs in democratic societies.

The editors themselves feel that independent central banks are not consistent with either democratic societies or the effective implementation of package deal post-Keynesian policies.

XIV

A sharp dividing line exists between mainstream economists, on the one hand, and post-Keynesians, on the other, in regard to views on the role of the state. Rick Holt and Steve Pressman have written stimulating books and articles on this and Holt provides a comprehensive survey of the issues at stake in his chapter, "The post-Keynesian critique of the mainstream theory of the state and the post-Keynesian approaches to economic policy".

He sets out starkly the main tenets of each group's approach and shows that they lead directly into vastly different views on the size and functions of the state and its policies. The most conservative non-interventionist views of mainstream economists derive their analysis from a wrong reading of Adam Smith – Holt implies but does not say that this group only knows of *The Wealth of Nations* (1776), often may not have read it, and have never heard of its essential complement, *The Theory of Moral Sentiments* (1759), see Harcourt (1994a; 1995). Basically, a strong belief in the efficacy of competitive forces leads to a call for minimum intervention especially in markets. It is common ground that institutions such as laws relating to enforceable contracts, the police and law courts, and defence are the province of the state. But if in competitive conditions, there are always present strong equilibrating forces at both microeconomic and macroeconomic levels, the state must remain very much in the background.

Holt argues that Keynes and post-Keynesians were/are concerned to deny the powerful purchase of these forces at micro and macro levels, so that there was/is a major niche for the state to fill. (For each problem, it would still be necessary to establish that measures taken by the state are more effective in overcoming the problem than the workings of the market even *if* market failures had been shown to exist.) Holt stresses the much greater role for *social* intervention, that men and women are not islands in the post-Keynesian approach, and the implications of it for state actions.

He considers a wide range of problems – unemployment, inflation, the environment, for example, – and compares and contrasts the great differences in proposed policies, each set following logically from their underlying theoretical systems. He concludes by discussing serious differences in post-Keynesian views on theory and policy, especially with regard to policies concerning inflation. Holt suggests that future discussions and exchanges will be needed and be most useful in establishing a more realistic and enlightened view of the state's role and of the nature of economic theory itself.

Philip Arestis and Malcolm Sawyer are eminent post-Keynesian economists who, for many years now (both have recently had *Festschrift* volumes in their honour), have made essential contributions to theory, applied work and policies. Their chapter, "A modern Kaleckian-Keynesian framework for economic theory and policy", complements Holt's. It shows the connection between a theoretical structure based on the contributions of Keynes and Kalecki and the policies that follow from them, in effect, a case study of the general arguments by Holt above.

In their account deficient aggregate demand is a pervasive issue in the workings of modern economies if left to themselves (or if subjected to neo-liberal policies). They also stress that the behaviour of financial markets is a fundamental source of instability, not only within their own workings, but also through their feedbacks into the behaviour of the real economy. They reject the Monetarist notion that inflation is overwhelmingly a monetary phenomenon, arguing that inflation is primarily a byproduct of conflicts at work in modern economies associated with incompatible aspirations of broad social groupings, see also Rowthorn (1977), Marglin (1984), Harcourt (2006, Chapter 6). They also emphasise a feature of the structuralists' approach, that often there may not be sufficient productive capacity to support full employment, so that the sharp distinction that used to be made between Keynes/Kaleckian unemployment due to too low effective demand, on the one hand, and Marxian unemployment due to insufficient capacity, on the other,(analysed in detail in Kriesler's chapter discussed above) is in fact blurred. This is due not least to inappropriate policies derived from Monetarist views on how to control inflation (read, implicitly, revive or reinforce the reserve army of labour and, as an unintended consequence, blunt "animal spirits" and confidence in general and therefore adequate levels of accumulation and consumption in the process).

As with Holt, they link their 'vision' to the policies they derive and advocate. They conclude by contrasting their suggested approach – "use fiscal policy in the short term and in the long term to address demand issues, use regional and industrial policies to create the required capacity and develop incomes policy to maintain low inflation" – with the prevailing orthodoxy – "use interest rates to address demand issues with fiscal policy left in neutral, to use the 'credibility' of the Central Bank to hold down inflationary expectations and to 'reform' labour markets to lower the non-accelerating inflation rate of unemployment" (17-18).

