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How did Piero Sraffa look at the future of economic theory: first, when he arrived in England in the mid-1920s, and then, after the publication of his extraordinarily compact little book (*Production of Commodities by Means of Commodities*, 1960)? The Author sifts through Sraffa's published works, and abundant unpublished papers, his acquaintances and personal contacts and vicissitudes. The conclusions he arrives at remain problematical; but do not refrain him from clearly expressing his specific, quite definite views.

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JEL Classifications: B20, B40, B50

1. Introduction

What conception did Piero Sraffa have of economic theory when, at the initiative of Keynes, he arrived in Cambridge in the late 1920s and—with his early, strikingly original, contributions (1925, 1926)—immediately upset the established views on economics dominated at that time by the leadership of Alfred Marshall? Then, 40 years later, how did Piero Sraffa look at the future of economics after the publication of his amazingly concise little book, *Production of Commodities by Means of Commodities* (1960)?

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*Università Cattolica del Sacro Cuore, Milan, Italy. The present paper is a compact version of one of the major outcomes of the research with which I have been engaged since the beginning of my contacts with Piero Sraffa. My approach has gone through three successive steps. *The first step* was the widest and most detailed one (but still too rough) on the occasion of the centenary of Sraffa's birth (see Pasinetti, 2001). *The second step* was part of one of the three chapters on Sraffa in my book on Keynes's 'unaccomplished revolution' (see Pasinetti, 2007). *The third step* (the present one) is the shortest, most compact (and I hope final) version. It is concentrated on a specific aspect, namely, my evaluation of the significance of Sraffa's work for the future of economics. Of course, I have taken advantage of the two earlier texts and I am grateful to the publishers (Routledge and Cambridge University Press) for allowing me to freely make use of much of my previous versions, reshaped in the form I believe to be relevant for the present initiative (the 50th anniversary of Sraffa's book). Paper presented at the Conference on New Perspectives on the Work of Piero Sraffa on the occasion of the 50th anniversary of the publication of Sraffa's book.

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These are the sort of burning questions that the younger generation of research students in economics—five of whom are present at this Conference today—had the chance, in Cambridge, to place very high on their minds when they came in contact with Sraffa, with talks and discussions, in the immediate period after World War II. Their adventure began in the 1950s and 1960s, when they had the privilege to undertake their graduate studies while coming in touch with that extraordinary group of Keynes's pupils who formed, together with Sraffa, what I have recently dared to call the *Cambridge School of Keynesian Economics*.

None of the participants in those discussions, at that time or even after, had the courage to openly put those questions directly to Sraffa, though those were unmistakably the crude questions that troubled and excited them. What is even more exciting is that those same questions still remain open today, as strongly as ever if not more so, while the Western world has fallen perhaps into the worst of all crises ever to break out in economic theory, let alone in economic policy, since the inception of the Industrial Revolution.

As we all know, Piero Sraffa published surprisingly little. But after his death and after a period of some uncertainty on the availability of what he had left, an extraordinarily and surprisingly abundant amount of handwritten annotations, reflections, criticisms, letters, drafts of letters and notes of all sorts have become available, with the consent of his literary executor, Pierangelo Garegnani, and have been made available—very neatly catalogued and ordered in an enviable manner—in the Wren Library of Trinity College.

As many scholars have done by now, I thought myself, at a certain stage, that I had to make an effort and sit down, with calm and patience, to look through the unpublished *Sraffa Papers* as carefully as I could, searching for illumination on so many matters of interest, which in fact often unexpectedly turned out to be on different or further issues than those I was looking for. Eager as I was to learn, I was astonished at realising how one could meet again, in some peculiarly unknown ways, the wonders of Sraffa's mind, and become acquainted with his thoughts, wishes, aspirations, doubts, criticisms and even idiosyncrasies. It was a delight for me, as I always admired him as one of the most remarkably clear minds of the twentieth century.

After paying a few short visits I decided to search more intensely and I locked myself up for some time¹ in the Wren Library, avidly going through notes, manuscripts, and files and files of papers. They always seemed to be relevant, often in the most unanticipated ways, for many purposes. But of course I mainly concentrated on the ideas that Sraffa seemed to entertain in his mind on the theme of the two questions I mentioned at the beginning. Most importantly of all, I concentrated on what appeared to be his thought on the direction of research he considered to be most fruitful for the future of economics.

