Cambridge School of economics

Even though references to the “Cambridge School” are frequent in history of economic thought literature, what this term designates is far from being univocal, being used sometimes in relation to Marshall and his disciples, sometimes to Keynes and his followers, sometimes to the approach to economics prevailing in Cambridge throughout the period spanning from the early days of the twentieth century to the 1970s, when Cambridge enjoyed international prestige as one of the leading centres of scientific investigation in economics. As in any other science, there is more than one definition of what it takes to constitute a school in economics. If we accept as the definition of school “an alliance of persons, a community of ideas, an acknowledged authority, and a combination in purpose, which banded them into a society apart” (Higgs 1897 [2001]: 7), then this would hold only for the first decades of the Cambridge School, when Marshall introduced the new degree in economics in 1903 and created a community of disciples that kept his teachings alive well after his death. They spread the ideas of the master as presented in his Principles of Economics (Marshall 1920), acknowledged his authority, shared the mission he set for economics and were perceived and perceived themselves as a group of scholars with a well-defined identity. Keynes himself, in his introduction to the Cambridge Handbooks in 1922, could speak of the authors contributing to this output as “orthodox members of the Cambridge School of economics” whose “ideas about the subject, and even [whose] prejudices, are traceable to the contact they have enjoyed with the writings and lectures of the two economists who have chiefly influenced Cambridge thought for the past fifty years, Dr. Marshall and Prof. Pigou” (Keynes 1971–89, hereafter CWK, XII: 857). The School included almost all the members of the Faculty of Economics and Politics, Claude William Guillebaud (1890–1971), Hubert Douglas Henderson (1890–1952), Frederick Lavington (1881–1927), Gerald Frank Shove (1887–1947), Dennis Holme Robertson (1890–1963), Maurice Herbert Dobb (1900–76), and Edward Austin Gossage Robertson (1897–1993).

When the term “school” is applied to the Keynes era and more so to the post-Keynes period, the above definition is more problematic. First there is the issue of whom should be included. Until Keynes’s death in 1946 the list would certainly have included Roy Forbes Harrod (1900–78), Richard Ferdinand Kahn (1905–89), Nicholas Kaldor (1908–86), Michal Kalecki (1899–1970), James Edward Meade (1907–95), Joan Violet Robinson (1903–83), Piero Sraffa (1898–1983) and Richard Nicholas Stone (1913–91), while for the post-war period the names of Wynne Godley (1926–2010), Richard Murphey Goodwin (1913–96), Geoffrey Colin Harcourt, Robin Mars (1924–2012), Luigi Pasinetti and Ajit Singh (1940–2015) are to be added. Secondly there is the issue of what exactly they shared and whether it is sufficiently broad to consider them a school.

Most of these economists shared common times and places, but this is neither a necessary nor a sufficient condition to constitute a school. A school is, after all, marked out by shared approach and doctrinal content, and we can speak of schools of thought also in the absence of unity of time and place. Conversely, a shared place and time do not lead to the formation of a school if there is no common pursuit or recognized leader. While the role of “master” might, in the first period after Marshall, have been performed by Keynes, who was the pivotal figure in the inter-war Cambridge, after his death it is hard to identify a “master” around whom the school regrouped.
However, in the literature the term “Cambridge School” is generally applied without qualification to Keynes’s immediate circle in the inter-war years, and to his followers in the later period.

Schumpeter (1954: 223) argues that Keynes and the “orthodox Keynesians . . . were a school by virtue of doctrinal and personal bonds, and always acted as a group, praising one another, fighting one another’s fights, each member taking his share in group propaganda”.

Pasinetti (2007: 61) maintains that Joan Robinson, Richard Kahn, Nicholas Kaldor and Piero Sraffa formed “a powerful school on the track of Keynes’s economic theory”. He recognizes that this “school” was in reality a motley, argumentative group united and divided by strong emotional bonds, although he discerned “something . . . much deeper, that shaped their intellectual affinities or attractiveness and at the same time gave rise to their strong and stormy personal relationship” (ibid.). That “deep something”, Pasinetti argues, derived from adopting a common approach to economics.

On the other hand, Bliss (2010: 632–3) wrote: “Keynes created a circle of true believers and a corresponding group of heretical others. . . . The characters listed in Pasinetti’s book [2007] were each different, and where their paths crossed they were frequently in ill-tempered opposition . . . The exception would be the twin stars Richard Kahn and Joan Robinson”.

