

**Socialism and
Marginalism in
Economics
1870–1930**

Edited by
Ian Steedman



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The rise to dominance of marginalist economics coincided with a major increase in the spread of socialist ideas. As many socialist and Marxist thinkers were preoccupied with economic questions this was scarcely a development they could ignore. Socialists either had to defend Marxist economics against marginalist criticism or show that socialism and marginalism were compatible.

This volume explores the varied socialist responses in a number of major European countries including Italy, France, Russia and the German-speaking countries. No one response prevailed: some socialists defended Marxist economics and rejected marginalism; others criticized Marxist economics 'from within' without adopting marginalism to any significant degree. Yet others sought to effect a theoretical compromise or amalgam, or, again, to advocate an outright acceptance of marginalist economics and its use in arguing for socialism. The first chapter presents the general findings on a 'cross-country' basis, while the remaining eight chapters provide detailed case studies.

The relations between marginalism and socialism are shown to be highly complex and variable, and this book pays equal attention to the differences and the common themes. It also highlights some of the many, innovative contributions to 'classical' political economy, some of which were only to be rediscovered after many decades.

Ian Steedman is Research Professor in Economics at Manchester Metropolitan University. He has been much influenced by Italian economists. He has worked in trade theory, capital theory and the history of economic thought (especially Ricardo, Marx, Jevons and Wicksteed). His books include *Marx after Sraffa*, *Trade Amongst Growing Economies* and *From Exploitation to Altruism*.

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SOCIALISM AND MARGINALISM IN ECONOMICS, 1870–1930

A brief overview

*Ian Steedman**

The post-1870 period saw the gradual spread and strengthening of marginal analysis within economics; to recognize this is neither to imagine that marginalism swept the board overnight nor to commit oneself to any strong view about the existence or otherwise of a ‘marginalist revolution’ in economics. That same period witnessed the growth of socialist ideas and movements and, given the importance of economic issues to socialists, it is hardly surprising that the marginalist approach to economics was widely discussed by them. Equally, of course, a number of marginalist economists discussed certain socialist ideas, not least the economic theories stemming from Marx. Indeed some socialists (often Marxist socialists) were prone to talk of socialism *versus* marginalism; a number of examples will emerge from the following chapters. Overall, however, those chapters will show why our title—socialism *and* marginalism—is an appropriate one, for the mutual relationships involved were complex, sometimes of conflict and sometimes of complementarity.

Any notion of a simple, straightforward relation between socialism and marginalism is likely to derive at least part of its (apparent) strength from oversimple characterizations, e.g. Marx’s objective theory versus subjectivist marginal utility theory. The reality, of course, was always far more complex. On the one side, marginalism was not in fact a fully finished and homogeneous body of economic analysis; rather it took different forms, offered alternative emphases, was still developing and, indeed, witnessed its own internal disagreements (cf. Wicksteed (1905) on Professor Marshall and his ‘school of apologists’). Socialism, even more obviously, was a positively protean conception which it would take a whole volume to characterize; here let us simply conjure up the images suggested by such labels as egalitarianism, collectivism, Guild Socialism, syndicalism, the planned economy, anarchism, Fabianism, Social Democracy, the Second International—all of which, with many others, form part of the mosaic of

‘socialism’ in 1870–1930. Nor had Marxism yet become a monolithic stem of doctrine; the following chapters will draw attention both to disagreements between Marxists and to Marxists who explicitly rejected significant aspects of Marx’s economic theory. But if marginalism, socialism and (within socialism) Marxism were each heterogeneous—and they were—it is unsurprising that the relations between them cannot be captured by descriptions which are both simple and truthful. Nor, of course, is it implied that those relations, however complex, were unchanging throughout our period; the following chapters will point up various changes, both in the ideas of specific individuals and in broader tendencies. It will be clear, then, why no rigid definitions of marginalism and of socialism (or indeed of Marxism) are imposed throughout this volume. Nor will any very sharp boundary between academic and political writings be observed, even though the weight of the discussion will certainly incline to the former category. The focus of that discussion being clearly theoretical—relating principally to the theory of value and distribution—it would go beyond the scope of the following essays to assess whether the debates which they recall had significant wider political and historical effects—even if chapters 3 and 4 may suggest some such effects in Denmark and in Sweden.

The following essays cannot, of course, pretend to provide an exhaustive coverage of the relations between socialism and marginalism in economics, even for the period 1870–1930. They focus, as will be seen, on the German-language literature, on Denmark, Sweden, Italy, France, the Netherlands and Russia. Yet these case studies already show both, on the one hand, a variety of interactions between marginalism, socialism and (more specifically) Marxism and, on the other hand, a number of common themes which emerge in one country after another. This latter phenomenon may have arisen from the intrinsic logic of certain arguments; or from the fact that, as emerges from several chapters, many of the participants in the relevant discussions were fairly well read in national literatures other than their own; or via other processes. Yet whatever may have been its source(s), the phenomenon itself suggests that examination of the comparable debates in other countries might not reveal many new general features, as opposed to fascinating specific details, of the relations between socialism and marginalism. That would be my overall view, for example, with respect to the case of Britain; see, e.g., Ellis (1930), Steedman (1989), Thompson (1988). But it would naturally be of great interest to be shown to be wrong in this matter and further case studies, relating to whatever country, could only be welcomed.

Because the essays in this volume necessarily focus sharply on socialism and marginalism and can provide only very limited background material, it will be helpful if the reader recalls throughout both some of the wider cultural and historical contexts and the fact that both socialism and

marginalism may properly be seen as relatively minority movements within those wider contexts; our sharp focus is not intended to set our subject matter out of all proportion!

SOME COMMON THEMES

Since the following essays adopt a national, or language-use, standpoint for reviewing the relations between socialism and marginalism, it may be useful here to present a brief overview of certain themes which emerge, cutting across the 'national' perspectives of the essays. Of course, no attempt will be made here to reproduce all the rich detail to be found in the essays themselves. We shall simply highlight both the variety of relationships between socialism and marginalism and the fact that common themes did indeed arise internationally; we certainly shall not seek to impose any simple pattern on the findings of the essays or propose any neat and simple theses.

One strand of the relationship between socialism and marginalism was indeed that of opposition; examples will be found below from Germany, Italy and Russia, for example. More precisely, though, this was generally a perceived opposition between marginalism and specifically Marxist socialism, rather than socialism in other senses. Even if Croce declared that marginalism and Marxism were simply non-commensurable (chapter 5), Marxist authors often responded very negatively to marginal theory—or, more exactly, to marginal utility theory. The commonly voiced objection to marginal theory that it was 'subjectivist' (in contrast to the 'objective' cast of Marxist theory) clearly could not have been made so readily against much of marginal productivity theory (whatever its strength or weakness in relation to demand theory). Such opposition was not all one way, of course. Wicksell, for example, was a radical reformer, an egalitarian and no 'economic harmonist', even if he disagreed with the Swedish socialists over population questions; yet his radicalism did not prevent his being hostile to Marxist economics.

It was not necessary to be a marginalist, of course, in order to have a critical attitude to at least some of Marx's economics—even if an awareness of marginalist arguments might have coloured that attitude in more or less direct ways—and the following essays set out a number of criticisms of Marx's theory made by socialists and even by Marxists. Thus Loria in Italy and Bortkiewicz in Germany sustained quite complex relationships with both marginalism and Marxism and (as is well known in the case of Bortkiewicz but less well known in the case of Loria) presented non-marginalist theories of the rate of profit which differed from that of Marx in significant respects. (It is noteworthy that Loria paid far more attention to the role of land than many 'non-orthodox' economists have done. Bortkiewicz, like Dmitriev, strongly defended Ricardo and Bortkiewicz

indeed insisted that Ricardo's theory of profit was superior to Marx's incertain respects.) In a somewhat similar spirit, such authors as Leontief, Remak and Charasoff developed non-marginalist theories of profits and pricing which could be seen as criticisms of Marx's theory and/or as improvements thereof. A common feature of these developments, made in a Russian/German milieu, was of course that they embodied a 'surplus' view of profits whilst making no use of any kind of labour theory of value; they may thus be seen, in part, as the formal expressions of an approach which had already emerged earlier in our period. In Italy, Graziadei had stressed that a Marx-like view of economic surplus and of exploitation could be sustained quite independently of the labour theory of value. Rejecting both this latter and any marginal productivity theory of profit, Graziadei insisted that profits could and should be seen in terms of a surplus of physical output, without any need for a theory of value. In Germany Conrad Schmidt (1897) adopted a similar stance, while in Russia Tugan-Baranovsky pointed out, as did Graziadei, that profits could be positive in a fully automated economy, so that 'surplus labour' could not possibly be their fundamental source. Rather, that source was to be located in the existence and causes of a surplus of physical output.

Tugan-Baranovsky was also one of those who argued that Marx's strength lay in his sociology rather than in his economic theory, this view being shared by his compatriot Struve who suggested that the Marxist sociology of exploitation and the existence of an economic surplus should be retained but without there being any need for a value theory. Karleby, in Sweden, and Kuyper, in the Netherlands, went 'further', maintaining that Marxist sociology and exploitation theory should be retained and combined with subjectivist economic theory.

Thus, in their different ways, a number of socialists in different countries—to those mentioned above one might add Coletti in Italy—saw the labour theory of value not as the theoretical backbone of socialist thought but as a positive fetter on the development thereof. Graziadei, for example, was emphatic that intellectual honesty and the strengthening of socialism both required that the labour theory of value be left behind. (Presumably he would have accepted Böhm-Bawerk's remark that good socialist thinkers will seek for a theory with a future. Hilferding and others responded quite differently, of course, by seeking to defend the labour theory of value against such critiques as Böhm-Bawerk's.)

We may turn now towards those aspects of the relationship between socialism and marginalism which involved either a stress on the complementarity of marginalism and more traditional socialist analyses or even an insistence that marginalist economics should simply be seen as *the* form of economic analysis which socialists should use in order to argue their case. In Russia Tugan-Baranovsky, for example, claimed that Marxist and marginalist economics were complementary, not contradictory. More

specifically, he noted—as did Eduard Bernstein and Conrad Schmidt, in Germany, and others—that with respect to value theory relative prices would often be equal both to relative marginal utilities and to relative marginal labour costs; thus the relations $(p_i/p_j)=(\mu_i/\mu_j)=(\partial L_i/\partial Q_i)/(\partial L_j/\partial Q_j)$ in a presumably obvious notation, would often hold simultaneously. Indeed if labour costs were constant then $(p_i/p_j)=(\mu_i/\mu_j)=(l_i/l_j)$ would often hold good (l_i being the average and marginal labour cost of good i), with both the marginal utility theory and the labour theory of value making a correct statement about relative commodity prices. (The reader may wish to set out assumptions sufficient to make good this argument, which was of course familiar to both Jevons and Wicksteed, for example.) In Italy such authors as Conigliani, Ricca-Salerno, the young Arturo Labriola and Loria tended to combine Marxist and marginalist analyses in discussing issues of concern to socialists; see for example Loria's marginalist analysis of a monopsonistic labour market (chapter 5). The Dutch socialist writers Kuyper and Cornelissen went further, making full use of marginalist economics and indeed displacing from influence the Dutch Marxists who had ignored it. Like Loria, Cornelissen saw the relevance of marginal analysis for monopoly (monopsonistic) pricing and it is noteworthy that Frank, in Russia, who was later to move closer to marginalism, began by being dismissive of Austrian theory except for its relevance to, precisely, monopoly pricing. (Marxist analysis, based on prices of production and a uniform rate of profit, had never been particularly effective with respect to monopoly pricing.)

Kuyper and Cornelissen were not alone. In Sweden, it was not only the more famous Wicksell who was both a radical and a marginalist: Gustav Steffen—a reformer, moderate socialist and friend of Wicksteed—also was hostile to Marxist economics, saw the importance of demand in price determination and welcomed marginalism. In Denmark too there was no conflict between marginalist economics and social reform and Bing, Petersen and Westergaard employed marginal theory, not least to argue against any 'iron law' of wages and the socially conservative uses to which it was being put. Again, in Germany Bernstein argued that socialists should abandon any hostility to 'Jevonian' economics (like Steffen, Bernstein had spent time in London) and Vleugels insisted that marginalist economics was not 'apologetic' with respect to the capitalist market economy and that it was indeed being adopted by socialist theorists. In Italy, Montemartini and Leone had argued that marginalist methods could be used to examine socialist questions and Leone had warned that socialism was coming to seem anti-'economic science' when, on the contrary, it ought to be employing that 'science'. It need hardly be said that it was within this context that (whatever their politics) Pareto and Barone contributed to what later came to be known as the socialist calculation debate. In France, Sorel, Walras and the group around the *Revue Socialiste* were hardly hostile to marginalism!

As was remarked above, then, the following essays show the relationships between socialism in general, Marxism more specifically and marginalism to have been multi-faceted and changing. In broad terms, however, those varied relationships were not country-specific but were manifested internationally. Many (but not all) of the socialist authors considered below were imaginative and open-minded. It would be contrary to the spirit both of this brief overview and of the volume as a whole to suggest here that any simple and unilateral conclusion is to be drawn from the arguments recalled in the following essays. Yet the reader who bears in mind, whilst studying those essays, the course of subsequent developments in socialist economics may perhaps reflect that much that was learned in 1870–1930 was then forgotten and had eventually to be relearned. Such cultural loss was not, of course, peculiar to the subject in hand.

NOTE

- * I thank the other contributors to this volume for their suggestions concerning this introductory chapter, mostly made at our two-day workshop in Amsterdam in April 1993. We are all indebted to Frank Kalshoven for organizing that enjoyable event.

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MARGINALISM, CLASSICISM AND SOCIALISM IN GERMAN- SPEAKING COUNTRIES, 1871–1932*

Heinz D.Kurz

INTRODUCTION

In this chapter an attempt will be made to summarize the debate between authors advocating some form of marginal utility theory and those advocating some form of labour theory of value or cost of production theory in German-speaking countries in the period after the inception of what may be called marginal theory proper, i.e. subsequent to the publication of Menger's *Grundsätze* (1871), Jevons's *Theory* (1871) and Walras's *Eléments* (1874), and up to the 1932 conference of the Verein für Socialpolitik on *Probleme der Werttheorie* (Problems of value theory). Emphasis will be on the debates in Germany (Deutsches Reich) and Austria.¹ For the purpose of this paper, German-speaking economists include all those who used the German language for their writings. Since in those days German was still a main language in economics, many contributions came from authors who were subjects of neither the German Reich nor the Hapsburg Empire. The discussion will focus attention on the controversy between marginalist economists on the one hand and 'socialists' of various orientations on the other, with exponents of 'classical' economics playing an important side role. The main concern will be with alternative theories of value and distribution.