Also complementing the chapters of Holt, and Arestis and Sawyer is Heinrich Bortis's chapter, "Classical-Keynesian political economy: genesis, present state and implications for political philosophy and economic policy". As we noted above, in 1997 Bortis published an outstanding manuscript, Bortis (1997), in which he set out his comprehensive and, he argued, coherent system of post-Keynesian economics. In this he brought together ideas from Keynes and Sraffa, together with his thorough knowledge of the history of economic theory and political philosophy. As we also discussed above, if we were ever to be persuaded that a coherent post-Keynesian system existed, it would be by Bortis. He presents his ideas in three layers – a long-period set of growth relationships, drawing on Sraffa, Keynes and Pasinetti (and before them, Smith and Ricardo), a Robinsonian theory of the cycle, and short-period problems allied with the impact of uncertainty – he therefore views his attempt at coherence as “a synthesis of Ricardo and Keynes”, Bortis (1986, 69). His present chapter is built on these foundations. He shows that there is a logical difference between an underlying timeless set of principles and specific application of them. The latter are relevant as the rationale of a “horses for courses” approach emanating from Joan Robinson and those of many post-Keynesians, including the present editors.

The political philosophy of Keynes is also Bortis’s foundation for he regards Keynes as the foremost thinker who attempted to construct an alternative between socialism and capitalism, what Bortis calls Keynes’s “Social Liberalism”. (In his 1997 book Bortis named it “Comprehensive Humanism”.).

The objective of Bortis’s chapter is to set out his basic propositions and on them erect a systematic approach to the pressing problems facing modern economies, including providing a coherent underlying political philosophy. In particular, he takes in the problems of financial instability, the problems associated with the process of globalisation and the rise to dominance in decision-making on both economic and political matters of large multi-national oligopolistic firms and industries. Because of the broad range of important, indeed fundamental, issues that Bortis discusses, his chapter is considerably longer than the average length of the other chapters in the volumes, an indulgence which the editors and the other contributors have graciously allowed!

Neil Perry’s chapter covers the emerging and important field of post-Keynesian environmental economics and complements Holt’s in calling for the State to have a strong role in guiding the economy to an environmentally sustainable future. Perry surveys the field, provides extensions, and guides future research. Although he locates the history of post-Keynesian environmental economics as effectively beginning with Bird’s 1982 *Journal of*

Post-Keynesian Economics publication ,"Neoclassical and post-Keynesian environmental economics", and only recently accelerating, Perry questions whether some of the founding contributions to Ecological Economics, such as those by Boulding and Georgescu-Roegen, were also contributions to post-Keynesian environmental economics and discusses J.K. Galbraith's work on the quality of life and the power of corporations.

Perry discusses work on embedding the environment in post-Keynesian theory and proposes new directions, arguing that by using models developed by Sraffa and Kalecki, post-Keynesian economics is well situated to develop models which distinguish between growth and employment in different sectors of the economy and their resulting impact on the environment. This also requires embedding the entropy law within models of production and this complements ecological economics. A post-Keynesian model of the macroeconomy with the entropy law included would be fertile ground for ecological economists who have struggled to develop models and policy which simultaneously deal with the environment and social issues such as income distribution. Such a model would also be valuable for post-Keynesian economists analysing endogenous business cycles, path dependence and equitable distribution where the latter includes a consideration for exposure to environmental contaminants.

The major component of Perry's contribution concerns a critique of orthodox environmental policy and a discussion of post-Keynesian alternatives. He provides a comprehensive critique of the foundations of orthodox environmental economics and in particular the theoretical legitimacy of the marginal damage and marginal abatement cost functions which are widely used in the analysis of orthodox environmental policy.

Perry covers post-Keynesian alternatives to the "getting the prices right", one-policy-fits-all solution of orthodox environmental economics. With strong links to institutional economics, one of these alternatives is policy aimed at changing consumer preferences through changes in technical and social institutions which is guided by Lavoie's analysis of the post-Keynesian consumer. Another policy instrument may include environmental taxation, and based on the work of Kalecki, Steindl and Salter, Perry outlines a post-Keynesian mechanism for environmental taxes which leads to changes in industry composition in the long term. A strong role for the State is envisioned to support the long-term change in industry composition.