For our part, we have characterized the Cambridge economists in the inter-war years as a group rather than as a school (Marcuzzo and Rosselli 2005; Marcuzzo et al. 2008). We maintained that:

Unlike a “school”, a “group” does not subscribe to a common body of doctrine, although there may be internal cohesion and shared contents; . . . this group identity stemmed from motivations, values, life-styles and work-styles, leaving room for reciprocal respect, overriding many contrasts, and keeping the sense of belonging alive; . . . the points of theoretical division, precisely because they generated discussion, did not break the group up but served to form a connective tissue; . . . precisely because there was no common corpus of accepted ideas to defend, the characteristic feature seems rather to have been elitism – a system of co-optation based on characteristics that were neither ideology nor exactly academic performance or success, but rather the features of a moral and intellectual aristocracy. (Marcuzzo et al. 2008: 582–3)

As to the period after World War II, there is certainly a recognizable group of economists in Cambridge that shared an opposition to neoclassical economics and drew mainly on Keynes’s heritage, but they can hardly be considered a school given the nature of their research agenda, which was highly diversified and, in the case of Sraffa, radically so.

Whether in the form of opposition or endorsement, the Cambridge group or school is a landmark in the history of twentieth century economic thought, because of its outstanding characteristic of being associated with the most powerful attempt at building an approach to economics alternative to the mainstream. For this reason it is still capable of arousing strong reactions in friends and foes alike. In the following pages we reconstruct the main elements of this tradition, the stages of its developments and the nature of its heritage. For the purpose of reconstructing the main features of the “Cambridge School” it is useful to identify four stages of its history: (1) the Marshall era, up to the mid-1920s; (2) the Keynes era, up to the mid-1940s; (3) the Golden Age, up to the early 1970s; and (4) the “fall from grace”, up to the early 1980s.
The Marshall Era

Marshall was the first to believe in the possibility of making economics an independent discipline, and indeed a major one in the academic system of Cambridge, hitherto dominated by classical and mathematical studies (see Coats 1993: 106–13; Groenewegen 1995: ch. 15). It was Marshall who set the process moving by instituting the Economics Tripos, supporting the birth of a faculty of economics, selecting the teaching staff and courses, and guiding and coordinating the academic life and assignments of the various members. A few years later it was his pupil, Pigou, who took over this role, making a decisive contribution to the consolidation of the academic status of Cambridge economics. The operation proved an unqualified success, seeing that just a few years later – from the 1920s – Cambridge drew the attention of the rest of the world as a paragon for the study of economics, while those engaged there in research and teaching had a distinct sense of belonging to a concentrated microcosm with a clear identity of its own.

Much of this imprinting was forged by Marshall’s vision of where the ultimate purpose of economics lay and consequently how economists should be trained. Both “visions” can be traced back to his inaugural lecture in Cambridge (Marshall 1885 [1925]). There we find sketched out his conception of modern economics as an *organon*, as a means of reasoning; it was the approach with which “Cambridge economists up to and beyond the 1930s positively associated themselves” (Tribe 2000: 223). He also made eloquently clear his vision of what the purpose of training economists in Cambridge was:

> It will be my most cherished ambition, my highest endeavour, to do what with my poor ability and my limited strength I may, to increase the numbers of those, whom Cambridge, the great mother of strong men, sends out into the world with cool heads but warm hearts, willing to give some at least of their best powers to grappling with the social suffering around them; resolved not to rest content till they have done what in them lies to discover how far it is possible to open up to all the material means of a refined and noble life. (Marshall 1885 [1925]: 177)

The type of economics Marshall favoured was application of the tools of economic analysis to reality, be it districts, trades or markets, “always with acute awareness of its embeddedness in historically determined totalities” (Becattini 2006: 614).

In the curriculum of students great weight was given to modern economic and political history and applied economics, which were to provide the framework for an economic interpretation of social reality. Recourse to mathematical formalism was discouraged because “excessive reliance on this instrument ... might distort our sense of proportion by causing us to neglect factors that could not easily be worked up in the mathematical machine” (Pigou 1925: 84). Equally distrusted was the appeal of the raw statistical material, pre-eminence being attributed to theoretical analysis over simple data collection or manipulation. Moreover, biological metaphors served the purpose of stressing the evolutionary nature of most economic institutions, which should be studied like living organisms, of which they follow similar life-cycle patterns.

While Keynes, the most outstanding of Marshall’s pupils, went on to pursue a research path of his own, which eventually led his economics to differ in many and fundamental respects from that of Marshall, there remained in Cambridge well after Marshall’s death a Marshallian “old guard” of faithful pupils – Pigou, Robertson and Shove – who resisted the “Keynesian revolution” and, as far as language and substance of the theory
were concerned, stuck to unadulterated Marshall. A small group of Marshall’s pupils, Sydney Chapman, David Macgregor, Walter Layton, Frederick Lavington and Philip Sargant Florence, constituting what has been labelled the Marshallian school of industrial economics (see Raffaelli 2004), should also be considered as a distinctive thread in the warp of the Cambridge School in its early stage.