The structure of the chapter is as follows. The next section prepares the ground for the subsequent discussion in terms of a brief description of the economico-political situation and the intellectual traditions in economics in Germany and Austria, respectively, when our *dramatis personae* entered the stage. We then deal with the reactions of some non-Marxist advocates of what was considered 'classical' value theory to the challenge posed by marginal utility theory, placing special emphasis on the debate between Heinrich Dietzel and Eugen von Böhm-Bawerk. It will be seen that several of the arguments put forward in defence of the labour theory of value as well as in criticism of marginal utility theory were anticipated in these first rounds of

the debate. Next we deal with the attack on marginal utility theory by the German socialist Conrad Schmidt and the controversy between Eduard Bernstein and Karl Kautsky on the usefulness, or otherwise, of the contributions of the ‘psychological school’ to value theory. The fifth section summarizes the main arguments put forward by Eugen von Böhm-Bawerk in his frontal assault on Marx’s theory of value and surplus value after the publication in 1894 of the third volume of *Capital*. The sixth section is devoted to a discussion of Karl Vornberg’s defence of Marx and Rudolf Hilferding’s reply to Böhm-Bawerk. In addition the interventions of some other ‘Austro-Marxists’, including Gustav Eckstein, Otto Bauer and Helene Bauer will be dealt with; emphasis is on the so-called ‘imputation problem’. The next section summarizes the reformulations of the classical approach to the theory of value and distribution by Ladislaus von Bortkiewicz and Georg von Charasoff. Their important contributions were hardly taken notice of both by advocates and critics of the classical approach. This becomes clear in the following sections. The next section sketches briefly the views entertained by Franz Oppenheimer and Emil Lederer, leading economists of classicist-socialist orientation in Germany at the beginning of this century; in addition it summarizes the ‘naturalistic’ approaches to the problem of value and distribution by Wassily Leontief and Robert Remak. The next section turns to three major representatives of the marginalist camp who, though none of them German, exerted a considerable influence on the economics profession in Germany at that time: Knut Wicksell, Joseph Alois Schumpeter and Gustav Cassel. The concluding section contains a summary assessment of the 1932 Dresden meeting of the Verein für Socialpolitik devoted to problems of value theory which saw a clear dominance of the marginalist point of view. The Dresden conference marks a watershed in German academic economics in a twofold sense. First, it documents that after the Historical School interregnum German economics was relinked again with mainstream economics. Second, while one *Sonderweg* (special development) of German economics had come to an end, a new one was just about to begin: that imposed by the so-called *Gleichschaltung* (synchronization) of universities in Nazi Germany.

ECONOMICS IN GERMANY AND AUSTRIA IN THE SECOND HALF OF THE NINETEENTH CENTURY

Economics in Germany and Austria in the second half of the nineteenth century differed markedly in a variety of respects.²

Germany

The impression conveyed in some of the literature on the development of economics in Germany is that the Historical School dominated the subject

for most of the nineteenth century. This is misleading. Two phases can be distinguished which broadly coincide with two phases in the development of the Historical School. Before about 1870 the latter was just one of a variety of strands of economic thought. Major exponents of this 'older' Historical School were Karl Roscher, Bruno Hildebrand and Karl Knies, who combined a vigorous interest in economic theory with a concern for both historical research and practical questions, paying due attention to institutions and cultural differences among nations. In terms of economic theory they elaborated a particular variant of the continental tradition of classical economic thought based particularly on the writings of Adam Smith with a heavy dose of Jean Baptiste Say. Characteristic features of this variant were the absorption of cameralistic ideas and its decidedly subjectivist flavour, with authors such as Karl Thomas, Friedrich Benedikt Wilhelm von Hermann and Hildebrand anticipating, in embryonic form, some of the concepts that were to become prominent after the so-called 'marginal revolution'.³

The years around 1870 marked a watershed in the development of German economics, with the members of the 'younger' Historical School, led by Gustav Schmoller, taking over the profession. Schmoller, Lujo von Brentano and their followers were opposed to the abstract axiomatic-deductive approach of classical economics and the emerging marginalist school. Scholars engaged in theoretical work were attacked for doing the wrong kind of economics. Their theories were said to be at best irrelevant and generally misleading for the solution of the pressing problems of the time. According to Schumpeter (1954b, p. 765n), 'Schmoller once asserted publicly that a "Smithian" was unfit to occupy a professorial chair'. Subsequent to the foundation of the *Verein für Socialpolitik* in 1872, whose long-time chairman he was, Schmoller in a few years became the most powerful and influential economist in Imperial Germany. After positions held in Halle and Strassburg, he was appointed to a chair in Berlin in 1882. There is evidence that around the turn of the century he had a say in almost every important academic appointment in economics in Germany (cf. Pohle, 1911). As a consequence of the rise to predominance of the 'younger' Historical School 'the sense of theoretical work was lost, with the result that even the most simple economic relations were no longer understood' (Schneider, 1962, p. 326). In many places economics was little else than 'a concoction of empiricism and ethics and often it was just prattle' (Preiser, 1950, p. 241). Schumpeter coined the expression 'economics without thinking' to describe this state of affairs.

It would be wrong to assume that the younger Historical School was *per se* anti-theoretical.⁴ Its opposition was directed more against the received doctrines of *laissez faire* than economic theory as such. These former doctrines which centred around the notion of the 'rational' individual implied false abstractions and tended to generate a distorted view of

historical processes, vastly underrating the importance of the centralized nation state in fostering economic and social development and in controlling particularist interests. Most members of the Historical School⁵ combined an aversion against the French revolution and liberal ideas at large with a belief in an étatist, state paternalistic way of coping with economic and social problems. The state, whether the Prussian state and its kings, which Schmoller tended to glorify, or some central authority in the German Empire which was founded in 1871, was to assume responsibility for the well-being of its subjects. It was particularly the *Soziale Frage* and the threat posed by a working-class movement gaining strength which concerned the *Kathedersozialisten* (socialists of the chair), as Schmoller and his followers were also called. Socialist and communist ideas had fallen on fertile ground in the late 1830s and early 1840s, with pauperization affecting larger and larger parts of the Prussian people and social unrest making itself felt in such uprisings as those of the Silesian weavers. In 1863 Ferdinand Lassalle and his adherents founded the *Allgemeine Deutsche Arbeiterverein* (General German Workers' Union), the first German socialist party, followed by Wilhelm Liebknecht and August Bebel in 1869 with the *Sozialdemokratische Arbeiterpartei* (Social Democratic Workers' Party); in 1875 the two parties merged.

In these circumstances, in which an unsolved *Soziale Frage* endangered the social order and the stability of the nation state, a concern with pure theory and, worse, with a theory maintaining that the social good is to be expected from the unfettered pursuit of self-interest was considered anachronistic, if not dangerous.⁶ Engaging in pure theory was regarded as a waste of time in a twofold sense. First, it was illusory to believe that the socialist threat could be fought in theoretical terms only. Second, it prevented resources from being employed in the elaboration of an effective policy of social reform which would alleviate the deplorable lot of the working classes, thereby making them less susceptible to the socialist propaganda. For better or worse, the 'historical-ethical school' made the German economics profession develop a collective sentiment of social responsibility. The name the German association of economists gave itself stands for a programme: *Sozialpolitik*. There is no doubt that the socialists of the chair had an important part in promoting the social legislation effectuated by Bismarck in 1883 (see Ritter, 1989). It is also true that there is no evidence that they opposed the so-called *Sozialistengesetz* (Anti-Socialist Law) of 1878, which forbade the socialist party press and organization.⁷

Austria

Facilitated by a common language, there was of course a lively exchange of ideas between German and Austrian universities and intellectual circles. Yet

in spite of this the intellectual heritage that shaped research and teaching in Austria was markedly different from that in Germany. Most important in the present context, historicism never rose to predominance in the social sciences. The situation did not dramatically change when, with the demise of the Metternich system in 1848, a period of reform began which freed Austrian academic life from the fetters the old regime had imposed upon it. These reforms included the opening of universities to foreign scholars. In the following decades several eminent German economists, including Lujo von Brentano, Adolph Wagner, Lorenz Stein and Albert Schäffle were appointed to chairs at the University of Vienna. While there can be no doubt that this helped to strengthen the historical approach in Austria, it did not crowd out an interest in economic theory. On the contrary, given the stature of Wagner and Schäffle as theorists, these appointments were probably more important for the vitalization of economic theory in Austria than for anything else.⁸

It was particularly via Stein and Schäffle that Austrian students became acquainted with socialist doctrines. Lorenz Stein, later von Stein, was one of the first to write about socialist ideas, particularly of French derivation. When still in Germany he published in 1852 a critical essay on socialism in Germany (cf. Stein, 1852). Schäffle, who held a chair in Vienna from 1868 to 1872, seems to have exerted a considerable influence on the rising generation of Austrian economists, in particular Böhm-Bawerk and Wieser who were among his students. He introduced the Viennese audience to classical and contemporary German economic thought.

Schäffle's 1864 essay 'Bourgeois- und Arbeiter-Nationalökonomie' (cf. Schäffle, 1864) is a response to the heated controversy in Germany between Ferdinand Lassalle and Hermann Schulze-Delitzsch and their adherents about which course the working-class movement should take: should it rely predominantly on the principle of 'self-help' or should it seek 'state help', should it be socialist or liberal? A main concern of Schäffle's in his essay is with clarifying the respective roles of workers and capitalists, and the role of capital, in the production process. He takes issue with Lassalle's view that entrepreneurship is dispensable and should be abolished. Against this he puts forward an argument that foreshadows the view developed later by Böhm-Bawerk in his theory of interest. The argument combines Adam Smith's view of the beneficial effects of the division of labour with Hermann's notion of the 'temporal structure of the economic process' (Schäffle, 1864, p. 285). The entrepreneur, alias capitalist, is said to be needed in order to reap the benefits of the division of labour, since it is he 'who advances out of his capital, in the form of wages, the value of labour's services which are not yet consumable' (ibid., p. 323). Hence it is 'the particular way in which labour's services are temporally structured, in which production is separated in time and space,...that defines both the particular position of workers in the

economy and points out the main reason for the position assumed by entrepreneurs' (ibid., p. 322).

For the different development which Austrian economics took, economic and political factors mattered, too. As regards industrialization, Austria lagged behind Germany. This was one of the reasons why the *Soziale Frage* was less pressing than in Germany. In the circumstances a theoretical response to it was considered necessary, but also sufficient. Another reason was, of course, that the Hapsburg Empire was shaken by several other conflicts which in terms of seriousness compared with the emerging *Soziale Frage*, or were at least felt to do so. It was particularly the problem of nationalities that kept worrying the Austrian government and public. In the war against Prussia in 1866 the Hapsburg Empire had suffered a painful defeat which, in the so-called *Ausgleich* with Hungary, resulted in its transformation into a Dual Monarchy, made up of Cisleithanien (Austria) and Transleithanien (Hungary). The exclusion of Austria from the then nascent German nation state must have been a traumatic experience to many Austrians and created ambivalent feelings towards Germany. The socio-economic problems were put back in the first place, when in 1873 a long boom came to a close, followed by a severe depression. Under the Taaffe government police-state methods were applied to fight social unrest. The working-class movement was suppressed: trade unions were forbidden and strikes were frequently terminated by military action.

There was not a single university in the Hapsburg Empire which had a declared Marxist economist in its ranks. The development of the socialist movement lagged behind that of Germany, with the Austrian Social Democratic Party founded only in 1889. Some Marxism was taught at the *Arbeiterhochschulen* (workers' colleges) (cf. Kauder, 1970, p. 398). Exponents of marginal utility theory on the other hand were extremely successful in establishing their point of view in Austrian universities. It took some time, though. In 1873 Carl Menger was appointed to Schöffle's former chair. In 1883 he published his *Untersuchungen über die Methode der Sozialwissenschaften* which triggered a fierce controversy with Schmoller and his followers, known as the *Methodenstreit* debate (cf. Menger, 1883, and Schmoller, 1883). Whatever the intellectual achievements of this debate, it had two practical effects:

- 1 it made the group around Menger known to the economics profession at large and increased its reputation in Austria, i.e. was of great promotional value;
- 2 it rendered the Historical School in Germany even more rigid and intolerant towards other points of view.

The positive effect on the establishment of marginalism in Austria was felt in the 1880s when many of its leading exponents, some still relatively

young, became *Extraordinarii* or were appointed to chairs. These included Eugen von Böhm-Bawerk, Friedrich von Wieser, Johann von Komorzynski, Emil Sax and Robert Zuckerkandl (cf. Howey, 1960, pp. 161–2). Vienna became the undisputed intellectual centre of the school, with Prague and Innsbruck as important advanced posts.

When in 1904 Böhm-Bawerk was appointed to a chair at the University of Vienna, he like his former teacher Schäffle made the socialist doctrine an object of intellectual discourse. The first seminar he offered was dedicated to the foundations of value theory, confronting the ‘subjectivist’ and ‘objectivist’ point of view. The seminar was attended by, among others, Joseph Schumpeter, Ludwig von Mises, Otto Neurath, Emil Lederer, Rudolf Hilferding and Otto Bauer. To a considerable extent the discussion centred on Böhm-Bawerk’s 1896 criticism of Marx’s value theory (see pp. 32–7). According to the recollections of Mises, the exchange in the seminar was mainly between Bauer and Böhm-Bawerk: ‘Bauer’s brilliant intellect was very impressive; he was a worthy opponent of the great master whose critique had mortally wounded Marxian economics’ (Mises, 1978, pp. 39–40).⁹ Subsequently, several of the seminarists were to take part in the controversy between marginalists and socialists, to which we now turn.

GERMAN ACADEMIC ECONOMICS, MARGINALISM AND MARX: THE BEGINNINGS

The state of affairs in the 1870s

In his monumental *Geschichte der National-Oekonomie in Deutschland* (History of economics in Germany), published in 1874, Wilhem Roscher (1817–94), a leading figure in German academic economics and one of the founders and major exponents of the German ‘older’ historical school, provides in chapter 35 an ‘Overview of the Latest Developments’. The chapter can be considered representative of the view entertained by a large group of German economists; it would be easy to give multiple examples. The chapter contains a eulogy on the *Sonderweg* (special development) of economics in Germany, culminating in the claim that ‘also in the present age, German economics is at least equal to foreign economics’ (Roscher, 1874, p. 1011). This is justified first and foremost in terms of ‘the progress made by those sciences that are based on observation and that long for practical application’ (ibid., p. 1007). While Hermann Heinrich Gossen is not mentioned, Hans von Mangoldt, ‘a somewhat dry, but fine and ingenious head’, is briefly dealt with. ‘His main strength lies in systematising the entire subject of economics and in analysing single economic events.... However, frequently this procedure degenerates into an infertile splitting of concepts’ (ibid., p. 1039). To Carl Menger ‘with his very abstract..., always independent and often fruitful analysis of notions’

Roscher devotes altogether four lines (*ibid.*, p. 1040).¹⁰ Cournot and Jevons are not mentioned in the book.

The chapter has also a few words on socialist authors, including Karl Marx (1818–83) and Johann Karl Rodbertus (1805–75). Section 3 is introduced as follows: ‘During the last three decades *socialism* in Germany has made surprising progress, particularly since the great overthrow and reconstruction of 1866’ (*ibid.*, p. 1020). According to Roscher this ‘progress’ is partly due to the writings of Friedrich Engels whose investigation of the situation of the working class in England, ‘though in many details correct, is on the whole a caricature, which, however, is most effective as a means of agitation and provocation’ (*ibid.*, p. 1021).