In contrast to orthodox economics, there is a need for multiple policy instruments and these include the much maligned emission and technology standards (command and control approach) which have an important role to play in an economy characterised by fundamental uncertainty. Other important instruments include deficit spending and employment programs which could simultaneously advance post-Keynesian concerns for equitable income distribution and full employment as well as promote environmental sustainability if directed carefully. Industry policy is also strongly recommended to promote particular qualities of growth.

In his final section, Perry considers the role of innovation for environmental sustainability and again highlights the role of the State. Post-Keynesian economists have followed the work of Salter (1960, 1965) in arguing that changes in technology and environmental productivity are generally resisted by industries. In a vintage capital model, changes in the emission profile of industries only occur when marginal firms who are also high emitting firms become obsolete. Firms protect the return on their existing capital stock and changes in technology are only incremental within incumbent plants and firms. Perry draws on Davidson's analysis of natural resources, which relies on Keynes's concept of user cost, to highlight the inherent problem of large multinationals being active in both renewable and non-renewable, fossil-fuel based energy industries. This creates an inertia which can only be broken when industry participants are independent – that is, when firms in fossil-fuel industries are excluded from the renewable energy industry. Again, this creates a need for strong government involvement because participants in the relatively tiny and new renewable energy industry require financing for their growth and policy to speed up the obsolescence of high emitting firms while simultaneously protecting and retraining workers in outmoded industries.

XV

For many years now James Galbraith has been heading a large empirical project on income distribution in major economies in the world economy at the University of Texas, Austin. The project has brought together a huge body of data from disparate sources. This has been refined into detailed classifications using innovative statistical techniques in order to present the information in relevant detail.

In his chapter, "Post-Keynesian distribution of personal income and policy", he uses a broad post-Keynesian approach to analyse the links between macroeconomic behaviour and changes in inequality over distinct historical episodes. He compares inequality over time and within regions, sectors and countries. A major finding is that the movements in inequality within countries are dominated by a single global pattern, closely related to changes in the international financial regime. While we are not sure that Galbraith would agree with us, we think his finding is consistent with a major insight of Marx, that when finance capital is out of kilter with industrial and commercial capital, instability and often crises result. Accompanying such shocks are major changes in inequality, reflecting the impact of systemic behaviour on the relative economic, social and political power of the groups-classes that make up modern capitalist economies.

XVI

Until the training of economists in the Antipodes was restructured to make most of their economics departments clones of leading US departments, Australian and New Zealand economists had justly earned reputations for independent and creative thought and contributions, especially in understanding the operations of small open economies. Two of the most original and productive contributors within this tradition are John Nevile in Australia and Paul Dalziel in New Zealand. John is now an elder statesperson; Paul started his professional life just when the implementation of extreme Monetarist and neo-liberal views and policies came to dominate teaching and policy-making in New Zealand. Both have independent, critical minds, excellent technical ability, and keen economic intuition. Their chapter, "Theorising about post-Keynesian economics in Australasia: aggregate demand, economic growth and income distribution policy", is concerned with the relationship between mainly Keynesian and post-Keynesian views and the development of theory and policy in Australia and New Zealand.

Nevile provides an historical narrative within which he discusses monetary policy, fiscal policy, incomes policy and economic growth in Australia during several different historical episodes in the pre-war and post-war periods. He documents the important influence in each of these eras of several well known Australian economists – Douglas Copland, John Crawford, Peter Karmel, Eric Russell, Wilfred Salter and Trevor Swan, for example. He also documents the development and application of Keynesian and then post-Keynesian ideas in particular, Keynes in the two decades or so after the end of the World War Two, more post-Keynesian after that. His own contributions and inputs rightly figure in the later period. He played a role in the Vernon Committee Report, a committee set up by Menzies in the early 1960s and then aborted by him soon after its publication as part of the fight between Treasury and the Department of Trade (read, the Treasury and Crawford). Nevile also developed the first econometric model of the Australia economy, Nevile

(1962).[28]He has combined theory, applied investigations and policy recommendations on post-Keynesian lines ever since, latterly with Kriesler.