Developments in economics along the lines identified by Marshall did not end with his death. Important new fields were explored and approaches were created that dominated economic thinking well into the 1960s. This was the case of Pigou’s welfare economics, built on Marshall’s marginal benefit–marginal cost framework and based on identification and analysis of the divergences between marginal private net product and marginal social net product. The market failures that arise when pursuit of self-interest does not lead to the best results for the society as a whole was for decades the justification for the corrective action of the state.

Other efforts were less successful. The book that Shove had meant to write on the theory of costs, which should have taken into account the heterogeneity of factors of production and all the different types of relation between firm and industry, never came to light. Shove had assumed, like Marshall, that each firm had a private market, but his idea of “imperfect competition” was too vague and intractable in formal representation, and eventually it was Joan Robinson’s geometrical approach that prevailed.

The Keynes Era

The arrival of Sraffa in Cambridge in 1927 marked the onset of upheaval with new and subversive ideas. He had criticized Marshall in the famous 1925 and 1926 articles which had driven Keynes to invite him to Cambridge, showing that Marshall’s supply curve of an industry in perfect competition was built on assumptions both unrealistic and inconsistent with the partial equilibrium approach. Inconsistent because decreasing costs must be explained by “external” economies, since in perfect competition “internal” economies would turn the most efficient firm into a monopoly. Yet external economies also usually affect the other sectors, so the clause ceteris paribus does not hold. Similarly, Sraffa argued, it is hard to conceive of the price of a factor that increases in one sector only and generates increasing costs exclusively in that sector.

Keynes thought Sraffa’s criticism disruptive and indeed it deeply impacted on the Marshallian hegemony, marking a new phase. The old guard—of Marshall’s disciples (Robertson and Shove) tried to defend Marshall’s theory of value and his supply curve. In their defence an important role was played by marketing expenses and by the idea that the firm is subject to a life cycle and natural decline (Robertson 1930; Shove 1930). Their arguments, however, failed to convince the younger generation, who enthusiastically pursued the way out of Marshall’s inconsistencies suggested by Sraffa’s 1926 article: the idea was to drop the assumption of perfect competition and to focus on markets where each firm faces its own negative sloping demand curve.

The original idea of developing a theory of imperfect competition has always been credited to Sraffa. However, it is still doubtful how convinced he himself was of its fruitfulness, apart from its role in exposing Marshall’s weaknesses. Sraffa did not follow this line of research for long, and during the preparation of his course on advanced theory of value, which he taught in Cambridge from 1928 to 1931, he took a completely different
route. This was based on two elements. The first was a reappraisal of the theory of value of classical political economy as antagonist to the Marshallian “fundamental symmetry” of supply and demand and based on a definition of cost as “physical” cost, which does not include any subjective factors, such as “sacrifice” and “waiting”. The second element was investigation into the exchange ratios between commodities that enable the exchanges between productive sectors which warrant reproduction of the economic system. However, very little of what Sraffa was working on was known to his Cambridge colleagues, and the prolonged work on the book, which was to appear 33 years later, has only recently been reconstructed on the basis of his unpublished papers.

In the period under consideration two major works, The Treatise on Probability (1921) and The General Theory of Employment, Interest and Money (1936), signpost Keynes’s contribution to Cambridge economics. During the same period Keynes produced another landmark work, the Treatise on Money (1930), besides A Tract of Monetary Reform (1923). Philosophically and methodologically he remained faithful to the approach to human behaviour resting on the two pillars of conventions and expectations, supported by a notion of probability, to be evaluated with evidence and judgement, as guide to action. Understanding how opinions are formed is instrumental to transforming them through the joint effects of persuasion and artfully designed institutions, with the ultimate aim of attaining the common good.

The premise of Keynesian economics, as we find it in the General Theory, is that the economic system is not ruled by “natural forces” that economists can discover and order in a neat pattern of causes and effects, but that their task, rather, is to control and manage the key variables for attainment of a social goal. Against the “classical” conclusion that market forces are at work to bring the economic system to the full employment of resources, Keynes counter-posed the argument that aggregate economic behaviour does not have the same outcome as the pursuit of individual self-interest, so that what is good for the individual may not be good for the whole. It was not against the market, rather against unfettered laissez-faire that his economics stood, for, as he wrote in the last chapter of the General Theory, it is “wise and prudent statesmanship to allow the game to be played, subject to rules and limitations” (CWK VII: 374, emphasis added).

Keynes’s first tenet against traditional thinking is based on reverting the causality relation between budget deficit, income and expenditure; the means to reduce unemployment is through an increase in effective demand (having public expenditure to supplement private investment when necessary) rather than adjusting supply to the existing level of demand. The “digging holes in the ground” argument – it does not matter how public money is spent, as long as it is spent – is meant to illustrate the principle that expenditure will generate income and through the multiplier the savings necessary to finance it.