Roscher then turns to a brief discussion of Marx’s contribution in Volume I of *Capital* (see Marx, [1867] 1954). ‘The indisputable strength of Marx’, he writes, ‘consists in his profound knowledge of the English literature, legislation and practice,’ which renders the book ‘highly instructive, despite its long-windedly abstract and imprecise mode of expression’ (Roscher, 1874, p. 1021). ‘However’, Roscher continues, ‘theoretically [!] this witty, but not very ingenious man is hardly fit for reducing complicated phenomena to their simple elements. He is prevented from doing this especially because of a strange preference for an almost mythological personification of physical goods.’ The reference is to Marx’s discussion of the exchange relationship between linen and a coat in chapter 1, ‘Commodities’ (cf. Marx, 1954, pp. 66 et seq.). Roscher comments: ‘Is it possible to talk more unclearly, mystically, to obscure more the *psychological* nature of economics?’ (*ibid.*, p. 1022; emphasis added). What is wrong with Marx’s analysis?

The main socialist idea in Marx consists in a relapse to the old heresy of the improductivity of capitals.... From a misunderstood Ricardo he has adopted, like an article of faith that is certain, the doctrine that all value of commodities derives exclusively from the average labour, or rather labour time, needed in their production. If this is true, then it is of course obvious that the value of the capital goods used up in production can only be contained in the value of the new product, and all surplus value must be ascribed to labour.

Yet rather than entering into a discussion of this view, Roscher turns to what he contends ‘is known as the main proposal with which Marx intended to confirm his theory, i.e. the reduced “normal working day”; because in his view capitals are formed out of the surplus of the product over the costs of subsistence of workers. That is, a huge reduction of the total production of the people is to form the beginning of the reform...!’ (*ibid.*, p. 1022).

After a brief remark on the writings of Ferdinand Lassalle, whom he considers a mere popularizer of Marx’s doctrine, Roscher summarizes his

criticism of socialist authors. His main objections read: socialists use history in a ‘tendentious and sophistical’ way; their views are characterized by a ‘doctrinaire abstraction’ and ‘cosmopolitanism that ignores real people, states, cultural stages’ and raises ‘the naive assumption of the equality of all men to a Procrustean levelling mania’; their teaching contributes ‘to the demoralization (“Entsittlichung”) of the lower classes’ and, if successful beyond a certain point, is bound to lead directly ‘into a catastrophe as terrible as the one experienced in the sixteenth century’. He expresses the hope that the working classes will show a sufficiently high ‘degree of true mental sanity, i.e. reason, fear of God, philanthropy and strength of character’ to resist the socialist ideas (ibid., pp. 1024–5).

In 1887 Emil Sax complained about the reception in Germany of Menger’s *Grundsätze*: ‘In every other science a publication with such a content would have triggered immediately the most enthusiastic discussions.... Otherwise in German professional journals, which ignored this research almost completely, a fact that throws a light on the precarious state of contemporary economics in Germany’ (Sax, 1887, p. 28). However, Sax’s judgement is somewhat unfair since at the time of their publication the *Grundsätze* could have hardly been considered to revolutionize economics, nor to have aimed at doing so. This becomes clear on the very first pages of the book. The treatise is dedicated by the author ‘with respectful esteem’ to Wilhelm Roscher, and in the Preface it is stated:

It was a pleasure to me that the field here treated, comprising the most general principles of our science, is in no small degree so truly the product of recent development in German political economy, and that the *reform* of the most important principles of our science here attempted is therefore built upon a foundation laid by previous work that was produced almost entirely by the industry of German scholars. Let this work be regarded, therefore, as a friendly greeting from a collaborator in Austria, and as a faint echo of the scientific suggestions so abundantly lavished on us Austrians by Germany through the many outstanding scholars she has sent us and through her excellent publications.

(Menger, 1981, p. 49; emphasis added)

Reform, yes, but revolution? Certainly not!¹¹ It should come as no surprise that the publication of Menger’s book did not immediately create a widespread sentiment of fundamental innovation in economics in Germany.

Early reactions by non-Marxists to marginal utility theory: Dietzel vs. Böhm-Bawerk

In Germany marginal utility theory was not received with enthusiasm. Indeed, at first there was hardly any reception at all (see Howey, 1960, chs

XV and XVIII, Lehmann, 1968, ch. 4, Wysocki, 1988, and Brandt, 1989). The books by Jevons, Menger and Walras were not given great attention in German economic journals in the 1870s. None of the handful of reviewers expressed the view that these works ushered in a new age in theoretical economics. It was not until Eugen von Böhm-Bawerk's 'Grundzüge der Theorie des wirtschaftlichen Güterwerts', published in two instalments in *Jahrbücher für Nationalökonomie und Statistik* in 1886 and 1887, that the reader of German periodicals was exposed to a detailed treatment of (the Austrian variant of) the new doctrine (cf. Böhm-Bawerk, 1886–87). Böhm-Bawerk's article triggered the publication of several other papers devoted to the theory of value in the same journal, including Heinrich Dietzel's 'Die klassische Werttheorie und die Theorie vom Grenznutzen', which for the first time carried the term 'Grenznutzen' in the title of an article (cf. Dietzel, 1890).¹²

Dietzel's article deserves some attention for the following reasons. Its author attempted to assess marginal utility theory from what he considered to be the 'classical' point of view.¹³ His final verdict on the theory, as paraphrased by Böhm-Bawerk (1892, p. 325), was that in regard to goods that are not reproducible it is valid, but not new, whilst in regard to goods that are freely reproducible, it is new, but not valid. In the course of his investigation Dietzel formulated several arguments which we shall encounter again in the subsequent literature, socialist and other. These concern both criticisms of certain aspects of the new doctrine and the interpretation put forward that marginal utility theory is in principle compatible with the classical cost-based theory of value. Dietzel's assessment contradicted of course the opinion entertained by the exponents of marginal utility theory that the new doctrine was both logically sound and marked a fundamental break with earlier theories of value. Hence, it was hardly surprising that Dietzel's article led to a lively controversy in the *Jahrbücher*, in which participated, among others, Böhm-Bawerk (1890, 1892), Lehr (1890), Auspitz (1890), Zuckerkandl (1890) and Dietzel (1891). Let us start with a brief summary of Dietzel's argument.

Dietzel on cost of production and marginal utility

Contrary to what is claimed by the advocates of the new doctrine, according to Dietzel there are no 'unsolved riddles' in value theory.¹⁴ These have long ago been solved by Ricardo, whose analysis, though defective in some details, is to be considered 'definitive and unassailable' (Dietzel, 1890, p. 562). This can be seen with regard to the two main objections raised against classical theory: that it confuses value and utility; and that it relates value to the expenditure of labour or cost rather than to welfare (cf. Böhm-Bawerk, 1886–87).

In Dietzel's view the first objection is correct: the fact that 'free goods',

i.e. goods that are available in abundance, possess utility, but not value, does not warrant Ricardo's conclusion that 'Utility then is not the measure of exchangeable value' (Ricardo, 1951, p. 11). However, Dietzel maintains, Ricardo's error had no material consequences. He gives the following reasons. First, with the possible exception of the air we breathe, there is no such thing as a 'free good', since in order to appropriate those goods which nature offers in abundant quantity some labour is always needed—the 'labour of appropriation [Aneignungsarbeit]' (Dietzel, 1890, p. 567). Second, Ricardo's main concern was not with goods the 'scarcity' of which is 'absolute [unbedingt]', i.e. whose quantities cannot be increased by labour. He rather focused attention on those goods, whose 'scarcity' is 'relative [bedingt]', i.e. which are reproducible (cf. *ibid.*, pp. 565–6). The crucial question then is, whether both classes of goods can be dealt with in terms of a single explanatory principle. 'The innovators call for "a law of value cast from a single die". Yet does not the fundamental difference that separates the two classes of goods render two different formulae necessary and possible?'

Ricardo's answer was in the positive. He regarded the value of the 'absolutely scarce' goods as governed by the 'wealth and inclinations of those who are desirous to possess them' (Ricardo, 1951, p. 12). Dietzel comments on this: 'What he says in a few lines, the innovators spin out over long pages. The difference lies not in the material result, but in the form of disquisition. I prefer Ricardo's blunt brevity [schroffe Kürze] to comfortable prolixity [bequeme Breite]' (Dietzel, 1890, p. 576; similarly p. 592). As regards reproducible goods, Ricardo rightly sees their value determined by the amount of labour, or the 'expenditure of cost' [Kostenaufwand], needed in their production. Again, there is no material difference, Dietzel claims, between the view of the marginalists and that of Ricardo: 'All goods which "cost labour", which are "difficult to procure", are "scarce" goods—"scarcity" and "cost expenditure" are merely different words for the same thing' (*ibid.*, p. 566).¹⁵ Ricardo's reference to the amount of labour required has however a considerable advantage: 'While the reference to *scarcity* gives only the *condition* that a good attains economic value, the reference to the *quantity of labour*, which "removes" scarcity,...at the same time provides a *measure* for economic value' (*ibid.*, p. 567).¹⁶ Dietzel concludes: 'The polemic of the marginal value theorists against the classical theory of value is mistaken; the dichotomy of the law of value at which the older theory arrives on the basis of the insight that there exist two categories of goods which need to be treated differently, is unimpeachable [unantastbar].... I can see in [the new doctrine] solely a retrogression and not an "epoch-making discovery"' (*ibid.*, p. 606).

More specifically, Dietzel's criticism of marginal utility theory involves the following aspects. The new doctrine is nothing but old wine in new bottles: 'The theory of "marginal utility" hasn't excited me at all, since it is

the good old acquaintance which we called so far “the law of supply and demand”, only wrapped up in a new and somewhat tedious garb. And I cannot understand why the gentlemen of the Austrian school are resentful that we received this doublet coolly’ (Dietzel, 1890, p. 570). The new doctrine remains ‘incomplete’ as long as it does not take into account in the valuation of ‘the largest and *most important* category of goods the element of the amount of *cost or labour*.’ The latter provides a ‘far more *precise measure* of value than “marginal utility”’ (ibid., p. 572). This objection Dietzel reiterates time and again, without apparently recognizing that it is difficult to reconcile with his view that the two theories arrive at the same result. In one place the two conflicting propositions are even placed next to each other: ‘Whether I reckon according to *cost* value or *use* value makes no difference, *the result is the same*. But reckoning according to *cost* value is both *simpler* and *more precise* than according to *use* value’ (ibid., p. 588).¹⁷

Dietzel’s scepticism as to the possibility of measurement in terms of marginal utility is motivated as follows: marginal utility depends on caprice and mood and is thus extremely volatile (ibid., p. 595). Volatility does not, however, preclude measurability, as Dietzel appears to assume. More important, Dietzel opposes the view that utility can be measured cardinally: ‘I may of course construct a stepladder [Stufenleiter] of my needs. *How far* the different steps are apart remains unclear’ (ibid., p. 585). While this poses no big problem in the simple case, in which the valuation concerns different amounts of a single good, things are different in the case in which different goods satisfying different needs are considered. Because of the difficulty, if not impossibility, of rendering different needs commensurable, Austrian economists, understandably, are said to prefer, in their illustrations, the single-commodity case. Interestingly, Dietzel sees no analogous problem of commensurability with regard to cost and (heterogeneous) labour: ‘The concrete *use* effects, which goods yield their owners, are hardly commensurable; whereas the amounts of abstract use power, the quantities of *labour* or *cost*, needed in the reproduction of goods, are easily commensurable’ (ibid., p. 595; similarly p. 586). His argument is, however, ambiguous. While wage costs are comparable, it is unclear how different qualities of labour are expressed in terms of a ‘common denominator’.

A major deficiency of marginal utility theory, as seen by Dietzel, consists in its narrow object of analysis: ‘first developed for *non-reproducible* goods, it never managed to get beyond its origins’ (ibid., p. 576). Whenever reproducible goods are dealt with, their characteristic feature is neutralized in terms of the assumption that the goods have been produced in the past and are now available in given stocks. By this token the role of cost of production in determining values is minimized—let bygones be bygones—and that of utility is maximized. If production is taken into account at all, the marginal

utility theory gets caught up in the ‘awful’ and tedious problem of imputation. More important, once continuous production is allowed for, marginal utility theory can no longer turn a blind eye to the ‘necessary relationship between the value of a product and the value of the productive and cost goods’ employed in its production (ibid., p. 580). To show this, Dietzel, referring to an example in Böhm-Bawerk’s *Kapital und Kapitalzins* ([1889] 1921, pp. 185 et seq), tells the following story. Assume an ‘isolated economy’ in which Robinson, endowed with his labour power but no stock of goods, has first to produce whichever good he wants to consume. The problem to be solved is how to allocate his labour power to different productive activities such that his individual welfare is maximized.¹⁸ The solution given by Dietzel is: ‘The subjective values of replaceable goods are proportional to the quantities of labour needed to replace them’ (ibid., p. 586). With ‘subjective value’ standing for marginal utility, and the amount of labour for the ‘original purchase-money’ to be paid by Robinson, we are facing a formulation of ‘Gossen’s second law’ applied to an economy with production. As can be seen, the valuation of goods according to the principle of marginal utility is in full harmony with that according to (labour) costs of production: ‘Thus the *labour* value enters...a most intimate causal relation with *use* value’ (ibid., p. 587). And in a later paper he stresses ‘that there is no substantial difference: the labour or cost theory of value of the classics and the socialists is perfectly compatible with the utility theory of a Jevons, Walras, Menger, Sax’ (Dietzel, 1921, p. 107; similarly p. 141 n).¹⁹ The quarrel between the two schools he calls a ‘scholastic dispute’, in which differences in expression were mistaken for differences in substance, and compares it to Don Quixote’s ‘fight against windmills’.

Dietzel seems to have been of the opinion that the above result holds in general. His own argument was, however, implicitly based on several highly restrictive assumptions. He started from single production and constant returns to scale; there is no distinction between average and marginal (labour) costs as in Ricardo’s theory of rent; he also assumed a zero rate of interest and thus set aside the difficulties in value theory due to compound interest that kept bothering Ricardo to the end of his life. Hence Dietzel’s ‘Ricardian’ perspective had little in common with Ricardo’s analysis. Yet the interpretation put forward by him that equilibrium relative prices coincide with relative labour costs was to recur in one version or another in the following years.²⁰

Reactions

Dietzel’s 1890 paper triggered several responses.²¹ Rudolf Auspitz objected that in principle it would be desirable to have a ‘unified “law of price”’ rather than different laws (Auspitz, 1890, p. 289). This is not only desirable but also feasible, since the class of commodities that can be produced and

reproduced at constant cost without limit does not in fact exist. Since at any point in time land, capital and labour are available in given amounts only, marginal costs of each single commodity will go up with increases in output. This would hold true even if land and capital were abundant: while Dietzel in his theory of value and price contents himself with counting the number, of hours worked, what is necessary 'is also to weigh them, since it is the last, the hardest, the most exhausting hour of each day which decides the price' (ibid., p. 292). Hence relative prices are said to equal relative marginal labour costs, i.e., in obvious notation,

$$\frac{p_i}{p_j} = \frac{\partial L_i / \partial Q_i}{\partial L_j / \partial Q_j}$$

Ricardo in his theory of rent is said to have been well aware of this principle. The unified theory of price sought can be arrived at by generalizing the principle of scarcity developed by Ricardo with respect to land to the other factors of production, labour and capital.²²

Robert Zuckerkandl rejected Dietzel's interpretation both of Ricardo and of Menger. The situation contemplated by the latter in which a consumer is confronted with a given stock of goods, far from being irrelevant for a developed economy, constitutes 'the normal case of value estimation by the buyer in our economy' (Zuckerkandl, 1890, p. 516). Zuckerkandl then provided a neat expression of the Austrian version of 'successivist' reasoning:²³ as regards the question whether costs determine prices or prices determine costs, he put forward the view that producers adjust quantities produced such that costs eventually equal prices which reflect marginal utilities. He concluded: 'The so-called law of costs points thus to a higher, more general law of price formation' (ibid., p. 518).