2. Three streams of thought

I tried to force myself to take a detached and far-away overview, as if seen from the eye of a bird on a high flight, with the aim of grasping the essentials rather than the details or asides, only to find that in fact nothing was superfluous. Unmistakably, I think, I got the impression of at least three very distinct though intermingling strands in Sraffa's remarkable set of writings. These three strands correspondingly concern the development of three streams of thought.

¹ This happened in September 1998.

2.1 First stream of thought

One thing that appears to be quite clear from numerous notes, starting immediately after the publication of the 1925 and 1926 articles and parallel to the revision of the 1928–31 lecture notes, is that Sraffa became convinced, from the very beginning, that in the second part of the nineteenth century an *aberrant distortion* had taken place in the development of economic theory. From 1870 onwards, dominant (marginalist) economics had caused a change in the content of the whole subject, with respect to what it used to be previously. More precisely, Sraffa found that since the 1870s, economic theorists continued indeed to use the same vocabulary, the same language and terms of reference as their predecessors, but the underlying concepts had undergone a 'terrific' change. Sraffa is astonished: did not Smith and Ricardo on the one side and the marginalists and Marshall on the other speak the same English language? Why does one not realise that the actual content—the concepts behind the same words—has been twisted to mean entirely different things? There is an 'abysmal gulf' between the marginal economists' writings since 1870 and those of the economists of the beginning of the nineteenth century.² The basic problem is not, or not only, a question of a different theory. We are not simply facing a question of 'marginal theory' versus 'classical theory', as one may be inclined to think. For Sraffa, marginal theory is an aberration.³ There exists, for him, a sensible economic theory and an aberrant economic theory. The change of the name itself-from the Classics's 'political economy' to Marshall's 'economics'-is there to 'mark the cleavage' and 'Marshall's attempt to bridge over the cleavage and establish a continuity in the tradition is futile and misguided'.⁴ Sraffa is convinced that one must discard the aberrations and go back to an economic theory that is sensible, true and reasonable: the economic theory that existed before the 1870s.

This first stream of thought in Sraffa's notes would appear therefore to belong to the *history of economic thought*.

2.2 Second stream of thought

From what is said above, Sraffa appears to be convinced that it is a question of absolute priority and necessity to develop a ruthless critique of the aberrations brought into existence by marginal economic theory. The bulk of his notes, reflections and comments are in this direction. They form an impressive set of critical arguments and in this Sraffa really reveals himself as an exceptional critical mind. The Sraffa notes provide a determined, reiterated, punctilious set of criticisms of the economic theory that have come into being since 1870. Within this critical stream of thought, one can find many substreams. Since the field is immense and the notes are numerous, I shall mention only four themes that repeatedly recur as the specific targets of his poisonous arrows: (i) the marginal theory of production and distribution; (ii) the theory of value (which the marginalists call price theory); (iii) the theory of marginal utility; and (iv) the theory of interest, when interest is presented as a reward for abstinence (his remarks on this subject are particularly caustic).

² See S. P., D 3/12/4, f. 10 and f. 14. Throughout this paper, the reference S. P. is to the *Sraffa Papers* in the Wren Library. I shall use first the symbols S. P. followed by the section (a capital letter) and the reference numbers. For specific references to the subject dealt with here, and for brevity, excerpts can be seen in documents 3 and 4 reproduced on pp. 195–7 of Pasinetti (2007).

³ For further details on this problem see also 'The baffling 1870s, Section 6 of ch. I in Pasinetti (1981, pp. 11–14).

⁴ The citations are all in S. P., D 3/12/4 mentioned above.

This second stream of thought in Sraffa's notes is thus aimed at *a critique of dominant economic theory*. It is by far the most extensive and prevailing stream of thought in Sraffa's notes, especially in the early periods.

2.3 Third stream of thought

A third strand of arguments unfolds as a logical consequence of the previous two. For Sraffa it is absolutely necessary to return to the point where sensible economic theory stood, i.e. to the point where its development was interrupted and distorted. It is necessary to return to the 'political economy' of the physiocrats, Smith, Ricardo, Malthus and Marx. One must resume genuine economic theory at the point where it was discontinued. And one must proceed in two directions: (i) to cleanse it of all difficulties and incongruities that the classical economists (and Marx) had not been able to overcome; and (ii) to go on and develop the relevant economic theory as this should have evolved from Petty, Cantillon, the physiocrats, Smith, Ricardo, Malthus and Marx. This natural and consistent flow of ideas had suddenly been interrupted and buried under the all-invading, submerging, overwhelming tidal wave of marginal economics. It should be rescued.