Keynes’s other fundamental contribution to macroeconomics, besides effective demand, is the notion of liquidity preference. He argued against the “classical tradition” whereby thrift and capital productivity are the “real forces” at work in determining the rate of interest, considering it a highly conventional phenomenon, determined by the strength of the desire of individuals to hold money (as protection against an uncertain future) and the quantity of money provided by the banking system.

At the international level he struggled to make the logic of cooperation and coordination prevail over the working of blind market forces, which would not be able to correct imbalances and asymmetries between creditor and debtor countries. He fought for the
creation of international institutions to oversee the system of payments and the allocation of international capital.

These pillars are the foundations of the Keynesian full employment policies and reforms of the international monetary order, which informed the so-called Keynesian consensus in the post-war years.

In all his activities, Keynes could rely on his “favourite pupil” Richard Kahn, who stood for the preservation of Keynes’s heritage. At the beginning of his career, following a path opened up by Marshall, Kahn stressed the importance of the short period because of the nature of the particular decisions involved, characterized by the time horizon to which they apply. The “Economics of the short period” was the title of the dissertation which in 1930 earned him a Fellowship at King’s College and was much later (it remained unpublished for nearly 50 years) to be recognized as a landmark in the “imperfect competition revolution”. However, Kahn’s association with Cambridge economics in the period under consideration is certainly to be identified with the Keynesian revolution, to which he contributed more significantly than anyone else in the circle around Keynes. First, there is the forging of a formidable analytical tool – the multiplier – which allowed Keynes to reverse the causality relationship between saving and investment: it is investment which generates savings. Secondly, again expanding on Marshall’s apparatus, Kahn introduced the aggregate supply function as a means, together with the aggregate demand function, to determine the price level. Many years later he prided himself on “finally disposing of the idea that the price level is determined by the quantity of money” (Patinkin and Leith 1977: 147). Unlike Keynes, adept in the use of rhetoric as a technique for persuasion, Kahn invariably favoured the use of deductive reasoning. His “great repugnance to the thought that there might be an error attached to his name”, according to Joan Robinson (JVR papers i/8/7, King’s College, Cambridge) did not make him a prolific writer, but his extraordinary influence is to be seen in the two most important books of the Cambridge economics of the 1930s, the Economics of Imperfect Competition (Robinson 1969) and the General Theory (Keynes 1936).

Joan Robinson, “after Keynes... the most prominent name associated with the Cambridge School of Economics” according to Kaldor’s obituary written for the King’s College 1984 Annual Report (p. 34), was a latecomer and potentially an outcast in the all-male club of Cambridge economists. Early on she gained Kahn’s enthusiastic support and Keynes’s consideration, which sustained her in the production of many articles and books in the 1930s and 1940s. Her contributions span from imperfect competition to extension of the General Theory to an open economy and the long period, and they include the attempt to legitimate some Marxian concepts within the accepted box of tools drawn upon by the economist. Her encounter with Kalecki (who was in Cambridge during 1937–39) and constant engagement with Sraffa made her more willing than Kahn to enlarge her approach beyond the boundaries of Keynesian economics. “For me” – she wrote much later – “the main message of Marx was the need to think in terms of history, not of equilibrium” (Robinson 1973: x). Pursuit in this direction became her main endeavour in the last part of her life, when she strongly argued that Kalecki, who “brought imperfect competition into touch with the theory of employment” (Robinson 1969: viii), had a system of analysis in some respects superior to Keynes’s (Robinson 1979: 186).
The very idea of a Keynesian “revolution” was resisted and, to some extent, opposed by the old Marshallian guard. Robertson, on the basis of his own approach to the problems of economic fluctuations and cycles in terms of a succession of periods, objected to Keynes’s short-period approach whereby the current level of saving is a function of current income, without any reference to the past level of savings. Moreover, he challenged Keynes’s theory of liquidity preference, adhering to the theory that the rate of interest is the price that brings the demand and supply of loanable funds into equilibrium. In the case of Pigou, the main point of disagreement was whether a cut in money wages would cure unemployment. In October 1937 Pigou presented his argument, based on the quantity theory of money, that “if a cut in wages leaves employment unchanged, money income has no ground for change” (CWK XIV: 256–7); Keynes’s position was, instead, “that, if there is a cut in wages, unemployment being unchanged, there is a ground for a change in money income” (CWK XIV: 257). At the time there was no room forconciliation, and notwithstanding Pigou’s later admission that he did not grant Keynes due recognition (Pigou 1950), the ground was paved for presenting the main result of the General Theory – equilibrium with unemployment – as dependent on wage rigidity only, as Marshall and subsequent neoclassical economics would have it.