Böhm-Bawerk, in a first short comment (cf. Böhm-Bawerk, 1890), complained that Dietzel had failed to represent the different theories with sufficient clarity and precision. In order to avoid unnecessary quarrels he should be invited to answer as concisely as possible the following questions:

- 1 Which concept of cost does he use?
- 2 Is the value of cost goods the cause or the effect of the value of the product?
- 3 Is the market price the result of supply and demand or rather first and foremost the result of the subjective value estimations of the market parties?
- 4 Is labour a good that can be reproduced at constant costs? (ibid., pp. 521–2).

Dietzel answered Böhm-Bawerk in the following year (cf. Dietzel, 1891). Most important, he rejected the idea of causality entertained by

Böhm-Bawerk and Zuckerkandl: ‘the values of productive goods and those of consumption goods are mutually dependent’ (ibid., p. 694). In the short period prices, including the price of labour power, are determined by supply and demand. Attention should focus, however, on the determination of prices ‘in the long period [auf die Dauer]’, i.e. on the ‘centres of gravitation’ of market prices. While it cannot be denied that demand has an important impact on market prices, normal prices follow costs of production: ‘The law of supply and demand provides an explanation of *momentary oscillations* of prices and wages, the law of cost governs the *course of the basic trend in the development*. This is why classical theory put the law of cost in the centre of the doctrine of value and price’ (ibid., p. 707).

Conciseness was apparently not in high esteem with the combatants: Böhm-Bawerk countered Dietzel’s twenty-three-page answer with a forty-seven-page reply (cf. Böhm-Bawerk, 1892). Yet from the point of view of the combatants the length of the papers could hardly be called excessive, since what was at stake was the ‘showdown [Entscheidungskampf] between the old and the new doctrine’ (ibid., p. 321). According to Böhm-Bawerk the only difference between Dietzel and himself is to be seen in the following:

The law of cost is not an Archimedian point from which the remaining explanation could be supported without itself being in need of some support. It is rather in the midst of an explanation: it explains certain phenomena, but must itself be explained in terms of some other, even more general phenomena. In order to bring the explanation to its necessary conclusion, we marginal utility theorists make an addendum—an addendum, to be sure, which is not meant to run counter to or infringe upon the validity of the law of cost, but rather to support it and render it comprehensible. That is to say, we complement the theory of value of products with a theory of value of productive means or cost goods in which we arrive at the conclusion that this value is itself rooted in marginal utility. This is why we cannot consider costs the *ultimate* cause of the value of the product, but only as a very important and fairly general *intermediate cause*.

(Ibid., pp. 329–30)

Böhm-Bawerk then discusses two variants of the theory of cost—its ‘Scylla and Charybdis’: first, costs determined exclusively by technical conditions, as for example, in the ‘socialist labour theory’; second, costs conceived as a value sum. The first theory has to be rejected because goods which are the product of equal quantities of labour but need different ‘expenditures of time or capital’ generally have different values. The second notion is said to be caught in a ‘circular reasoning’, since prices are explained by means of prices. More important, carrying out this reduction one will sooner or later ‘come across a productive means which cannot be reproduced at will, for

example a raw material which is naturally scarce or a patented tool. Eventually one will come across the most original and most general of all productive means: “labour” (ibid., p. 332). Yet how is the value of labour to be explained? To trace it back to costs of (re)production would inevitably result again in ‘circular explanation’. According to Böhm-Bawerk the *only* way out of this impasse is ‘to turn the argument upside down, i.e. to realize that the value of labour is determined from the side of the product’ (ibid., p. 333). The objection that this involves just another variant of circular reasoning is mistaken, since the values or prices of the products are themselves explained in terms of marginal utilities, i.e. magnitudes that are independent of prices. Ultimately the value of labour is determined by the ‘marginal utility of labour’ (ibid., p. 336).

As to the question of causality, i.e. whether price depends on cost or *vice versa*, Böhm-Bawerk accuses Dietzel, who had argued that they are mutually dependent, once more of circular reasoning. The solution is to be found in tracing back both prices and costs to a ‘third cause’ (ibid., p. 360): the marginal utility of products in combination with the scarcity of productive means. Böhm-Bawerk concludes his paper by way of parable, in which the locomotive of a train is compared to marginal utility and the waggons to costs of production: ‘The simple truth is that ultimately the last waggon is pulled by the locomotive and not the other way round’ (ibid., p. 367).

Later publications by Dietzel are characterized by an attempt to play down the importance of the theory of value. He even expresses the opinion that the latter is entirely dispensable: ‘If in Smith or Ricardo there was no theory of value, this deficit would have no negative implications for their theory of distribution.... The same applies to Marx’ (1921, p. 110). All that is necessary ‘in price theory are the notions of price and maximum cost, and in the theory of rent, wage and capital rental that of a “deduction from the produce”’ (ibid., p. 142). Similarly, he maintains that the Austrian school could do perfectly well without marginal utility theory. His proposition of the redundancy of the theory of value does not however prevent him from emphasizing time and again the correctness and equivalence of the ‘objective’ and the ‘subjective’ variants of it.

Dietzel also entered into a discussion of Marx’s analysis which provides further evidence of the gradual erosion of his ‘classical’ point of view. In his opinion Marx’s ‘fundamental error’ in the theory of distribution was the application of the theory of value to the commodity ‘labour power’. This would only be warranted if there existed a tendency towards an excess supply of labour. However, Marx’s theory of the reserve army of the unemployed, based on the labour displacing effects of technical progress, and his criticism of the ‘compensation argument of McCulloch, Bastiat and Senior’ are said to be ‘vacuous’ (ibid., p. 137n). It is also not true that the worker depends on the capitalist but not *vice versa*: ‘There is *mutual dependence*; Marx and the entire “scientific socialism” sees only the “whip

of hunger” that forces the worker to capital, not the “greed for profits” that forces capital to the worker’ (ibid., p. 121). Competition amongst employers is taken to result in a wage rate compatible with full employment. The economy is seen to be ruled by an ‘iron law of scarcity’ rather than an ‘iron law of wages’. Böhm-Bawerk, it may be conjectured, would have been pleased to read this.

EARLY MARXIST REACTIONS TO THE CHALLENGE OF MARGINAL UTILITY THEORY

Volume I of *Capital* was published, in German, in 1867, only four years prior to Menger’s *Grundsätze* and Jevons’s *Theory*, and seven years prior to Walras’s *Eléments*. There is no evidence known to me that Karl Marx became acquainted with these works and entered into a discussion of them. Friedrich Engels, however, who survived Marx by twelve years, witnessed the rise to dominance of the new doctrine in academic economics in Great Britain. In a letter to the Russian translator of *Capital*, Danielson, of 5 January 1888, five years after Marx’s death, Engels wrote: ‘Here the theory of Stanley Jevons is now fashionable, which argues that value is determined by utility, that is, value in exchange=value in use, and on the other hand by the size of the supply (i.e. the costs of production), which is only a confused and roundabout manner of saying that the value is determined by supply and demand. Vulgar economy everywhere!’ (Marx and Engels, 1954, p. 306). What must have shocked Engels even more was the influence the new doctrine had gained in the socialist movement in Great Britain. In a letter of 15 October 1888 he complained to the same Danielson that ‘in London at present (1888) four people can come forward—who call themselves “socialists”—claiming to have totally refuted our author [Marx] by setting against his theory—that of Stanley Jevons!’ (ibid., p. 310). Given these developments, it was to be expected that Engels in the preface to Volume III of *Capital*, edited by him and published in 1894, would take the opportunity to formulate a frontal attack on the new doctrine which had drawn leading socialist intellectuals into its orbit. However, this expectation is not fulfilled. Strangely enough, it is at only one point in Engels’s preface, and as an aside, that the new doctrine is mentioned, in a dismissive way. Commenting on Wilhelm Lexis’s suggested ‘solution’ to the value-price ‘contradiction’ (cf. Lexis, 1885), Engels concludes that the theory of the German economist and statistician

amounts in practice to the same thing as the Marxian theory of surplus-value;...and that it is just as easy to build up an at least equally plausible *vulgar socialism* on the basis of this theory, as that built in England on the foundation of Jevons’s and Menger’s theory of use value and marginal utility. I even suspect that if Mr George

Bernard Shaw had been familiar with this theory of profit, he would have likely fallen to with both hands, discarding Jevons and Carl Menger, to build anew the Fabian church of the future upon this rock.

(Engels in Marx, 1959, p. 10; emphasis added)

Engels, who died the year after the publication of Volume III of *Capital*, was not given the time and energy to enter into a critical discussion, aiming at its refutation, of the marginalist theory himself. He approved, however, of the criticism put forward by Conrad Schmidt in two instalments in the theoretical voice of the German Social Democrats, *Die Neue Zeit*, in 1892 (cf. Schmidt, 1892): ‘Your article in “Die Neue Zeit”,’ Engels wrote to Schmidt, ‘has given me much joy—it would be most appropriate here, since the Jevons-Mengerians prevail awfully in the Fabian Society and look down on the long out of date Marx with contempt. If there were a periodical here, where we could place it, I would, given your permission, make Aveling translate it under my supervision. Yet it is hardly probable that this project will materialize—there is no periodical!’ (Marx and Engels, 1954, p. 352).

Conrad Schmidt

Schmidt’s piece was the first serious attempt by a German-speaking Marxist to deal with the ‘psychological tendency’ in economics. In the introductory passage of his article Schmidt defines the ‘essential task’ of political economy to be that of unravelling the ‘objective laws’ governing modern society characterized by commodity production and the ‘omnipotence and omnipresence of money’. The key to an understanding of the ‘objective laws’ is to be sought in solving ‘the enigma of price’ (Schmidt, 1892, p. 422). Marx is credited for having ‘continued, after a long interruption, with wonderful vigour the analysis of value started by Smith and Ricardo’ (ibid., p. 423). It has to be admitted, though, that some problems, in particular the problem of the rent of land and that of the general rate of profit and the relationship between price and ‘value’, are still waiting to be resolved. Yet it will only be after the third volume of *Capital* is available that a final judgement can be passed on Marx’s theory. Böhm-Bawerk’s rejection of it in his reply to Dietzel (cf. Dietzel, 1891; Böhm-Bawerk, 1892) is thus qualified as premature.

Whether there exists ‘an objective, secretly operating law of value’ has been disputed in recent times ‘in the name of psychology’ by that ‘deductive’ direction in economics, which, inaugurated by Jevons in England, has its ‘main camp in Austrian universities, with Menger, Böhm-Bawerk and Wieser as its best known spokesmen’ (Schmidt, 1892, pp. 423–4). However, Schmidt objects, the fact that all exchanges of commodities are ultimately rooted in the psychological motives of the respective

individuals engaged in the exchange, i.e. in their subjective valuations, is not sufficient to deny the existence of an 'objective law of value'. The latter may perfectly well emerge despite the fact that all individuals follow their own wills. The predilection of the 'Mengerians' for the case of the 'isolated individual' confronted with a given endowment with goods is misleading: 'If men were only consumers and if goods fell from heaven, everyone would indeed have to evaluate his property exclusively in accordance with marginal utility theory. However, since men are themselves the producers of their commodities and can normally replace these by means of labour, they have no reason to value their products only according to their ranking of needs [Bedürfnisstafel]. The valuation could as well follow the larger or smaller difficulty with which the respective goods can be replaced' (ibid., pp. 426–7). The importance of the 'objective factor'—the amount of labour needed in the production of a product—can even be seen in the case of the 'isolated economy', provided it is not forgotten that the majority of goods are reproducible. Only 'the wonderful partiality of the value psychologists' could ignore this factor (ibid., p. 427).²⁴

While the model of the 'isolated economy' may be useful for the purpose of illustrating the concept of marginal utility, in order for the new view to gain in importance, Schmidt emphasizes, it must 'leave fantasy and turn to reality', i.e. address the problem of an economy characterized by commodity production and free competition. This the psychological theory does, yet not with regard to the historically developed form, competitive capitalism, but its general form, simple commodity production. Because of competition, in the latter the exchange relationships between commodities follow Marx's 'law of value' and, in addition, comply with the principle of marginal utility. Schmidt concludes:

It is thus seen that although the realization of this objective law of value is not deliberately intended by the different opponents, it is nevertheless guaranteed in a society of independent commodity producers via the free play of economic egoisms, knowing only their own advantage. The analysis of the psychological factors that are active in a commodity producing society, far from implying that an objective law of value is impossible, on the assumption of simple commodity production on the contrary directly demonstrates its necessity.

Since the psychologically motivated individual will does not contradict, but rather contributes to the establishment of an 'objective law of value' in conditions of simple commodity production, how could it prevent 'the realisation of such a law (of course in a different form) in a developed capitalist commodity production?' (ibid., p. 429).

This question is dealt with in the second part of Schmidt's article. The previous argument is said to suffice as an 'indirect' refutation of marginal

utility theory. However, given the ‘epoch-making importance attributed to it by its propagators’ and the ‘relatively great popularity of the school’ a more direct refutation is needed. The main question reads: ‘Is it at least possible, let alone correct, to derive exchange value from the marginal utility principle in a commodity producing society?’ (ibid., p. 459). Schmidt’s answer is in the negative. Since in a capitalist economy commodities are generally produced in order to be sold rather than to be consumed by the producer, the precondition is missing under which a subjective valuation by the producer on the basis of marginal utility would be possible: ‘In a commodity producing society the marginal utility, conceived in this way, as a principle of value is nothing less than a bare *contradictio in adjecto*’ (ibid., p. 460). This objection became prominent, above all in Marxist circles, and was reiterated by several authors, including Hilferding and Kautsky (see below).^{25, 26}

The same holds true for the next criticism, which consists of a particular version of the objection of ‘circular reasoning’, then highly popular amongst the exponents of all the different schools, but filled, of course, with different content. In the present case the objection reads that in order to determine the optimal consumption basket of an individual, the marginal utility theorists have to start from given prices, i.e. have to assume as already known what is to be explained (cf. ibid., pp. 460 and 462–3). This leads Schmidt to a related objection. According to marginal utility theory commodities that are available in abundance fetch a low price, while those that are available in a small amount are expensive. The explanation of this phenomenon given by Böhm-Bawerk and his followers shows only

that the fantasy of the marginal utility theorists deals with economic facts in the same way as some more famous fantasies deal with world history. The facts have to obey the command, as in front of a Prussian corporal, and even to accept, if necessary, to be put upside down. Of course, the products with low prices are not economical because they are available in large amounts, but they are available in large amounts, because they have low prices. The overwhelming majority of people in modern society consist of poor devils that can afford only the cheapest amongst the means of consumption. Because of their cheapness these commodities are demanded and thus produced in large quantities. To derive their low prices from their quantity involves mistaking the cause for the effect.