This third stream of thought appears therefore, at last, as a *constructive stream of thought*. For our purposes, this would appear to be the most interesting and helpful part of the resumption of Sraffa's approach, but it cannot obviously be resumed properly if the other two strands are not preliminarily investigated and understood.

3. An impossibly grand research programme

The three streams of thought sketched out above make up such a huge research programme as to frighten anybody who might think of carrying it out in isolation. Yet Piero Sraffa, at the beginning, seems to have aimed at doing precisely that. One can see such a programme as showing up at the time of his coming to Cambridge and more clearly at the stage of the revision of his (still unpublished) *Lectures on Advanced Theory of Value*, i.e. in the years 1928–31. But it must not have taken long for him to realise the sheer impossibility of bringing such an ambitiously grand research programme into actual shape. The contrast between ideal aims and realistic possibilities begins to emerge strikingly from his notes, while he is preparing the amendments to his *Lectures on Advanced Theory of Value*. These *Lectures* had all been handwritten in 1927. They were delivered in the three subsequent years, with changes and amendments, which one can find added, in his clear hand-writing, on the manuscript, with clearly perceptible increasing dissatisfaction.

The sheer fact of being compelled to lecture stimulates Sraffa's mind to the limit of endurance. One can see from his critical notes that he goes into depth, he goes into analysis, he goes in extension. Never does one find him going towards a synthesis. Thus he writes notes, which are essentially critical and provisional. Apparently, these notes are for himself, but maybe he had begun quite early to look ahead and hope that in the future someone might pick them up. (One could understand in this way also his care in marking them with a date.) Criticisms add themselves to criticisms and to the critique of criticisms.

It is a fact that, at a certain point, even delivering his *already written-up* lectures becomes for him an excruciating experience. It must indeed have become a hard task for him to guard himself from frustration.

We can infer that Keynes's intuition was sharp enough to realise that Sraffa was in a serious predicament, without perhaps understanding clearly the basic source and wide extent of his drama. In any case, Keynes is sufficiently impressed to become convinced that in some way somebody or something should come to the rescue. Thus, Keynes manages to convince Professor T. E. Gregory of the LSE to withdraw from his already signed-up agreement with the Royal Economic Society to collect and edit the works and correspondence of David Ricardo. The contract is transferred from Gregory to Sraffa: a real blessing. God knows what Sraffa would have done otherwise.

At that point, Piero Sraffa is relieved. He resigns his Cambridge lectureship so as to stop the nightmare of delivering lectures and he immerses himself, for the following 30 years, into his newly acquired task—a task which to external observers appears, from that point on, his major concern. Behind the scenes his principal grandiose research programme is temporarily put aside. Not entirely, though. If nothing else, he takes the opportunity to clarify to himself and to clear up the incongruities in classical economic thought. This merges well with what I have called above his third stream of thought or his 'constructive' strand of thought.

Sraffa becomes so aware of the relevance of Ricardo's works to his research programme that when, in 1941, the bulk of Ricardo's writings have gone to the printer (to remain there for years, owing to his difficulties in writing the introductions and then owing to the discovery of new documents, as will be noted below), he goes back to his programme and begins to shape up a new phase that, from the notes, now appears as leading him to concentrate on the correct formulation, in terms of equations, of at least some of his 'classical' propositions. This is quite evident in his 1941 notes, where one can see his earlier thoughts being resumed at the point where they had been left. In fact he had already tried to formulate his theory in terms of 'equations' as early as in 1928. He had even shown such equations to Keynes. This event is mentioned at many points in the drafts and then, though in a slightly more diluted form, in the published Preface to his book. But in the late 1920s he had barely been able to satisfactorily go beyond the 'equations without a surplus'. In 1941–44 he really makes a breakthrough. With the advice, not always followed and actually sometimes disputed, of Abram Besicovitch, he succeeds in correctly formulating the equations with a surplus and with labour explicitly introduced,⁵ while discovering the notions of (i) a maximum rate of profits as independent of prices, (ii) basic and non-basic commodities, and (iii) the 'standard system'. These results really represent a remarkable achievement. Obtained in isolation and silence, they will be included in the first part of his book, 20 years later. But at the time they absorb all his efforts. There is very little else he can do on the rest of his original research programme. He goes back, now and then, to his previous notes and adds some comments or self-criticism or further reflections. Not much more than that. As a consequence, the horizon of his research programme gets drastically restricted. As he proceeds he is excited by the remarkable properties he is discovering in the mathematical formulation of his equations. But this absorbs time. He is compelled to postpone or cut down the other aspects.