The Golden Age

In the first decades after War World II the reputation enjoyed by the most famous Cambridge economists attracted students from all over the world to their courses. Taking the academic year 1961–62 as an example, they went to Cambridge to study “Economic dynamics” with Kaldor, “Employment, prices and growth” with J. Robinson, “Wages policy” with Kahn, “Planned economies” and “Welfare economics” with Dobb, and “Price and production in an expanding economy” with Goodwin and Pasinetti (Cambridge University Reporter, 1962). The number of students sitting part II of the Economics Tripos nearly trebled in less than 20 years, from 72 students in 1952 to 212 in 1968, with a growing non-British percentage. However, not many changes were made to the composition of the faculty, nor to its size. For a long time there were only two professors in economics, Kahn and Austin Robinson, who had been appointed a few years after the end of the war. Robertson, who had returned to Cambridge after the war as professor of political economy, retired in 1957. When A. Robinson retired in 1965, his place was taken by his wife J. Robinson, joined, one year later, by Kaldor. They left the small group of readers to which they had belonged since the early 1950s, and to which Dobb and David Champernowne had been admitted in 1959 and Goodwin only in 1966. Until the end of the 1960s, then, it was the generation who had personally been under the influence of Keynes who ruled the faculty and taught the main courses in economics, with the support of no more than a dozen younger lecturers, some of whom, like Harcourt and Pasinetti, kept the tradition of their mentors alive, while others, like Frank Horace Hahn, Christopher Bliss or Amartya Sen, took different routes. The size of the Faculty of Economics and Politics was matched by that of the Department of Applied Economics, established in 1939 to manage the research projects funded by external institutions, and put under the direction first of Stone, and later of Brian Reddaway.

In the post-war period Cambridge economics developed along two routes which converged for a few years subsequent to publication of Sraffa’s Production of Commodities
by Means of Commodities (1960), as the capital controversy raged throughout the 1960s and 1970s, only to diverge again in its aftermath.

The first route has been labelled (Harcourt 2006) the Post-Keynesian theory of growth and distribution: it originated as a joint effort, first by J. Robinson, Kahn and Kaldor, and later by Goodwin and Pasinetti. The aim was to go beyond the static approach of the General Theory and model the working of an economic system which moves through time. One of the protagonists of these efforts, Kaldor, was not a born and bred Cambridge economist, but a Hungarian émigré who soon became identified with the Cambridge School. Although he was already in Cambridge when the London School of Economics was evacuated there in wartime, he joined the economics faculty only in 1949, when he also became a fellow of King’s College. He was a prolific writer both in his academic output and in his contributions to the political debates on economic issues, advising governments and the general public alike.

Kaldor’s main contributions in the field of pure economic theory are his economic growth models and his theory of income distribution, which followed up the thread of a Keynesian idea, namely, that profit earners have a higher propensity to save than wage earners (Kaldor 1956). So he became “the joint architect with Joan Robinson and Richard Kahn of the Post Keynesian School of Economics which extended Keynesian modes of thinking to the long run” (Thirlwall 2003: 221).

Joan Robinson, in her Accumulation of Capital (1956), pursued a different method, seeking to determine what the consequences are for an economy when it moves off its golden path, that is, when the rate of accumulation and the rates of growth of population and technical change are not such as to guarantee a steady growth in equilibrium with full employment.

Goodwin, an American Marxist who arrived in Cambridge in 1951, contributed to this literature in 1967 with a model of growth cycle, exhibiting the dynamic interaction between the distribution of income and the accumulation of capital, which formalized Marx’s general law of accumulation:

Labour market conditions drive profit rates, profit rates drive the rate of accumulation, and the rate of accumulation feeds back to affect labour market conditions. When placed in a multiplier-accelerator framework, this generates cyclical growth, with a full-employment profit rate squeeze sending the economy into a phase of slower growth with rising unemployment that lasts until the profit rate has recovered. (Palley 2003: 185; see also Desai and Ormerod 1998)

Pasinetti arrived from Italy to Cambridge in 1956 as a student, having both Kaldor and Goodwin as mentors; he later became a member of the faculty and a recognized leader of post-Keynesian economics. In his 1962 article he presented the famous theorem associated with his name that “in steady growth the rate of profit is equal to the ratio between the rate of growth and the capitalists’ propensity to save and does not depend on technology or on the workers’ propensity to save” (Panico 2003: 171).

The second route developed in Cambridge after the war – the alternative to the Marshallian determination of prices (both of goods and factors) – surfaced with the publication of Sraffa’s introduction to Ricardo’s Principles (Sraffa 1951) and was fully laid down in his 1960 book, where reappraisal of classical political economy led the way towards the construction of a theory in which the principle of equating marginal costs and benefits found no room. The monumental editorial work on Ricardo’s Works and
Correspondence, for which he was universally praised, led Sraffa to challenge the interpretation of Ricardo which had prevailed in the British tradition.