(Ibid., pp. 460–1)

Schmidt sees a close relationship between the received theory of supply and demand and marginal utility theory since both are concerned with market prices only and have nothing to offer on ‘normal’ prices. While it cannot be denied that the psychological school provides a more detailed investigation of ‘a highly self-evident fact’ (ibid., p. 463), the interest on the part of the

consumer in spending his income in an optimal way, it nevertheless falls back behind conventional supply and demand analysis because of its exclusive concern with consumption to the detriment of production. Schmidt concludes that after Ricardo's death it was only Marx who is to be credited with important achievements in political economy. The success of the psychological school, Schmidt surmises, is perhaps best explained in terms of the marginal utility and market value the new doctrine has for those forces in society that are threatened by the social critique implied by Marx's economic analysis (*ibid.*, p. 464).

Schmidt entered the debate about alternative theories of value once more. In 1896 Gustav F. Steffen, a friend of Wicksteed's who lived and taught in London, had published an article entitled 'Gebrauchswerth und Tauschwerth' (Value in use and value in exchange) in the monthly magazine *Der sozialistische Akademiker* (cf. Steffen, 1896).²⁷ In it he contrasted the doctrine of the 'new school' of Jevons with that of the 'old school' of the classical economists and Marx.²⁸ The new school is praised not only for its constructive achievements but also for its devastating criticism of the doctrines of the old school. In the new perspective 'political economy is first and foremost the science of the "measurement of human needs [Bedürfnisse]"' (Steffen, 1896, p. 563). Steffen concluded: 'In view of the desolate confusion of the older theoretical political economy, which has terribly discredited the entire and so eminently important discipline, the value of the transparently clear and important theory of Jevons cannot be overrated' (*ibid.*, p. 564). Apparently, Steffen did not think that embracing the new doctrine was in conflict with his 'socialist' convictions: adopting the Benthamite maxim of 'the greatest happiness of the greatest number', although Bentham is not mentioned by Steffen, the new doctrine, assuming cardinal utility, would imply, as Steffen illustrates in terms of an example, a fundamental, indeed revolutionary, change in the relations of production and in the distribution of income (cf. *ibid.*).

Schmidt's reply was published one year later (Schmidt, 1897) and thus also one year after Böhm-Bawerk's criticism of Marx, which will be dealt with in the following section. While Böhm-Bawerk's treatise is never mentioned in the text, there is every reason to believe that Schmidt was familiar with it. His steadfast and uncompromising partisanship in favour of Marx's value theory, evident in the 1894 article, has evaporated. 'The insight', the new paper commences, 'that Marx's value theory by no means provides the proof on which socialism is founded, has gradually made its way in the widest circles.' The demonstration that capitalism is based on the 'exploitation' of the working people 'is entirely *independent* of any theory of value'. In order to see its exploitative nature it suffices to conceive the wealth of commodities which is shared out between the different classes as incorporating simply the amount of labour needed in its production. 'This is a point of view that remains undisputed, irrespective of how the

formation of the exchange value and average prices may be explained theoretically' (ibid., p. 18).

The doctrine of Jevons and Böhm-Bawerk, to which Steffen, a member of the Fabian Society, has subscribed in his review article, in fact constitutes, Schmidt admits, the only positive attempt to counter the 'ingeniously conceived' Marxian theory of value. However, the would-be alternative has turned out 'to be wretched beyond measure', guided by the intention 'to camouflage the definite fact of exploitation, to recast [umdichten] the great tragedy as an idyll'. Schmidt expresses his amazement that despite its 'inherent weaknesses' this theory was able to gain support amongst the Fabians, whose 'thinking is decidedly socialist' (ibid., pp. 18–19). Schmidt then summarizes the new doctrine, which is said to revolve around the notion of an 'abstract value in use'—a term introduced by Karl Knies (see n 44). The achievement of the theory consists in the derivation of an inverse relationship between the amount of a commodity demanded and the price of that commodity, a relationship that is 'so simple and self-evident that no further explanation is indeed needed.... In former times one did not worry a lot about these trivialities' (ibid., pp. 20–1). 'Real economics' is said to begin where marginal utility theory ends, in determining the average prices of those commodities on which theoretical economics ought to focus attention: reproducible commodities.

While it is true that prices tend to be proportional to costs of production, to explain prices in terms of costs would involve 'arguing in a circle'; in addition, it would not allow one to ascertain the general rate of profit, which depends on the maximum surplus possible of prices over costs of production. Therefore, one has to take recourse to the common property of all commodities, i.e. their being products of labour. Schmidt does not seem to see that his objection to the cost of production theories applies also to the labour theory of value, in which the value of a commodity is partly explained in terms of the 'transfer' of value of those commodities used up in its production. Nor does he see that Marx's value-based determination of the profit rate is flawed. However, in his brief remark on Volume III of *Capital*, Schmidt expresses some uncertainty as to 'whether Marx's grand attempt has succeeded in every respect'. Be that as it may, Schmidt concludes, compared with that of the marginalists, Marx's analysis is far superior: '*Unhistorical* to the bone, they [the marginalists] spin out their deductions of subjective valuation, which are supposed to be valid in all periods, and precisely because of that turn out to be totally barren [ohnmächtig] in conceiving and clarifying the economic characteristics of a *certain*, i.e. modern, time' (ibid., p. 22).

Eduard Bernstein and Karl Kautsky

In 1896 H.M. Hyndman's book *The Economics of Socialism* had appeared in London (Hyndman, 1896). In the following year Eduard Bernstein published a review article in *Die Neue Zeit* (Bernstein, 1897). While the book is credited with providing one of the best 'popularizations' of Marx's doctrine, its author is accused of being too often concerned with the aspect of agitation to the detriment of scientific inquiry. In Bernstein's view it is particularly noteworthy that, apart from polemical attacks that lack substance, Hyndman had not found it necessary to enter into a serious discussion of the 'Jevons-Böhm-Mengerian school' whose theory of value has found support amongst the Fabian section of English socialists. It is considered a major shortcoming of the book that the third volume of *Capital*, 'without which Marx's labour theory of value is incomplete and therefore vulnerable' (Bernstein, 1897, p. 49), is not taken into account, and that the labour theory of value is raised to 'a sort of party dogma' (ibid., p. 54).

Bernstein takes issue with Hyndman's treatment of the notion of 'socially necessary labour time'. In Bernstein's view there are two problems involved here: first, the market value of a commodity cannot be considered independent of social needs and wants, i.e. 'demand'; second, it is unclear how different kinds of labour are (made) commensurable. To refer to the 'higgling of the market', as Hyndman does, evades the issue: 'If the labour theory of value does not say more than this, then it is rightly brought before the court. A theory which ends where a more precise determination has to start passes sentence on itself (ibid., p. 49). Clearly, Marx has not answered all the questions concerning the laws of commodity exchange, nor did he claim to have done so. Therefore, any new results that improve our understanding of the matter should be welcomed.

While it is to be conceded that the school of Jevons has carefully studied the problem of use-value, which led to 'a fruitful enrichment of economic concepts', its contribution should be seen in perspective. Bernstein quotes approvingly Schmidt's 1892 criticism. 'The fundamental error of the school', he emphasizes, 'consists obviously in that it wants to explain the entire movement on the basis of a law which applies, at most, to one phase of the circulation of the commodity only, i.e. the last one.' The fact that the theory is applicable to all objects of market exchange, including reproducible and monopoly products, must not be mistaken for a proof of its greater scope: 'Precisely because it is wide ranging, it is bound to remain on the surface. It is nothing but a *theory of purchase*.... In short, the theory of marginal utility is not a theory of value, but a theory of price, and in merely one direction.' Moreover, its importance, Bernstein contends, will vanish in the course of the development of capitalism, with the proportion of commodities that are subject to the law of price of production gradually

increasing. ‘Nevertheless it is merely a joke and nothing else, when Hyndman talks of a “final futility of final utility”’ (ibid., p. 51). For, ironically, the theory is at its best when dealing with the ‘higgling of the market’, which is invoked, but never analysed, by Hyndman whenever he is short of a proper argument. Bernstein concludes that there is reason to think that the rejection of a scientific analysis of demand would not have found Marx’s approval. ‘Hence, it would have been more correct to speak of the limited utility of marginal utility theory rather than of its “final futility”’ (ibid., p. 52).

Two years later Bernstein published his revisionist manifesto entitled *Die Voraussetzungen des Sozialismus und die Aufgaben der Sozialdemokratie* (The preconditions of socialism and the tasks of the Social Democratic Party), in which he expressed in some detail his uneasiness with the received Marxist socio-economic analysis and advised his fellow-socialists to give up their hostility towards the doctrine of the ‘Gossen-Jevons-Böhm school’ (cf. Bernstein, 1899a, in particular ch. 3). Bernstein’s book and his earlier article provoked a harsh reply by Karl Kautsky in the 1899 issue of *Die Neue Zeit* (Kautsky, 1899a; see also Kautsky, 1899b).²⁹ He accuses Bernstein of creating enormous confusion by putting marginal utility theory on a par with Marx’s theory: ‘The Böhm-Bawerkian and the Marxian theories of value exclude each other. Böhm-Bawerk is regarded as the great conqueror of Marx. The question thus is: Either-Or’ (ibid., p. 69).

To require, as Bernstein does, that the value of single commodities can be exactly measured is to misunderstand the purpose of Marx’s notion of value, which is meant to ‘provide the key to the capitalist mode of production.... Without a theory of value each economic theory remains just an uncertain groping on the surface of phenomena’ (ibid., pp. 69–70). Kautsky agrees that whether or not Marx’s value theory is correct is totally irrelevant with regard to the demonstration of surplus labour. Yet what matters, he stresses, is not only the existence of surplus labour in modern society, but the form in which it is appropriated, i.e. rent and profit, and in this regard Marx’s value theory is considered indispensable. In addition, Bernstein is accused of playing down the class antagonism between workers and capitalists and of ‘postponing socialism *ad calendas graecas*’ by arguing that the productive powers of German society are not yet developed to the extent needed to render socialism feasible. He is thus said to join the ranks of those socialists which Engels had called ‘petty-bourgeois’ (ibid., p. 74).^{30, 31}

Kautsky’s sermon is full of pin-pricks. In the introductory passages he pretends to have discerned startling similarities between the psychology underlying the theory of marginal utility and that of ‘the Polish Jews in Neu-Sandez’: Bernstein was Jewish and the Galizian Neu-Sandez was the birthplace of Carl Menger (ibid., p. 69). And towards the end of the piece he portrays Bernstein as infected with English liberalism and guilty of:

depriving Marxism of its determinateness and of interpreting the fundamental propositions of our movement with such vagueness that any demarcation from the socialism of the chair [Kathedersozialismus] is lost.... The sooner the hybrid position [Zwitterstellung] between the socialism of the chair and Marxism is terminated,...the better for Bernstein and for us.... As an ethical empiricist of the historical school of Marxist-Böhm-Bawerkian orientation, he is condemned to sterility. If Bernstein insists on the way he has taken, then he cannot get rid of his Marxism swiftly enough. The attempt to continue to appear as a Marxist is only a fetter on him and a deception of the audience.

(Ibid., pp. 80–1)

Bernstein answered Kautsky in the same year (Bernstein, 1899b). He introduces his reply with an analogy, in which ‘Peter’ and ‘Paul’ describe the same mineral, pyrites, in different ways, the one focusing attention on the form of the mineral, the other on its substance. Both descriptions are of course true: they merely cover different aspects of pyrites. Essentially the same can be said, Bernstein contends, about the twofold description of (reproducible) commodities in terms of their usefulness and in terms of the amount of labour embodied in them: these descriptions are not mutually exclusive. More important, the value of a commodity depends on both aspects, utility and (labour) costs of production. ‘Value is not an intrinsic property of commodities, but a valuation relation [Schätzungsverhältnis] of the market’. Several ‘extraordinarily ingenious men’ in various countries deserve the credit for having drawn our attention to this fact with the theory of marginal utility; Bernstein mentions Cournot and Walras in France, Jevons in England, Gossen in Germany and Böhm-Bawerk, Wieser and Menger in Austria. ‘For certain purposes of the investigation their doctrine has indeed its justification.’ He adds: ‘Kautsky does not understand, or does not want to understand, that one can arrive at this point of view without overturning Marx’ (ibid., p. 550).

As regards the problem of the ‘reduction’ of different kinds of labour to abstract labour, Bernstein refers to passages in Volume I of *Capital* in which any differences in quality are said to be reduced to equivalent differences in quantity by means of the wage structure. ‘Here the wage of labour determines the labour value, which makes the latter look completely different from the usual presentations, including various sentences by Marx’ (ibid., p. 551). For now values are seen to depend themselves on prices, i.e. the ruling prices for different kinds of labour power.

In Bernstein’s opinion there is a general tendency ‘to overestimate the value of value theory’ and, in the case of Kautsky, a particular tendency ‘to seek it in the wrong direction’ (ibid.).³² First, seen in proper historical perspective Marx’s contribution is much less original than some of his close

followers are inclined to believe: he has formulated with greater clarity and conceptual consistency what is already to be found in his precursors. Second, it cannot be maintained that it was only after Marx had developed the laws of surplus value that the question could finally be settled, ‘*why* in a capitalist society the product of surplus labour is distributed to capitalists and landowners.’ Marx’s explanation of nonwage incomes in terms of the ‘privileged positions’ held by some members of society due to capital or landed property was indeed anticipated by earlier authors. Moreover, Bernstein contends, essentially the same explanation, revolving around a generalized concept of ‘rent’, is given by

those English socialists who have accepted the marginal utility doctrine.... With regard to the income question they thus arrive, via a different route, at precisely the same conclusions as the Marxists with the doctrine of value and surplus value. Whether the income deriving from whatever privileges is fought as exploitative surplus value or exploitative rent, is of no import for the result sought.... Experience shows that in practice both theories lead to the same conclusions.