Precisely at this point another interruption comes in his way. Unexpected events, during the war, lead Sraffa to take advantage of an exciting discovery of a different

⁵ Giancarlo de Vivo (2004) confirms this in his detailed analysis of Sraffa's 'path' to the final formulation of the equations of his book.

sort. In July 1943, by chance, a locked metal box containing a considerable number of earlier missing Ricardo papers, actually the whole series of his letters to James Mill and other manuscripts, is unexpectedly found at Raheny, County Dublin. As soon as Sraffa is informed and becomes aware of the discovery, he gets so excited as to decide—in spite of all the difficulties connected with the war, but at the same time by taking advantage of Keynes's connections-to leave immediately for Dublin. On his return, he has no hesitation in deciding that he must rethink the whole layout of the plan of publication of Ricardo's Works, even though the volumes are already in print! Increasingly, especially from 1944, his concern is shifted away from his theory notes. Very rapidly, his energies are fully diverted to the task (including the excruciating experience of writing the Introductions, with the collaboration of Maurice Dobb) required to restructure and then to carry Ricardo's volumes I-X to actual publication (1951–55). He could hardly have done otherwise, under the mounting pressure of the Royal Economic Society for the long-overdue publication of a work that had been in print for more than 10 years. His energies are absorbed by this purpose, almost fully, from 1945 until 1955 (with the added misfortune of time forcedly lost as a consequence of a mountaineering accident in Norway⁶).

When, in the end, all Ricardo's works are published (with the only exception of the indexes, which were to remain in the pipeline of publication until 1973), Sraffa finally does go back and resume his theoretical work, as it was left in the 1940s. From 1955 to 1960, when nobody would have expected it, he succeeds in setting together enough propositions to be able to complete and at long last publish a book. We all know it well: a 99-page book, amazingly dense in concepts, terse and essential, extraordinarily compact and disconcertingly cryptic—*Production of Commodities by Means of Commodities*. Sraffa abstains from making any claim. In the subtitle he presents it as no more than 'a prelude to a critique of economic theory'.

4. What fraction of the original programme?

What fraction of the original programme and, most of all, which aspects of such a programme have eventually come to fruition? This becomes an irrepressible question at this point. The richness of the existing manuscripts can give us at least some idea of the wide gap that has grown in time between the original intentions and what Piero Sraffa finally actually published.

First of all, one must record with sadness that Sraffa abandons the aim of publishing anything on the history of economic thought. This is by itself an extraordinary decision, if we consider his original intentions. An idea of the breadth of the original purpose may be seen from a very clear and telling scheme⁷ of how he sees the development of economic thought from Petty to Marshall. In the same folder, one finds a page—headed 'Principio'—giving his intended plan of exposition.⁸

The 10-year interruption that follows, due to his ground work for the edition of Ricardo's *Works and Correspondence*, induces him—as one may clearly perceive from the post-war notes—to make a severe reassessment. His original grand programme—left

⁶ The date of the accident is noted in Sraffa's *The Cambridge Pocket Diary* 1951–52 as Friday 1 August 1952.

⁷ See S. P., D 3/12/4 f. 10 (1927). An excerpt can be seen as document 4 in Pasinetti (2007, pp. 196–7).

⁸ See S. P., D 3/12/4 f. 12. An excerpt can be seen as document 5 in Pasinetti (2007, p. 197).

aside for 10 years—undergoes a radical, down-to-earth reconsideration, presumably in view of a more realistic awareness of what can be done, given the effort and time absorbed by the setting together of a satisfactory formulation of his equations. In a note, which in the Sraffa Papers is among the post-1945 notes, we find a scheme headed '?Preface' [sic],⁹ where Sraffa gives an explicit account of the cuts he has decided to make with respect to the originally intended scheme.¹⁰ But the restructuring does not stop at this stage and goes on and on, as one may realise by comparing what is said in the already mentioned '? Preface' with what one finds in the final publication.¹¹ Ouite surprisingly, in the end, nothing explicit remains on the history of economic thought! Only indirectly do we find brief (though important) fragments pertaining to the history of economic thought in the 11-volume edition of Ricardo's Works. In Production of Commodities by Means of Commodities (Sraffa, 1960), all that one can find is a two-and-a-half-page appendix called 'Appendix D-References to the Literature' (Sraffa, 1960, pp. 93–5). And that is really all. It seems incredible, if we think that these two-and-a-half pages are what is actually published on the history of economic thought by a person who is considered to be one of the greatest scholars in the field.