In Adelaide, Russell was the mentor of GCH and others who were associated with the role of the Russell-Salter rule for incomes policy, first, within the Basic Wage submissions to the Commonwealth Arbitration Commission and, then, as part of the structure behind at least the first years of the Accord between employees, employers and the Hawke-Keating ALP government of the 1980s. Nevile makes an excellent case for the performance of the Australian economy being more impressive when Keynesian and post-Keynesian ideas ruled than what happened during the era of economic rationalism and neo-liberalism, remnants of which still linger on even after the disastrous world financial and real upheavals of 2008 and 2009.

Dalziel documents New Zealand experience, giving a proper place to the role of Conrad Blyth and, of course, to the most distinguished New Zealand economist of them all, Bill Phillips, even though he only spent his twilight years as an economist actually in New Zealand. Dalziel rightly points out that his own emphasis on asset inflation in the economic process is of profound importance in both understanding economic instability and what can be done about it – if only Dalziel surrogates were in charge in the universities and public services.

XVII

Gary Dymski's chapter, "The heterodox spiral and the neoclassical sink: reclaiming economic theory after neo-liberalism", is a brilliant critical essay on the deficiencies of the theories and policies built up from the general equilibrium model in the light of the neo-liberal era of recent decades and the global financial crisis. Its purest and most stark

[28] In the 1940s Swan carried out an exercise based on the system of *The General Theory* and Australian statistics but the empirical aspect of it was not technical econometrics, Swan (1989)

manifestation is the efficient markets hypothesis which its proponents still argue would continue to serve well if only government regulations could be removed. There is an explicit argument that aggregate demand will always be sufficient to absorb aggregate supply and that unequal diffusion of power on both sides of key markets play no significant role in competitive environments. Orthodox proposals after the GFC still continue to build on this underlying model, their faith unshaken by events.

Dymski argues that the approach is logically and practically bankrupt - a sink - and that new approaches to theory and policies must be built on bases created by Marx, Keynes and Kalecki concerning how our economies really work.

As we noted, Lance Taylor has recently published the tome for our times. *Maynard's Revenge* (2010) is the history of macroeconomics told in the light of the recent and ongoing world financial and real crisis. The heroes of Taylor's narrative are Keynes and the post-Keynesians. He highlights the contributions of Minsky and Godley, also of Kalecki and Joseph Steindl. There are also star roles for Goodwin, Kaldor and Charles Kindleberger.

Taylor combines comprehensive theoretical discussions of both Keynes and the post-Keynesians and of the mainstream alternatives which have dominated theory and policy making in the last 40 years. He allies these with an impressive account of the major historical episodes in pre-war and post-war USA, including its increasingly important relationship with the rest of the world. He sets out the policies that are needed in the wake of the financial crisis, policies based on his reconstruction of Keynes-type ideas as an integral part of Maynard's revenge.

It is fitting therefore that "Keynesianism and the crisis", the closing chapter of the post-Keynesian Handbook, should be written by Taylor, while the penultimate chapter should be written by Dymski, another doughty warrior. In his chapter, Taylor presents the main findings of his book. He brings together a theoretical structure based on Keynes, Kalecki, the others named above and also further references to the post-Keynesian literature. His account is political economy at its best, recognition of decision-making under uncertainty, power struggles between competing groups and classes and their implications for economic activity and the distribution of incomes, and financial instability, its causes and consequences. As did Dalziel, Taylor stresses the causes and implications of financial and other asset inflation and deflation.

With this theoretical structure and the use of simple diagrams and tables, Taylor's narrative takes in major periods of the history of the USA. He concludes with pointers towards necessary policy reforms in the USA and internationally. Like Keynes, he recognises major obstacles but remains clear sighted and is a cheerful optimist. One important point he stresses is how long in historical time community norms take to establish and change. An important example is how the huge blow outs in inequality of income and wealth of recent decades have progressively come to be accepted, though not, of course, by Taylor, nor by the contributors to these two volumes.

XVIII

It would be superfluous to go into more details. What we have tried to do in the Introduction is to map out what is to be found in the two volumes, to indicate how the various topics interact and to give a broad account of what may be found in each chapter. As general editors, we feel extraordinarily fortunate to have had such outstanding contributors and contributions. We hope our introduction will stimulate readers to read, either comprehensively or selectively, the chapters that follow. We do not think they will be disappointed.

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