Sraffa showed that in Ricardo the "laws which regulate the distribution" of the surplus between profits and rent constituted the main problem in political economy. To this end, the labour theory of value, despite its limitations, of which Ricardo was well aware, and which he sought to overcome with his search for an invariant measure of value, played the essential role of determining the rate of profit as a ratio between surplus and wages. The same role had been played in his "early theory of profits" by corn, which appeared both as input and output in the agricultural sector (known as Ricardo's corn-ratio theory of profits).

Sraffa's interpretation was translated into a geometrical model by Kaldor (1956) in a famous article which pointed out the differences between alternative theories of distribution (Ricardian, Marxian, neoclassical and Keynesian), and, by Pasinetti (1960), into a mathematical model. The introduction to the Principles was the first step toward a revival of that surplus approach, "submerged and forgotten", which Sraffa promoted in his 1960 book.

Production of Commodities by Means of Commodities (Sraffa 1960) had a great impact on Cambridge economics and seemed to satisfy two different needs. On the one hand, it presented an alternative theory of prices and distribution. Given the quantities produced and the technical conditions of production for each commodity, the prices are determined by a system of simultaneous equations, under the assumption that in a capitalist society the rate of profit must be equal in all sectors. The distribution of the surplus was not made dependent exclusively on the technical conditions of production and the relative scarcity of productive factors, since one of the distributive variables was determined outside the system of prices and could be influenced by other economic, or even political and social, causes. Moreover, it was a theory that underscored the antithetical interests of labourers and capitalists by drawing an inverse relationship between rate of profit and wage. On the other hand, Sraffa brought compelling elements to the critique of the concept of capital outside the short period that Joan Robinson had begun in her 1954 article, where she drew attention to the "profound methodological error" (Robinson 1954 [1964]: 120) connected with the concept of quantity of capital outside the short period. She pointed up the neoclassical failure to distinguish between changes in the conditions of producing a given output, when the quantity of physical capital is altered, from changes in the value of that capital, due to variations in wages and profits. The implication is that "different factor ratios cannot be used to analyse changes in the factor ratio taking place through time", because over time the value of the quantity of capital may change as a consequence of a change in distribution, and we will not be comparing the same quantities. She concluded that "it is impossible to discuss changes (as opposed to differences) in neo-classical terms" (Robinson 1954 [1964]: 129).

The substitution of labour for capital when the rate of profit rises relatively to the wage lost any meaning after Sraffa showed that the same technique could be adopted as the most profitable at different rates of wages (the so-called "reswitching"). Therefore Sraffa's critique had implications not only for the theory of distribution based on the aggregate production function, but also for the contention that market forces always bring the system to the full employment equilibrium via changes in the wage rate. It was the same battle the Keynesians were fighting.
The “Fall from Grace”

By the late 1970s the generation which had given Cambridge its fame and prestige had amply passed retirement age. While still active, opinionated and vociferous on the public and academic scene, they had lost power in the faculty. It has been said that there was a failure, “an unwise behaviour” (Pasinetti 2007: 199–204), on their part in selecting and promoting suitable candidates to become their successors. “The trouble is that the post-Keynesian school has not proved to be at all good at replicating itself” (Bliss 2010: 650).

As a result Cambridge was conquered by a very able new generation of economists who, however, set themselves up as opponents rather than followers. With the appointment of Frank Hahn as professor in 1972, the shift towards mathematical models of general equilibrium and formalism was accomplished. This opened a rift between the “old” Keynesians, who saw these developments as betrayal of the ideas they had fought for, and those who believed that they were a necessary step to break away from Cambridge insularity and engage in competition with the academic world at large.

Since the 1960s, the top US universities had established themselves as the leading centres of postgraduate education in economics. The prominence of their graduate schools in training and supplying cohorts of professional economists to cater for the growing demand coming from institutions and academia worldwide overshadowed the dominant position hitherto enjoyed by Cambridge, which was holding on to its old-fashioned system of teaching mainly to undergraduates and through supervisions, giving little weight to postgraduate lectures and courses (see Tribe 2000: 245).

If we look at the internal development of economics as an academic subject, we find other reasons which may account for the decline of the Cambridge School. As we have seen, the research strategy embraced by Cambridge economists in the post-war years followed two routes: extension and generalization to the long period of the Keynesian theory, and critique of neoclassical theory with a return to classical political economy. Both enterprises turned out to be at odds with what was being pursued on the research frontier in the major universities, mainly in the US, but also elsewhere (Desai 1983).

As far back as the early 1950s, Milton Friedman had launched his attack on Keynesian policies. Not only in Chicago but also elsewhere, increasing dissatisfaction with the neoclassical synthesis had given way to a kind of macroeconomics which discarded many Keynesian features to find more congenial ground in general equilibrium analysis. Monetarism and the “rational expectations” revolution were conquering the discipline within and outside the academic world.