The same process of a progressive restriction of horizon also comes to affect the major stream of Sraffa's work: the one referring to the critique of current economic theory. It is indeed astonishing to realise that, in the end, no explicit critique of marginal economic theory remains (with the exception of very short bits here and there, such as the one on the average period of production), though the concern with this critique is the major objective that Sraffa has had in mind since the beginning. A hint is given in the opening sentences of the Preface to his book. He states: 'It is ... a peculiar feature of the set of propositions now published that, although they do not enter into any discussion of the marginal theory of value and distribution, they have nevertheless been designed to serve as the basis for a critique of that theory. If the foundation holds, the critique may be attempted later, either by the writer or by someone younger and better equipped for the task' (Sraffa, 1960, p. vi). Consistently, he subtitles the book: 'Prelude to a Critique of Economic Theory'—an implicit confession of his awareness of remaining very far away from what his manuscripts reveal to be his original targets. At the same time, his last sentence just cited reveals the beginning of his opening up to the hope that some people of the younger generation may follow his lead and carry on his (originally conceived) task.

One must conclude that, as far as actual publication is concerned, what have been called above the first and second streams of thought in Sraffa's original programme—really two major strands of thought in his notes—have, in the end, been abandoned.

It sounds paradoxical—if one thinks of Sraffa's well-known powerful, critical mind—that he should decide in the end to leave critique aside altogether and go straight on—and in an amazingly concise way—to what has been singled out above as the third stream in his thought: the constructive stream of thought. But even this part of his analysis is by no means an all-comprehensive type of investigation. Very significantly and quite explicitly, he narrows it down to what, in presenting his book,

⁹ See S. P., D 3/12/43 f. 4. An excerpt can be seen as document 6 in Pasinetti (2007, p. 198).

¹⁰ See reference given in footnote 9.

¹¹ There is a witty letter from Raffaele Mattioli to Piero Sraffa, dated 15 March 1955, revealing that they had talked about the intended resumption of Sraffa's project and the drastic cuts that needed to be made. Mattioli writes (my translation from Italian): 'I hope you have succeeded in the past 30 days to reduce to half a kilogram the 20 kilos of paperasse ... and I wish you to write the first rough draft of the "modest little book". Keep me informed' (S. P., D 3/11/83, f. 6).

he defines as 'pure economic theory'. And it sounds almost unbelievable that, after scolding Marx in his earlier notes¹² for not having presented, first, a historical explanation, thus being the cause of his not being understood, he should do exactly the same. Albeit much worse: not only by dropping his historical conception of the evolution of economic thought, but also by leaving any critique of current economic theory aside altogether; and on top of that by using an extraordinarily compact method of exposition, compressing his arguments to the limit of incomprehension. No wonder the result has been found puzzling, cryptic and, by some people, even obscure.

The state of Sraffian understanding has somewhat improved since. Many economists of the younger generation have not disappointed his hopes. His constructive contributions to the analysis of the relations between value and income distribution, in a most general production economic system, have by now been perceived. His analytical results concerning the standard system and the relations between prices and income distribution have been widely illustrated. Many of the proofs concerning the remarkable properties of his system of equations (such as uniqueness, non-negativity of solutions, joint production with fixed capital and land as special cases, etc.) have been reformulated with the help of powerful mathematical tools (such as Perron-Frobenius theorems for non-negative matrices). Again paradoxically, this improvement in understanding his achievements is largely due to an explicit use of mathematical tools for which Sraffa had so much reluctance.¹³ Indeed, it is precisely due to the use of mathematics that many further analytical problems have kept on being clarified, in a literature that has been expanding. Let me mention, among other offshoots, the association of basic and non-basic commodities with the structure of irreducible and reducible matrices; the (Marxian) problem of (analytical) transformation of 'values' into prices of production and the opposite (symmetric) process of transformation of prices of production into 'values'; the reduction of prices to dated quantities of labour; the substantial development of the analysis of joint production;¹⁴ the analytical subdivision of an economic system into as many subsystems as there are final commodities; and their relation to an equal number of vertically integrated sectors.¹⁵ The list could go on. Moreover, it must at least be mentioned that a slim, seven-page last chapter of his book has proposed a highly original analysis of the switching and reswitching of techniques. Precisely, this short chapter was the igniting spark of a vast and heated debate on capital theory in the 1960s and 1970s. At the same time, his Introductions to Ricardo's Works have opened up the way to a clearer and deeper understanding of classical economic theory than has ever been the case before.