(Ibid., pp. 552–3)

Third, Bernstein rejects Kautsky’s opinion that the labour theory of value cannot be dispensed with because it correctly conceives the value relationship as a ‘social relationship’, i.e. a relationship between man and man, rather than one between man and things.³³ ‘Had it only been for the sake of conceiving the value relationship of the products of labour as a social relationship, Marx could have spared most of his investigation of value’ (ibid., p. 553), reads Bernstein’s dry commentary.³⁴

MARXISM UNDER ATTACK: BÖHM-BAWERK’S CRITIQUE OF MARX

Members of the Austrian school were generally critical of and some even hostile towards the theories of the classical economists and Marx and took pains to refute them (cf. Meixner and Turban, 1974; Rothschild, 1986).³⁵ In Friedrich von Wieser’s view the socialist theory of value is ‘wrong in almost every respect’ (Wieser, 1889, p. 66). Wieser’s friend Eugen von Böhm-Bawerk (1851–1914), the ‘bourgeois Marx’ as Schumpeter dubbed him (Schumpeter, 1954b, p. 846), took the opportunity on several occasions to scrutinize Marx’s analysis. The two most important instances are part VI of his *Geschichte und Kritik der Kapitalzins-Theorien*, published in 1884, an English translation of which entitled *Capital and Interest* appeared in 1890 (Böhm-Bawerk, [1884] 1890); and the long essay ‘Zum Abschluss des Marxschen Systems’, published in 1896 in a *Festschrift* in honour of Karl

Knies after the third volume of *Capital* had been made available to the public by Engels in 1894 (Böhm-Bawerk, 1896). An English translation of the essay was published in 1898 under the title 'Karl Marx and the Close of His System', which as Sweezy has rightly observed is somewhat misleading (cf. Sweezy, 1949, p. vi): a literal translation of the German title would be 'On the Conclusion of the Marxian System'.³⁶ Diehl in an essay on the relationship between value and price in Marx's system called Böhm-Bawerk's criticism 'the best that has been put forward against Marx's economic theory' (Diehl, 1898, p. 4); and Kauder more than seventy years later called it emphatically 'the eternal stumbling block for Marxist apologists' (1970, p. 402).

Since, in his essay, Böhm-Bawerk reiterates the objections put forward in *Capital and Interest* and adds some new criticisms relating to the value-price problem dealt with in Volume III of *Capital*, the following discussion will mainly focus on the essay. Emphasis will be on chapter IV of the essay, 'The Error in the Marxian System: Its Origin and Ramifications'.³⁷

The essay closes with the famous verdict: 'The Marxian system has a past and a present, but no abiding future.... [Marx's] theoretical work... was a most ingeniously conceived structure, built up by a fabulous power of combination, of innumerable storeys of thought, held together by a marvelous mental grasp, but—a house of cards' (Böhm-Bawerk, 1949, pp. 117–18).

As Böhm-Bawerk stresses at the beginning of chapter I: 'The pillars of the system of Marx are his conception of value and his law of value. Without them, as Marx repeatedly asserts, all scientific knowledge of economic facts would be impossible' (ibid., p. 9). Since Marx's theory is said to stand or fall with the labour theory of value, a refutation of the latter would overthrow the entire edifice. Böhm-Bawerk proceeds in two main steps. He first draws attention to an 'irreconcilable contradiction' between Volumes I and II on the one hand and Volume III on the other. While the analysis in the first two volumes is based on the premise that commodities exchange according to the quantities of labour needed directly and indirectly in their respective production, in the third volume it is acknowledged that competition necessitates the 'transformation' of values into prices of production characterized by a uniform rate of profit across industries.³⁸ In *Capital and Interest* Böhm-Bawerk had already expressed the view that Marx's 'promise' to resolve this contradiction in Volume III could not be kept (cf. Böhm-Bawerk, 1890, p. 310); he now sees his scepticism fully confirmed. His critique of Marx's approach to the value-price problem is not particularly remarkable or original,³⁹ except perhaps for the fact that in the fourth section of chapter III he shows some awareness that the determination of aggregate profits cannot proceed on the assumption that the wage goods advanced to the workers are reckoned in 'value' rather than in 'price' terms.⁴⁰ As is well known, Marx had already

hinted at the fallacy of assuming that the ‘constant’ and the ‘variable’ capitals enter the price equations as ‘value’ magnitudes, but expressed the opinion that ‘our present analysis does not necessitate a closer examination of this point’ (Marx, [1894] 1959, p. 165; see also p. 161).

The second main step is taken in chapter IV of the essay. According to Böhm-Bawerk, to point out that an author has contradicted himself is not good enough: ‘A firmly rooted system can only be effectively overthrown by discovering with absolute precision the point at which the error made its way into the system and the manner in which it spread and branched out’ (Böhm-Bawerk, 1949, p. 64). This is particularly true with regard to ‘a thinker so important and influential as Marx’ (ibid., p. 65). Böhm-Bawerk repeatedly praises Marx’s intellectual abilities: he calls him ‘an intellectual force of the very highest order’, ‘of the first rank’, a ‘philosophical genius’ (ibid., pp. 77, 88–9, 118). What is more, the socialist movement has gained momentum and Marx’s influence in it has become dominant. Böhm-Bawerk leaves no doubt that his intention reaches beyond a mere refutation of Marx’s doctrine and aims at gaining influence among ‘the wiser minds’ of the socialist leaders who ‘will not fail in good time to try to connect with a scientific system more likely to live’ (ibid., p. 118).

The scientific system Böhm-Bawerk refers to is of course his own: in chapter IV it is used in an attempt to deliver the *coup de grâce* to Marx’s reasoning, which Böhm-Bawerk considers ‘full of the most obvious faults of logic and method which deprive it of all cogency’ (ibid., p. 66). Instead of seeking support for his theory from experience, or, even better, from a ‘scientific, psychological analysis’, i.e. the *economico-psychological method* (ibid., p. 79), which is the ‘natural method of investigation’ (ibid., p. 67), Marx has had recourse to the method of a purely logical proof, of ‘dialectical speculation’, ‘dialectical hocus-pocus’ (ibid., pp. 79 and 77). There is only one element in Marx’s analysis to which Böhm-Bawerk subscribes, i.e. the concern with ‘normal’ or long-period positions of the economic system in dealing with the problem of value and distribution: ‘a theorist may really venture to abstract [from] the accidental and temporary fluctuations of the market prices round their normal fixed level’ (ibid., p. 87).

The second main step is subdivided into essentially three substeps. Böhm-Bawerk first discusses the idea of *tertium comparationes* in chapter I, ‘Commodities’, of Volume I of *Capital*. He calls this idea, which Marx had taken from Aristotle, ‘very old-fashioned’ and ‘wrong’ and adds that ‘modern political economists agree that the old scholastico-theological theory of “equivalence” in the commodities to be exchanged is untenable’ (ibid., pp. 68–9).⁴¹ Then follows a discussion of the process by means of which Marx searched for the ‘common factor’, in Böhm-Bawerk’s view ‘the most vulnerable point in the Marxian theory’ (ibid., p. 69). The main objection, which Böhm-Bawerk adopts from Karl Knies (1873, p. 121), is that both the set of commodities, and the set of alternatives from which

Marx eventually selected ‘abstract labour’ as the ‘common factor’, are grossly incomplete. For example, had he included exchangeable goods that are not the product of labour, such as the gifts of nature (land, natural resources), amongst commodities he could not have arrived at his choice. Singling out labour as the ‘substance’ of value is thus said to be based on a ‘trick’ (ibid., p. 73).

More important, Marx is accused of having left out of consideration other potential candidates for the role of the ‘common factor’.⁴² For instance, materials that are used in the production of commodities could perform that role. Hence, following Marx’s line of reasoning, commodities could with the same right be said to ‘exchange in proportion to the *quantity of material incorporated in them*’ (ibid., p. 85). The purpose of the suggested material-based theory of value is of course only to ridicule Marx’s procedure by pointing out its arbitrariness. In Böhm-Bawerk’s view, again following Knies, the source of value is to be sought neither in labour nor in some material input, but eventually in the *value in use* of commodities, which Marx in his investigation had explicitly set aside: ‘the exchange of commodities is evidently an act characterized by a total abstraction from use-value’ (Marx, 1954, p. 45). To this Böhm-Bawerk objects: ‘Is not the property of being scarce in proportion to demand also common to all exchangeable goods?’ And would this insight not have forced Marx ‘to declare the value in use to be the only property left, and therefore to be the sought-for common property, and value to be “the cellular tissue of value in use”’ (ibid., p. 77)?^{43, 44} Marx is said to have fallen victim to Adam Smith and David Ricardo, ‘the great authorities, as was then at least believed’: they had taught ‘the same doctrine’, without proving it any more than Marx (ibid., p. 78).

Next, and here we come to the second substep, Böhm-Bawerk turns to the problem of heterogeneous labour, placing special emphasis on the relationship between skilled and unskilled labour. On Marx’s remark that the proportions in which different kinds of labour are reduced to unskilled labour are fixed by a ‘social process’, i.e. the market, Böhm-Bawerk comments that ‘it simply means that Marx is arguing in a complete circle’ (ibid., p. 83): exchange relationships are explained in terms of exchange relationships.

Finally, Marx’s analysis is said to be fundamentally inconsistent. Given Marx’s concern with ‘normal’ prices, or ‘prices of production’, he ought to have abstracted only from temporary and accidental deviations of market prices from prices of production, but not from ‘regular, permanent, typical “deviations”...of the prices of commodities from the amount of their mere costs in labor’ (ibid., p. 87). Hence, Marx’s ‘value’ reasoning in the first two volumes of *Capital* cannot be justified under any circumstances, and the rest of his doctrine is of necessity afflicted with that basic flaw. This becomes clear in the third volume of *Capital* and there particularly in

chapter 10, 'Equalization of the General Rate of Profit Through Competition'. "Competition"—Böhm-Bawerk maintains—"is a sort of collective name for all the psychical motives and impulses which determine the action of the dealers in the market, and which thus influence the fixing of prices"—it is just another word for 'the play of supply and demand' (ibid., p. 91). In order for Marx firmly to support his labour theory of value he would have been obliged to base it on a proper analysis of the forces of supply and demand, which, alas, he did not carry out: 'a deeper analysis of these two social motive forces...would be out of place here' (Marx, 1954, p. 189). This neglect he tried to justify in terms of the supposition that supply and demand have absolutely no bearing on 'normal' prices; their impact is confined to 'market' prices and thus to the explanation of the gravitation of the latter around the former. To Böhm-Bawerk 'this curious theory is absolutely false' (Böhm-Bawerk, 1949, p. 94). First, it is 'quite erroneous and unscientific' to assume that forces which balance each other in market price equilibrium 'cease to explain anything', as Marx postulated (1954, p. 189), in normal price equilibrium: 'On the contrary, it is only by the agency of the forces which maintain the equilibrium that it can be explained' (Böhm-Bawerk, 1949, p. 95). Second, the fundamental contradiction between Volume III and the other two volumes of *Capital* comes in again. For, whereas in the latter Marx appealed to competition as a factor which tends to push market prices towards 'values', in Volume III he was forced to admit that it tends to push them towards 'prices of production'. Böhm-Bawerk concludes:

If, according to Marx, the relation of supply and demand exerts no influence at all on the level of permanent prices, how can competition, which is identical with this relation, be the power which shifts the level of the permanent prices from the level of 'value' to a level so different as that of the price of production?

(Ibid., p. 98)

The fact that Marx 'declined the deeper analysis of the social motive forces...[is] the alpha and omega of all that is fallacious, contradictory, and vague in the treatment of his subject.' His system is detached from facts, it is not based on 'a sound empiricism or a solid economico-psychological analysis': chapter 10 'brings the long-deferred bad harvest, which grew by necessity out of the bad seed' (ibid., p. 101).

As we have seen, Böhm-Bawerk's critique centred around the questionable claim that Marx's entire work depends on the correctness, or otherwise, of the labour theory of value. The main task Marx set himself was to provide a correct theory of the general rate of profit, the key variable in a capitalist economy. He had seen that the adoption of the labour theory of value had allowed Ricardo to establish the inverse relationship between the real wage rate and the profit rate and to dispel the

idea, generated by Adam Smith's notion of price as a sum of wages and profits (and rents), that the wage rate and the rate of profit are determined *independently* of each other. Marx was convinced, wrongly as we know, that he could develop the analysis of the general rate of profit and of prices of production in terms of the labour theory of value. Hence that theory was meant to play essentially the same subsidiary or instrumental role as in Ricardo, i.e. of determining the rate of profit and relative prices. The demonstration that it generally fails on this count is certainly enough to reject Marx's value-based approach to the theory of profits. To conclude, as Böhm-Bawerk did, that Marx's whole analysis has to be jettisoned, is however a *non sequitur*, for it is assumed, and not proved, that Marx's deficient approach to the theory of distribution and relative prices cannot be remedied, leaving the basic analytical structure of his theory intact.⁴⁵

Böhm-Bawerk's criticism of Marx had a considerable impact not only on the economics profession inside and outside German-speaking countries. It was also gradually undermining Marx's authority in the socialist movement. Therefore it was obvious that Böhm-Bawerk merited a kind of 'official' reply from the Marxist camp. One such reply came from Karl Vornberg entitled 'Die Einheitlichkeit der Marxschen Werttheorie' (The unity of Marx's theory of value) and was published in 1903 in *Die Neue Zeit* (cf. Vornberg, 1903). A greater impact was made by the reply elaborated by the young Rudolf Hilferding (1877–1941), who in 1904 in the first volume of the Viennese series *Marx-Studien*, the outlet of the 'Austro-Marxist' avantgarde, published his 'Böhm-Bawerk's Marx-Kritik' (Hilferding, 1904).⁴⁶ In what follows we shall first sketch Vornberg's defence of Marx, then deal with Hilferding's treatise, followed by a summary of the views on the matter of some other leading Austro-Marxists of various orientations. (On the Austro-Marxist counter-attack see also Kauder, 1970; Chaloupek, 1986, 1987; Wysocki, 1988; Rosner and Winckler, 1989.)

It should be noted that these defences have the following elements in common. First, their authors accept Böhm-Bawerk's basic premise that Marx's analysis stands or falls with the labour theory of value. Second, it is contended that the meaning of the labour theory of value in Marx cannot be reduced to, and is even quite different from, that of determining the general rate of profit and relative prices. The two contentions soon got elevated to the status of unquestionable 'axioms' amongst Marxist economists and thus stood in the way of a correction and further development of Marx's approach to the theory of distribution and relative prices. Fettered by a 'credo' in the defective labour theory of value, Marxist political economy remained vulnerable. The inability of its advocates effectively to ward off the attacks levelled at it was quickly to become apparent and explains in part the rise to dominance of the marginalist doctrine (see Garegnani, 1980, part V).

THE MARXIST COUNTER-ATTACK

Vornberg's defence of Marx

Vornberg's first complaint is that the critics of Marx have unduly managed to distract attention from the importance of Volume III of *Capital* with the untenable accusation that when writing Volume I Marx was totally unaware of the value-price problem. He challenges the 'irreconcilable contradiction' argument in terms of passages in Volume III, recollections of Engels concerning the genesis of Marx's doctrine and Marx's famous letter to Kugelmann of 11 July 1868 (cf. Vornberg, 1903, pp. 359–60). The evidence put forward shows that Marx never saw the analysis of Volume I as providing a 'complete, separate theory of value' (ibid., p. 362). In Vornberg's view the importance of Volume III is then to be seen in the fact that it contains a logically unassailable solution to the value-price problem and thus demonstrates the correctness of Marx's value-based reasoning, of his 'strictly "objective", inherently societal doctrine'.

Marginal utility theory is rejected as anachronistic, unhistorical, inconsistent, barren and irrelevant, reflecting properly the 'bankruptcy of bourgeois economics':

Such a theory cannot be correct for a developed capitalist urban culture with its mass production, gigantic bazaars and fixed prices. A theory based on individual marginal utility on the one hand and scarcity on the other is not applicable to an economic order which produces anarchically for the world market, which suffers chronically from a glut of commodities, and in which the latest forms of trusts and cartels are concerned with limiting production.... Scrutiny shows that with regard to the modern exchange economy, and only this matters, the heiress of the labour theory of value, flushed with victory, is a still birth.