The heated response, by Joan Robinson against “bastard Keynesism” and by Kahn and Kaldor against the “scourge of monetarism”, raised the contraposition between Cambridge and the outside world to an extreme degree. It deepened the gulf between “us and them”, enforcing the perception of isolation and sectarianism of the Cambridge School.

Similarly, Sraffa’s critique of neoclassical theory was rejected by the establishment in the academic world, and the Cambridge economists became increasingly isolated and dismissed. The controversy over the theory of capital between Cambridge, UK, and Cambridge, USA, had raged for two decades. It reached its peak in the late 1960s, when Paul Samuelson tried to defend the theory of capital under attack, first, by constructing a special case of production function and, secondly, by denying the possibility of
reswitching. In both cases he ended by honestly admitting that he had been wrong. At this point, Sraffa’s critique, which could not be proven wrong, was accused of being irrelevant: either reswitching was an “exception” that could be ignored or the critique of the concept of capital held only for obsolete versions of the neoclassical theory, the intertemporal general equilibrium models being free from any notion of capital as a single magnitude. In the mid-1970s the approach to the controversy went through a further development. It was argued by its opponents (see, for instance, Hahn 1982) not only that Sraffian theory was ineffective as a critique of the up-to-date versions of mainstream economics, but also that it was just an application of the general equilibrium theory under special assumptions. This is the interpretation of Sraffa’s book that still prevails in the literature.

To the list of factors which may account for the “fall from grace” of the Cambridge School, it must be added the change in the political climate whereby the ideological pendulum swung from government intervention to free market and liberalism, from the endorsement of the Welfare State and participation in mass movements of the late 1960s, to the encouragement of individualism and the philosophy of “homo faber fortunae suae” (“every man is the artisan of his own fortune”) which characterized the age of President Reagan and Mrs Thatcher.

The sea-change may have been prompted by the economic facts of high inflation and high unemployment of the 1970s, which contradicted the trade-off between unemployment and inflation predicted by the Phillips curve and made Keynesian policy appear totally ineffective, but it had much deeper reasons which are beyond the scope of this paper (for an overview see Bateman et al. 2010).

In this critical impasse, its internal divisions did not help the cause of the Cambridge School, with the neo-Ricardians accusing the post-Keynesians of not having sufficiently shaken off certain neoclassical traits (for instance, acceptance of the inverse relationship – based on the marginal productivity of factors – between investment and the rate of interest, or between real wage and employment) and the post-Keynesians retorting that in Sraffa’s system there is no room for money and uncertainty, which are the distinct features of a capitalist economy.

The Cambridge Tradition is Alive and Well

In spite of the loss of centrality in the academic world and the oblivion of the victories in the theoretical battle against neoclassical economics, it is not to be inferred that the Cambridge tradition is dead and buried. On the contrary, it is alive and kicking, as witnessed by the number of scientific societies which have Cambridge authors as their source of inspiration, by the great number of articles coming out that relate to the Cambridge School, either in choice of topic or approach, and by a sense of belonging, strongly felt by those who are committed to hold on to that heritage. Nowadays we can single out at least three research environments which purportedly draw and build upon what we have identified as the main threads of the Cambridge tradition, that is, the Marshallian, post-Keynesian and Sraffian approaches.

The tradition stemming from Marshall is enjoying a revival thanks to the work of a group of scholars bringing to light a conceptual tool of his analysis which has proved of great utility in interpreting the peculiarity of a contemporary economic phenomenon. Marshall’s concept of “industrial district”, discussed in book IV of the Principles,
describing “the concentration of specialised industries in particular localities”, pointed to a form of organization governed by trust and co-operation, which characterizes clusters of firms within well-defined regional boundaries in various parts of the world.

Becattini (1979), who was the first to apply this concept to explain the success stories of several industrial regions in Central Italy (mainly in the textile sector), provided the key idea that in order for an industrial district to rise and grow a congruence must be there between the organization of the production process and the social and cultural characteristics of the people involved in it. It is “the active presence of both a community of people and a population of firms in one naturally and historically bounded area” (Becattini 1990: 38) which provides the necessary ingredients. The district can be seen, then, as a relatively stable community which has evolved out of a strong local cultural identity and shared industrial expertise. (A recent assessment of the theoretical aspects of this literature can be found in Raffaeelli et al. 2010.)

This attention to the social and historical embeddedness of the economic process within which firms operate is a far cry from the approach to industrial economics which has become fashionable nowadays (industrial organization and its focus on strategic interaction and incentives). Marshall’s concern with the costs of coordination and the knowledge, skills and experience of the firm is a source of inspiration for those who are dissatisfied with formal production theory focusing on optimization. This is one of the areas in which the Cambridge School heritage has proved to be more fruitful.