But precisely *because his analysis* was not preceded by a presentation of his conception of the historical evolution of economic thought and by his critique of marginal economic theory, *his constructive efforts are still far from being fully understood*. Many economists, even among those basically sympathetic to his approach, remain in a state of dissatisfaction.

Most of all, the part of Sraffa's analysis that would seem to have remained incomplete is the one concerning the role of the physical quantities of the commodities that are produced and of their movements through time. One can understand quite well how prices

¹² See S. P., D 3/12/11 f. 35. An excerpt can be seen as document 2 in Pasinetti (2007, p. 195).

¹³ See Pasinetti (2003).

¹⁴ See Manara (1968) and then, much more extensively, Schefold (1971).

¹⁵ See Pasinetti (1973).

and physical quantities remain separated in classical economic theory and, consistently, how they remain separated in Sraffa's theoretical scheme. But Sraffa refuses to go ahead on these problems. In his published 'propositions', the physical quantities are taken as given. So much so that some critics have (mis)interpreted his system as being *only a half-system* (concerning the price side but not the quantity side of the economy). To dispel this misinterpretation, one should face the problem of dealing with the physical quantities. In a much-quoted letter to a student who was asking illumination from him on this point, Sraffa replied that his analysis was limited to taking a 'photograph' of an economic system, as this actually can be observed at a certain point in time.¹⁶

Yet one cannot refrain from asking what conception Sraffa had of the economic movements of physical quantities, i.e. more specifically, of the dynamics of an economic system. It is tempting to make comparison with von Neumann's scheme or with Leontief's dynamic model to try to gather some clues. But in spite of the analytical similarities with Sraffa's 'standard system', von Neumann's approach appears inappropriate and so does Leontief's. Sraffa does not even mention von Neumann's model, nor does he mention Leontief. Those who had the opportunity of putting questions to him on these similarities know Sraffa's negative responses. Von Neumann's and, even more so, Leontief's approaches are quite alien to his conception of the movements of an economic system through time.

What really is then Piero Sraffa's conception? It is not easy to give a satisfactory answer to this question. In Sraffa's early notes one finds some hints at the problem of 'closing' the system, in terms of what wages and profits could buy. But these are passing and incidental remarks (or so they appear to me). My impression is that, on these aspects, the enormous mass of Sraffa's notes is still not sufficient to reveal any clear direction. It may well be that, in the end, he simply lacked time to apply his mind to these problems. Personally, I am convinced that, while remaining within the bounds of what Sraffa calls 'pure economic theory', it is not enough to take a still photograph of an economic system as it appears at a given point in time. One should also be able to proceed, so to speak, to the 'filming' of the movements of the economic system through time.

There is not much choice among alternatives here. My personal conviction is that the only direction consistent with all this and with Sraffa's line of thought lies in a conception of the economic movements through time in terms of *structural economic dynamics*. This is the direction in which I, personally, have consistently decided to go, since the very beginning of my association with the *Cambridge School of Keynesian Economics*.¹⁷ But I must stress that the question remains wide open and, I fear, it goes beyond the reach of Sraffa's manuscripts.

5. Concluding remarks on Sraffa and (or versus?) Keynes

The present 'bird's eye view' exercise on Sraffa's manuscripts may well suffer from a somewhat hasty drive to arrive at least at some sharp conclusions. But it has been difficult for me not to be deeply impressed by the realisation of the drama that must have been lived through by this remarkable man, in isolation and silence. And I thought that taking a clear, even if controversial, stand would be the most helpful option

¹⁶ The letter is in S.P., C 294/2.

¹⁷ That is, since my Cambridge PhD thesis (Pasinetti, 1962).