(Ibid., p. 366)

Vornberg concludes his piece with a eulogium on Marx's doctrine of value and surplus value which is said to be 'clear as daylight [sonnenklar]' (ibid., p. 367).

Hilferding's reply to Böhm-Bawerk

In the preface to his essay (at least) Hilferding strikes a different note. He pays a compliment to 'the psychological school of political economy', which is said to stand out clearly against the rest of 'bourgeois economics' whose exponents 'have ceased to deal with principles' and have become 'eclectics and syncretists': 'The adherents of this school resemble the classical economists and the Marxists in that they endeavor to apprehend

economic phenomena from a unitary outlook' (Hilferding, 1949, pp. 121–2). Böhm-Bawerk, 'the leader of the psychological school' (ibid., p. 125), is credited with having aimed at a systematic criticism of Marx's system, rooted in first principles. It is with regard to these principles, and thus the 'outlook upon the whole of social life' (ibid., p. 187), that there are said to exist fundamental differences between the Marxist and the psychological school. Since Hilferding accepts Böhm-Bawerk's proposition that Marx's entire analysis stands or falls with the labour theory of value, a major concern of his argument is with defending the latter.

In chapter I of his essay Hilferding first tries to counter Böhm-Bawerk's objection that Marx neglected value in use in his search for a common factor of commodities. His argument is similar to the one put forward by Schmidt:

It is a precondition to the exchangeability of the commodities that they should possess *utility for others*, but since for me they are devoid of utility, the use value of my commodities is in no sense a measure even for my individual estimate of value, and still less is it a *measure* of an objective estimate of value.

(Ibid., p. 126; the first emphasis is mine)

In capitalism goods are generally produced, not in order to satisfy directly some need or want of the producer, but for the purpose of exchange, i.e. they are produced as commodities, while in some earlier modes of production they were produced as use values only, and on the rare occasions when some exchange took place, goods confronted one another solely as use values. The 'psychological' theory which starts 'from the individual relationship between a thing and a human being instead of starting from the social relationship of human beings one with another' (ibid., p. 133) is said to be of no avail in explaining the modern capitalist economy. Its main concern is precisely with something the economist ought not be interested in: use values.⁴⁷

What then can be said in favour of Marx's choice of labour as the common factor? Hilferding argues as follows. Whether a good has the character of a commodity is decided by the quality of functioning as an exchange value. 'But a commodity cannot of its own initiative enter into relationships with other commodities; the material relationship between commodities is of necessity the expression of a personal relationship between their respective owners. As owners of commodities...[t]hey are independent and equal producers of private "labors".' This leads Hilferding to the notion of a commodity as a '*social thing*' (ibid., p. 130). He expounds:

A commodity...can be the expression of social relationships only in so far as it is itself contemplated as a product of society, as a thing on which society has stamped its imprint. But for society, which

exchanges nothing, the commodity is nothing more than a product of labor. Moreover, the members of society can only enter into economic relationships one with another according as they work one for another.

(Ibid., pp. 130–1)

There is a second aspect mentioned by Hilferding in support of the idea that labour, and labour alone, forms the ‘substance’ of value. Marx’s ‘law of value’, it is contended, holds the key to an understanding of the ‘law of motion’ of modern society: ‘when we call upon the law of value to render us this service, the principle of value cannot be any other than that to whose variations the changes in the social institution must in the last instance be referred’ (ibid., p. 132). A theory that starts instead from use value must abandon the hope of ever discovering the long-run tendencies of society.

These are mostly statements the validity of which is dubious. They cannot at any rate be advocated independently of the question whether a logically sound theory of the general rate of profit and prices of production can be elaborated following Marx’s procedure, which von Bortkiewicz aptly called ‘successivist’ (cf. Bortkiewicz, 1906–07, II, pp. 37–8): Marx first attempts to ascertain the general rate of profit as the ratio between total ‘surplus value’ and the sum of total ‘constant’ and total ‘variable’ capital; he then uses the thus determined rate of profit to calculate prices of production. That is, the rate of profit is assumed to be unaffected by the ‘transformation’ of ‘values’ in prices of production. As is well known, this assumption cannot be sustained other than in uninteresting special cases. The ‘transformation’ of ‘values’ into prices generally affects the numerator and the denominator of the expression giving the rate of profit. Therefore, the ‘price’ rate of profit is generally different from the ‘value’ rate of profit. Hence, Marx’s value-based reasoning is flawed and has to be rejected (cf. p. 47 et seq.).

In Hilferding’s treatise there is no awareness at all of the difficulties involved. In chapter II he is concerned with defending Marx’s determination of the general, or ‘average’, rate of profit and prices of production, assuming that it is logically sound.⁴⁸ This becomes clear, for example, in statements like the following: ‘since the total price is equal to the total value, the total profit cannot be anything else than the total surplus value [!]. The total profit is thereby quantitatively determined, and solely on the basis of this determination [!] does it become possible to calculate the magnitude of the rate of profit’ (ibid., p. 159, similarly p. 182). Hilferding concludes that contrary to Böhm-Bawerk’s view there is no ‘contradiction’ between the ‘law of value’ and the theory of the average rate of profit and prices of production.

Since Hilferding takes Marx’s analysis to be essentially sound, Böhm-Bawerk’s must be flawed. To show this is the object of chapter III, ‘The

Subjectivist Outlook'. Methodologically, Hilferding argues, the social scientist can either start from the 'individual' or from 'society'. In the former case he can deduce only the most general implications for social life, of necessity missing out all the characteristic features of particular societies; his analysis must remain 'unhistorical'. Things are different otherwise: concerned with specific societies and modes of production, rather than with society *in abstracto*, the second method, Hilferding contends, is obviously the appropriate one.⁴⁹ It provides also a much richer picture of economic agents than marginal utility theory with its anaemic 'individual': 'The social conditions imposed upon labor become objective limitations for the individual, and the social complex controls the individual's activities' (*ibid.*, p. 188).

Before we continue it deserves to be mentioned that Hilferding takes no notice of Böhm-Bawerk's discussion of Werner Sombart's 1895 article on Marx's system in the concluding chapter of the treatise (cf. Sombart, 1895). Sombart had argued that there is a fundamental difference in the method of investigation adopted by Marx and the marginalists, the former standing for extreme objectivity, the latter for extreme subjectivity. While Böhm-Bawerk does not deny that a methodological difference exists, he insists that it is of no importance for his criticism, since what is at issue is not Marx's 'choice of method, but his mistakes in the application of the chosen method.' Böhm-Bawerk adds:

Personally, as regards the question of method, I am in the position adopted by the literary man in the story in regard to literature: he allowed every kind of literature with the exception of the '*genre ennuyeux*'. I allow every kind of method so long as it is practised in such a way as to produce some good results. I have nothing whatever to say against the objective method. I believe that in the region of those phenomena which are concerned with human action it can be an aid to the attainment of real knowledge.

(Böhm-Bawerk, 1949, p. 114)

It is difficult to see how Hilferding, who wishes to trace back the difference in 'outlook' between the two theories to a difference in method, could ignore these passages.

Let us now continue with Hilferding's reasoning. In capitalism, he argues, the *legal* equality among agents of production must not be mistaken for their *economic* equality:

The dependent position of the laborer is shown by his appearance as one of the constituents of k [cost of production], side by side with machinery, lubricating oil, and dumb beasts; this is all he is worth to the capitalist as soon as he has left the market and has taken his place in the factory to create surplus value. For a moment only did

he play his part in the market, as a free man selling his labor power. The brief glory in the market and the prolonged debasement in the factory—here we see the difference between legal equality and economic equality, between the equality demanded by the bourgeoisie and the equality demanded by the proletariat.

(Ibid., p. 190)

The bourgeois notion of equality is given a theoretical expression by the psychological school, whose apologetic character should thus be clear. The Marxist school, on the contrary, is concerned with analysing the causes of economic inequality hidden behind the veil of legal equality. 'In capitalist society the individual appears as ruler or slave according as he is enrolled in one or other of the two great classes.' Hilferding adds: 'This significance of class gives expression to the law of value as a *social* law. To confute the theory of value it must be shown to lack confirmation *in the social domain*' (ibid., p. 191).

To argue, as Böhm-Bawerk does, that the prices of commodities are to be explained in terms of supply and demand rather than on the basis of the 'law of value', cannot perform the task under consideration. This is so because the relationship between demand and supply is itself 'regulated by the price of production, which constitutes the center around which market prices fluctuate in directions which are perpetually opposed, so that the fluctuations compensate one another in the long run' (ibid., p. 193). Yet the price of production is 'brought about independently of this relationship [between supply and demand]' (ibid., p. 194). Hence, despite appearances, there is no determination of 'normal' or 'long-run' prices independent of the one given by the author of *Capital*: 'Marx supplies the objective laws which are realized by and control the 'psychical impulses' of individuals. The psychological school can attempt to elucidate but one side of the question, demand' (ibid., p. 194).

Hilferding's treatise culminates in a hymn of praise on Marx's achievements and a diatribe against the psychological school. In Marx's demonstration, 'in accordance with the dialectic method, conceptual evolution runs parallel throughout with historical evolution.... [T]his parallelism furnishes the strictest empirical proof of the accuracy of the theory.' Moreover, his demonstration of 'the historic transitoriness of bourgeois relationships of production signifies the close of political economy as a *bourgeois* science and its foundation as a *proletarian* science' (ibid., pp. 195–6). Then follows the speculation:

No more than two ways now remained open to the bourgeois champions, if they desired to be anything more than mere apologists for whom an uncritical eclecticism would provide the crumbling pillars of their systems of harmony. They might, like the historical

school in Germany, ignore theory, and endeavor to fill its place with a history of economic science, but would then be restricted...by the lack of any unified apprehension of economic happenings. The psychological school of economics has chosen the other path. The members of this school have endeavored to construct a theory of economic happenings by excluding economics itself from their purview. Instead of taking economic or social relationships as the starting point of their system, they have chosen for that starting point the *individual* relationship between men and things.... This economic theory signifies the repudiation of economics. The last word in the rejoinder of bourgeois economics to scientific socialism is the *suicide* [Selbstaufhebung] of *political economy*.

(Ibid., p. 196)⁵⁰

Interventions of other Austro-Marxists

Marginalism: the theory of the professorial state employee

Prior to Hilferding, Gustav Eckstein (1902) in a brief entry in *Die Neue Zeit* had attacked marginal utility theory in terms of a parody. A man called Robinson, the story goes, is endowed with five sacks of corn—and ‘common sense’, which is just another word for the principle of marginal utility he had picked up at the University of Vienna while he was young. Given his valuations of other goods he can get in exchange for corn, Robinson, who is said to follow closely Böhm-Bawerk’s doctrine, ends up with a pair of boots and a book: ‘Böhm-Bawerk’s “Capital”’, but, alas, no corn to feed him. A faithful follower of marginal utility theory, he is destined to starve to death! This tale serves Eckstein to formulate the following four objections to marginal utility theory:

- 1 Since there exists no ‘objective measure’ of wants, a valuation of the satisfaction of wants is of necessity vague and subject to temporary moods.
- 2 Important economic categories such as money are not explained.
- 3 The theory is not applicable to a developed capitalist economy.
- 4 Its principles do not even apply to a barter economy.

Eckstein repeated his negative assessment of marginal utility theory on two other occasions (see Eckstein, 1909 and 1909–10). Echoing Hilferding’s opinion, he criticized the subjectivist method as barren and irrelevant to an understanding of social phenomena. It is remarkable that he nowhere entered into a discussion of Böhm-Bawerk’s methodological position and his criticism of Marx. Anticipating to some extent the opinion expressed by Bukharin in *The Economic Theory of the Leisure Class*, a German version of which was published in 1926 (cf. Bucharin, 1926), Eckstein contended

that the economic perspective adopted by the marginal utility theorists is alien to the dynamic capitalist and applies ‘at most to the rentier who spends his fixed income at a steady rate’ (Eckstein, 1909–10, p. 332). The new theory ‘does not reflect the spirit of the capitalist who is greedy for profits, but that of the professorial state employee’ (ibid., p. 375).

The problem of ‘imputation’ (Zurechnungsproblem)

As we have seen, a major objection raised against marginal utility theory of the Austrian variant was that it could not deal with production and turned a blind eye to cost of production in determining relative prices. It deserves to be stressed, however, that Menger intended to provide a general solution to the problem of price, including the prices of the productive services, i.e. the distribution of income. Menger did not succeed in showing how the principle of marginal utility could be used to determine factor prices. The situation was not very different when Böhm-Bawerk published his ‘Grundzüge der Theorie des wirtschaftlichen Güterwerts’ (cf. Böhm-Bawerk, 1886–87). The concluding section of the treatise is devoted to the ‘law of cost’. Böhm-Bawerk states that with regard to reproducible goods there is, in principle, an identity between (normal) costs and price: *‘This identity is by and large brought about in such a way that the price of the products is the governing factor and the price of the cost goods is that which is governed.’* He continues:

A dualistic explanation of the phenomena of value and price in terms of two separate principles, ‘utility’ and ‘cost’ is neither necessary nor satisfactory: an explanation out of a single principle is not only simpler, it is also superior in terms of inner consistency and compatibility with the facts. Moreover, that single principle, out of which we sought to explain everything, is the most uncontrived and natural one from which to start, since it is obtained from the essence of the matter itself. For, there is no doubt that the cause and aim of all human industry is the improvement of our welfare: we derive the attitude of people in regard to goods from the importance these have for their welfare.

(Böhm-Bawerk, 1886–87, II, pp. 540–1)

Yet, apart from a footnote in which Böhm-Bawerk traces a rise in the price of iron back to an increase in the demand for railways, there is nothing to substantiate this far-reaching claim.⁵¹ It was only with Friedrich von Wieser’s book *Der Natürliche Werth* (1889) that an attempt was made to fill the lacuna left by Menger and Böhm-Bawerk. This is done in section 3, entitled ‘Die natürliche Zurechnung des productiven Ertrages’ (The natural imputation of the productive yield). Wieser makes it clear that without a solution to the problem of ‘imputation’ the new theory would remain

incomplete and would be subject to the widespread criticism that it cannot deal with production. The problem is posed as follows: 'The statement that the productive goods receive their value from the value of their produce suffices only to evaluate [schätzen] the collaborating factors of production as a whole, but not separately. In order to be able to do also this, *a rule is needed which allows one to apportion the total produce in detail*' (Wieser, 1889, p. 70).