Another and equally successful endorsement of the Marshallian apparatus draws on his evolutionary vision of the organic development of firms and society at large. Economic progress is seen as the cumulative result of increasing division of labour, of the development of specialized skills, knowledge and machinery and, at the same time, of the ability to coordinate them. Economic change is represented by concepts such as adaptive behaviour, variation and selection through industrial competition. The object of study is a population of firms, each different from the other and continuously evolving through interaction among themselves and with their social environment. Although this evolutionary approach is not unique to Marshall, having its recognized forefather in Schumpeter, several interesting research trends in cognitive and industrial economics have exploited the richness of this Marshallian tradition.

The idea that mental models matter in explaining economic processes, and the role of personal learning in the problem-solving process, together with the importance attached to the development of mental faculties – all of Marshallian ancestry (Egidi and Rizzello 2004) – are the basis of the cognitive approach to economics, which has grown into a specialized and successful discipline in recent years.

However, nowadays the best-known and most widespread approach in economics associated with the Cambridge School is post-Keynesianism, which emerged in the 1960s as a reaction against the “perversions of Keynes’s original vision” (King 2003: xiv). In recent years the insights of Hyman Minsky into the causes of the financial meltdown have given more visibility and credibility to an approach which had always stressed the role of uncertainty, as well as the importance of money and income distribution in capitalist economies. The role of effective demand in generating employment, rejection of the idea that public investment crowds out private investment, the monetary nature of the interest rate, mistrust in the flexibility of prices as a way to redress fundamental market imbalances, and the importance of cost in generating inflation and of incomes policy
in controlling it and fostering growth are the main ingredients of the post-Keynesian
approach.

There is indeed variety within the group of post-Keynesians, in terms of emphasis and
research agenda, while the (smaller) Sraffian group appears more cohesive and focused.
It is for expository purposes that the division is made here between the two approaches,
since many heterodox economists would see no contradiction in endorsing both.

Sraffa’s research programme has been carried forward along three different lines. The
first is investigation into the properties of the so-called “core”, that is, the set of equa-
tions that determine long-period relative prices and the wage rate or rate of profit, under
the assumption that outputs and the alternative techniques that produce them are given.
The analytical complexities of the system when joint production is involved and/or the
inputs include at least one natural resource have been explored. Another issue that drew
the attention of Sraffian scholars is the convergence (or the non-explosive oscillations)
of market prices to their long-run positions characterized by the uniformity of the profit
rate. Important results have been reached in this field and the related literature is quite
large (Kurz and Salvadori 1995; Chiodi and Ditta 2008).

The second line of research lies in the “closure of the system” or determination of
the distributive variable which is assumed as given. The classical tradition of assuming
constant real wage is rejected and attention is focused on the rate of profit. Two routes
have been pursued here. One, following Pasinetti and his Cambridge growth equation,
is to consider the rate of profit determined by the rate of growth of the system, which,
in turn, depends on the investment decisions of capitalists. The other route, following
Sraffa’s suggestion, is to assume the rate of interest to be equal to the rate of profit
(allowing for differences in liquidity and risks). In this way the possibility for monetary
policy to impact on income distribution – a clear case of non-neutrality of money – is
posed.

Note that the two lines of research described above well represent what Pasinetti has
labelled the “separation theorem”, that is, the division between “those investigations
that concern the foundational bases of economic relations – to be detected at a strictly
essential level of basic economic analysis – from those investigations that must be carried
out at the level of the actual economic institutions” (Pasinetti 2007: 275). The separation
concerns not only the objects, but the level of abstraction and generality that the analysis
must and can achieve (Garegnani 2002).

The third line of research lies in a critique of general equilibrium theory, in its more
recent versions of temporal and intertemporal equilibrium, in order to show that even
this version, with disaggregated capital endowments, is based on the notion of capital as
a single magnitude and therefore falls under Sraffa’s critique. The debate is still going on
(Garegnani 2003; Schefold 2008).

We may conclude by saying that the Cambridge tradition has handed down to us a
heritage resting on two pillars. The first is rejection of the “classical” conclusion that
market forces are always at work to bring the economic system to full employment of
resources, implicated by the belief that there is no discontinuity between individual and
aggregate behaviour, so that what is good for a single player in the market is good for
the whole. The second is the Sraffian theme that the market, taken as synonymous with
supply and demand, is a misleading arena for representation of the rules of production
and distribution. To accept being part of this tradition implies not only a commitment
against the “free market” ideology but also the need to work strenuously towards an alternative theory, and indeed a better society.

MARIA CRISTINA MARCUZZO AND ANNALISA ROSELLI

See also:
Business cycles and growth (III); Richard Ferdinand Kahn (I); Nicholas Kaldor (I); John Maynard Keynes (I); Keynesianism (II); Labour and employment (III); Macroeconomics (III); James Edward Meade (I); Money and banking (III); Post-Keynesianism (II); Joan Violet Robinson (I); Piero Sraffa (I); Uncertainty and information (III).

References and further reading