I could offer. It would be interesting for me—and I am sure for all scholars interested in the perspective for the future emerging from Sraffa's works—to know the opinion of the other members of the original group of research students mentioned at the beginning.

No doubt an evolution in Sraffa's attitudes did take place in the course of his life, but—I am now convinced more than ever—not in his basic thoughts and convictions. From his notes one can clearly perceive the long process: from an early volcanic eruption of never-ending criticisms of current economic theory, within a solid conceptual framework of the historical development of economic thought-surprisingly concealed even from his friends-to more mature reflections and a search for a distinction between those traditionally held propositions and concepts that could clearly be shown to be lacking logical foundations and those that should be treated with great circumspection, given the prevailing widespread hostility towards classical and Marxian views; to a final extra cautious attitude that led him to concentrate his published work on a concise nucleus of unassailable analytical propositions. But his remarkable final results—it seems to me—point in a double direction: (i) they can indeed be used, without being accused of ideological prejudices, for a critique of marginal economic theory, as he explicitly states; but also (ii) they can provide a solid logical basis—the starting seed we might say-for a reconstruction of economic theory. Because of the strikingly wide contrast between the huge amount of information available from Sraffa's unpublished notes and the tiny concise material that he finally has decided to publish, the exercise so far carried out brings into sharp evidence the vital importance of Piero Sraffa's manuscripts.¹⁸

But precisely here lies the conundrum. Which relations can one see between the plenty (of notes) and the scarcity (of published results)? Quantitatively—as has been stressed above-the contrast is enormous. But is it also so qualitatively? My answer is a definite no. What has been published—it seems to me—fits perfectly well into the initial grand scheme. The overall, wide spectrum of subjects, historical interpretations, evaluations of approaches, criticisms covered by the notes and, finally, the (limited) attempts at a reconstruction, can perfectly be put together in a logically comprehensive scheme, provided that we are prepared to step on to a methodological approach that seems to me of the greatest importance. We should note that Sraffa chooses to concentrate on a narrow but at the same time on the solidest and permanent part of his theoretical framework, i.e. on the strictly basic foundations of his analysis. In Production of Commodities by Means of Commodities he does not rely on any institutional set-up, he does not make reference to any historical context, he does not mention any kind of 'economic agent'. He carefully avoids making any assumptions on human behaviour, on market structure, on competition, on returns to scale. He even avoids taking an explicit stand on the distribution of income, for which he does not commit himself to the way in which the rate of profit (or alternatively the wage rate) is determined. The rate of profits is simply considered as an independently determined variable.

Because his basic 'pure economic theory' is one that does not depend on particular institutional assumptions, it enjoys a life of its own, at the very *foundation level* of economic theory. And Sraffa is confident: 'If the foundation holds [he states in his

¹⁸ There are many signs (which I have given at various places in my works) that Piero Sraffa was himself aware of the importance of his manuscripts.

Preface] the critique—but, we may also add, the reconstruction of economic theory can be attempted later.' (Sraffa, 1960, p. vi) There is no concealing that what is hinted at here is a really formidable task. Logically, it is not even one single task; it consists of at least two separate tasks. The 'impossibly grand programme', as I have called it above—that can be detected at the beginning of his mass of notes—is really spanning round 360 degrees: over history, over the evolution of economic thought, over the economic institutions. It is in fact—as we may now realise—a task that we can constantly find in the background of all the efforts attempted by his Cambridge colleagues, at various stages, in various parts, through many aspects—by Keynes *in primis*, but also by all the members of the Keynesian Cambridge group. Not surprisingly, their efforts could never satisfy Sraffa. Towards his colleagues—as well as towards his own thoughts—he was always exercising the most critical and the so much appreciated powerful force of his intellect.

And yet—from the point of view at which we have put ourselves here—this is by no means the whole story. If the analysis carried out above is correct, there is the task concerning also the *foundational aspects* of economic analysis that still remains to be completed. We should not be complacent about this, nor should we nurture illusions. This is the less satisfactory part of any work that might be attempted to be carried out by an exclusive reliance on the *Sraffa Papers*, because—as hinted at above—it seems to go beyond the content of the *Papers* themselves. Whatever investigation one may carry out on the *Sraffa Papers*, one cannot pretend to find in them what is not there.

It is up to the economists of the post-Sraffian generation to construct that part of the *foundations of economic theory* that Sraffa could not complete.

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