While major classical economists and the socialists are said to have evaded the problem in terms of the assumption that there is only a single factor of production, labour,⁵² it has to be acknowledged that there are altogether three types of factors: land, capital and labour (ibid., p. 77). Interestingly, the difficulty Wieser is confronted with is analogous to that encountered by the classical economists, which, according to William Stanley Jevons, demonstrated anew the deficiency of their entire approach. The difficulty concerns the determination of prices in the case of *joint* production. For, with joint production, Jevons's argument goes, the very basis of classical economics, the labour theory of value, breaks down, since 'it is impossible to divide up the labour and say that so much is expended on producing X, and so much on Y' (Jevons, 1871, p. 200).⁵³ Similarly in marginal utility theory, where the imputation problem consists in dividing up the value of the product⁵⁴ and saying that so much is derived from factor A, so much from B, and so much from C. Wieser, whose argument is not easy to follow and in places is even quite obscure, seeks a solution to the problem of imputation in terms of a system of simultaneous equations, in which the number of prices of productive services to be ascertained equals the number of processes of production (ibid., p. 87). This is one of the few instances in Austrian economics in which prices are explained in a 'functional' as opposed to the generally preferred 'causal-genetic' manner.⁵⁵ The problem of Wieser's approach is of course that it is not 'functional' enough, i.e. the prices of the products cannot be taken to be independent of the prices of the factor services employed in their production.⁵⁶

The similarity between the difficulties confronting the labour theory of value and the theory of marginal utility can be traced back to the 'causal-genetic' method adopted in both traditions, i.e. the attempt to reduce all price phenomena to some original factor. As Ladislaus von Bortkiewicz emphasized, 'the dispute between cost of production theorists and marginal utility theorists is mainly a product of the successivist prejudice.' He added: 'Modern economic theory gradually begins to free itself from the successivist prejudice. In this regard the main credit belongs to the mathematical school headed by Léon Walras' (1906–07, II, p. 38).⁵⁷ In this interpretation, both Marx and the Austrian economists Menger, Böhm-Bawerk and, up to a point, also Wieser represent 'old', i.e. 'obsolete', modes of thinking, which of necessity got entangled in logical contradictions that could be resolved only in terms of a *simultaneous*, rather than a

‘successivist’, determination of the relevant variables under consideration: these concern both the rate of profits and relative prices in classical theory, and both the prices of products and the prices of factor services in the marginalist one.

It is interesting to deal with a particular criticism of the marginalist approach to the imputation problem in some detail.⁵⁸ In 1924 Helene Bauer published in *Der Kampf*, the theoretical organ of the Austrian social democrats, a paper entitled ‘Bankrott der Grenzwerththeorie’ (Bauer, 1924). The ‘bankruptcy’ of the marginal theory of value is said to follow from the failure of the Austrian economists to provide a coherent theory of income distribution.⁵⁹ In the introduction the author (implicitly) comments on the theme of the concluding passages of Hilferding’s essay. Since the historical school and the socialists of the chair, she argues, turned out to be ineffective in warding off the threat to bourgeois society posed by the radicalized version of the classical theory of value in the hands of Marx, another line of defence was needed. Marginal theory was seen as ‘providing the bourgeoisie with a bulwark against the attack of the socialist criticism’; as ‘the best antitoxin to Marxism it soon became the only official, i.e., “the”, theory of value in the universities’ (ibid., pp. 106–7). Class antagonisms were made to disappear, history was deprived of its revolutionary content, bourgeois society emerged once again as harmonious and eternal.⁶⁰

However, the ‘smoke-screen’ (‘Nebelbilder’) built can easily be removed by showing that the new theory is inconsistent. In the determination of the ‘productive contributions’ of the different productive inputs Wieser distinguishes between a ‘general’ and a ‘specific’ imputation. The former refers to those goods that are produced only by means of inputs that can be used in several lines of production, whereas the latter concerns inputs that are specialized and are employed together with non-specialized inputs in a single or very few lines of production only. The value of the specific factor equals the residual left over after all other input costs have been subtracted from the proceeds (cf. Wieser, 1914, p. 213). By no means can this be considered a ‘solution’ to the problem, Bauer objects. The wage of labour, with labour as the perhaps most ‘versatile’ factor that can be used in many, if not all, lines of production, ‘is here not derived as a cost element from the value of the final product, but is *assumed* to be a given magnitude in production and thus is treated as an element, whose deduction leads to the shares of value of the more or less specific factors.’ While this is ‘a correct description of the capitalist mode of distribution’, it is not an explanation, as even Schumpeter (1909) admitted.

Böhm-Bawerk’s attempt to overcome the difficulty in terms of the concept of ‘values of substitution’ (‘Substitutionswert’)⁶¹ is rejected by Bauer on the grounds that thereby the problem of the determination of the value of so-called ‘substitutable’ (‘ersetzliche’) inputs is merely shifted from one line of production to the other, ‘without giving an answer’ (ibid., p.

110). She concludes: ‘The imputation of value has failed and thus it is all over for marginal utility in an economic theory deriving economic phenomena not from the actual social structure of the economy but from the unchangeable inner logic of any economy’ (ibid., p. 112).

REFORMULATIONS OF THE CLASSICAL THEORY OF VALUE AND DISTRIBUTION

Böhm-Bawerk’s critique of Marx and Hilferding’s anti-critique had an important impact on the subsequent debates in Germany and Austria, with the positions of the former widely accepted in the non-socialist and those of the latter in the socialist camp. Contributions by Lange (1897), Diehl (1898, 1905), Gunther (1905), among others, reiterated essentially the objections formulated by Böhm-Bawerk, while authors such as Eckstein (1909–10) and Petry (1916) sided with Hilferding.⁶² There were only a few scholars who expressed views that were both significantly different from the two main positions and interesting. To these belonged Wilhelm Lexis, the statistician and political economist, and his former student Ladislaus von Bortkiewicz. Lexis and Bortkiewicz had a profound knowledge not only of Marx’s analysis but also of marginal utility theory, a precondition not met by all the combatants, and both were original thinkers. Lexis was known, among other things, for his review articles of Volumes II and III of *Capital* (cf. Lexis, 1885, 1896), the latter published in the *Quarterly Journal of Economics*, and his entry on ‘marginal utility’ in the *Handwörterbuch der Staatswissenschaften*, the main German dictionary of social sciences of the time (cf. Lexis, 1895). As Bortkiewicz (1906–07, I, p. 16) stressed, Lexis in his review of the second volume of *Capital* had not only ‘asked the right question’, as Engels had maintained in his preface to Volume III, but had anticipated the essence of the ‘solution’ of the value-price problem put forward in it by Marx. Bortkiewicz himself is to be credited with having clarified the difficulties of Marx’s approach to the theory of distribution and prices of production.

Ladislaus von Bortkiewicz

Bortkiewicz’s clarification of the analytical structure of classical analysis

Bortkiewicz entered the debate on Marx’s theory of value and distribution in 1906 with the first instalment of his three-part essay ‘Wertrechnung und Preisrechnung im Marxschen System’; the other two instalments followed in 1907 (cf. Bortkiewicz, 1906–07, I–III). Also in 1907 he published his article ‘Zur Berichtigung der grundlegenden theoretischen Konstruktion von Marx im 3. Band des “Kapital”’ (cf. Bortkiewicz, 1907). Prior to these contributions he had demonstrated his familiarity with the marginalist

doctrine and its different versions: in 1890 he had published, in French, a piece on Walras's *Eléments*, in 1898 followed a critical article on Pareto's *Cours*, focusing attention on marginal utility theory and its economic policy implications, and in 1906 one dedicated to a refutation of Böhm-Bawerk's theory of interest (cf. Bortkiewicz, 1890, 1898, 1906).

With the benefit of hindsight, the two articles by Bortkiewicz mentioned first can be said to mark a milestone in the critical and apologetic works on Marx's contribution: they represented a big leap forward in understanding both the achievements and the deficiencies of Marx's approach. At the time when they appeared only a few people grasped their importance: the majority of German economists simply ignored them, including those who themselves worked in the classical tradition and should have welcomed any attempt that promised to overcome the impasse which that tradition faced.

In the first part of his essay Bortkiewicz provides a summary assessment of the debate as it had developed until then; emphasis is on the contributions by Böhm-Bawerk, Hilferding, Diehl, Lexis, Sombart and the 'ultra-revisionist' Tugan-Baranowsky. While he agrees with several of the objections levelled against Marx by Böhm-Bawerk (1896), and refutes others, the latter's critique cannot be considered 'the last word' on the subject (Bortkiewicz, 1906–07, I, p. 7). In particular, Bortkiewicz rejects the reproach that there is an 'irreconcilable contradiction' between the first and the third volume of *Capital*. In the remaining two parts and in his 1907 article he then attempts to formulate the 'objectivist' approach to the theory of value and distribution of the classical economists and Marx in a form that is logically unassailable. He makes use of the analytical instruments employed by Vladimir K. Dmitriev in his 1898 reformulation of Ricardo's theory (cf. Dmitriev, 1974, first essay).⁶³ Here we need not deal with Bortkiewicz's contribution in detail; a brief summary of his main results must suffice.⁶⁴ First, he shows why Marx was bound to fail with his construction. Second, he demonstrates that the labour theory of value does not constitute an indispensable step on the way to a consistent theory of the general rate of profit and prices of production. Third, he is concerned with showing, notwithstanding what has just been said, that a mathematically correct relationship between profit rate and prices, on the one hand, and value and surplus value magnitudes, on the other, can be elaborated. This leads him, fourth, to a discussion of the prevailing criticism of Marx, which erroneously considers his value-based reasoning as such, and not the defective use he made of it, to be responsible for his false doctrines. Fifth, Bortkiewicz is keen to show that Ricardo's theory is superior to Marx's in almost every respect, and that Marx is to be charged with several unpardonable retrogressions relatively to the level of knowledge achieved by his great precursor. It is in one regard only that Marx's analysis may be said to be 'superior' to Ricardo's: 'this concerns the doctrine of the *origin of profits*' (Bortkiewicz, 1906–07, III, p. 472).

Bortkiewicz deserves credit for having contributed to a clarification of the analytical structure of the classical approach to the theory of value and distribution (which includes Marx's). The data from which this approach starts in order to determine the profit rate and normal prices include: the methods of production in use to produce the various commodities; the real wage rate(s); and the amounts of the different commodities to be produced during the period (year) under consideration. With these data, the quantities of capital goods needed can also be taken as given. Böhm-Bawerk, who did not object to Marx's premise of given output levels, does not seem to have seen this implication; otherwise he would not have criticized Marx for the related premise (cf. Bortkiewicz, 1906–07, I, p. 13). On the implicit assumptions of no joint production proper and a single original factor of production only, i.e. labour, Bortkiewicz shows that these data, or independent variables, suffice to determine the profit rate and relative prices, i.e. the unknowns, or dependent variables, of the classical system of value and distribution:

In this construction, exactly as in Marx's, the technical conditions of production of commodities, including the technical conditions of production of the commodity labour power, which, in turn, are expressed in a given real wage, emerge as the ultimate and exclusive factors determining prices.

(Bortkiewicz, 1906–07, II, p. 35)

Hence the view entertained by the critics of the classical theory that it is *in principle* unable to provide a consistent theory of profits and prices (of reproducible commodities) cannot be sustained.

Bortkiewicz's contributions had relatively little impact on either friend or foe of classical and Marxian value analysis. As to the first group, this can be exemplified with regard to two leading academic economists: Franz Oppenheimer and Emil Lederer. They were regarded, and saw themselves, as 'socialists' of sorts. We shall come back to the contributions of these authors at pp. 55 et seq.

Bortkiewicz on objectivism and subjectivism in value theory

In 1921 Bortkiewicz published a paper in German in the Swedish journal *Ekonomisk Tidskrift* in which he gave his assessment of the achievements and scope of validity of alternative theories of value (cf. Bortkiewicz, 1921). He begins his disquisition by stressing that a 'purely objectivist' treatment of the problem of exchange value is impossible and adds with a view to Ricardo that the assumed endeavour on the part of capitalists to maximize profits introduces a subjective element into the theory.⁶⁵ He goes on to ask how 'modern value theory', based on the 'law of marginal utility' and the

‘law of supply and demand’, relates to the classical ‘law of cost of production’. A difference between the two would exist in two cases only:

- 1 If the ‘theory of value of the mathematical and the Austrian school would teach that changes on the demand side would trigger permanent effects on prices, even if costs of production remained the same’;
- 2 If ‘modern value theory would deny that an increase or a fall in costs has an impact on prices’ (ibid., p. 4).

Bortkiewicz then criticizes the Böhm-Bawerkian version of modern theory with its extremely subjectivist bent. The doctrine of the ‘marginal pairs’ of buyers and sellers he considers inferior to modern demand and supply theory; and the doctrine that the prices of the means of production are determined by the value of the product and not the other way round he classifies as an example of the ‘successivist prejudice’. Bortkiewicz’s intermediate result is:

De facto there is no theory of exchange value that needs to be taken into account from a scientific point of view, which is based exclusively on objective or exclusively on subjective factors, where the former refer first and foremost to costs and the latter to utility. The controversy between the objectivist and the subjectivist directions in the theory of value is thus only about whether the emphasis is to be put on costs or on utility.

(Ibid., p. 17)

He then distinguishes between changes in utility and changes in costs as the causes of long-period adjustments, in a regime of free competition, of the quantity and the exchange value of a commodity and concludes: ‘Since the exchange value reacts in all circumstances and permanently to changes in costs, whereas it reacts to changes in utility only in the case of goods whose production can be increased at rising unit costs only, there is a certain justification to talk of a *causal primacy of costs* (relatively to utility)’ (ibid., p. 20).⁶⁶

Georg von Charasoff

Georg von Charasoff, a Russian born in Tiflis in 1877, wrote his Ph.D. thesis in mathematics at the University of Heidelberg and then appears to have lived the life of an independent scholar. In 1909 he published *Karl Marx über die menschliche und kapitalistische Wirtschaft* (Karl Marx on the human and capitalist economy) (cf. Charasoff, 1909). This was the first book of a planned trilogy designed to provide a systematic analysis of, and confrontation between, the Marxian and the marginalist theory. His second book, *Das System des Marxismus*, appeared in 1910 (cf. Charasoff, 1910). About the planned third book which was to bear the title *Die Probleme der*

Produktion und der Verteilung (The problems of production and distribution) he writes in the preface to the second that it is 'on the way to completion' and will contain 'a thorough criticism of the subjective theory of value' (Charasoff, 1910, p. XIV n.). However, the third book seems to have never been published. Whether the disappointing reception of the first two books played any role in the premature termination of Charasoff's bold project, we do not know.⁶⁷ Because his argument is highly condensed and essentially mathematical without making use of formal language, it is hardly surprising that it met with a lack of understanding. While Charasoff is mentioned occasionally in the Marxist literature of the time, his contribution seems to have soon fallen into oblivion and has only recently been rediscovered.⁶⁸

Charasoff on normal prices and the rate of profit

In the present context Charasoff's second book is of particular interest since it anticipates several results of modern reformulations of the classical approach to the theories of value, distribution and growth and shows that that approach need not, and indeed cannot, be based on the labour theory of value. He rejects the widespread opinion that Marxism stands or falls with that theory. In the preface, which foreshadows the message of his work in progress on the third book, Charasoff summarizes also what he considers to be the main deficiencies of the 'subjective theory of value'.

Charasoff corroborates the main results obtained by von Bortkiewicz and puts forward several new ones. He develops his main argument within the framework of an interdependent model of (single) production, which-exhibits all the properties of the later input-output model, and which is fully specified in terms of use values and labour needed per unit of output.

The central concept of his analysis is that of a 'series of production' (*Produktionsreihe*): it consists of a sequence, starting with any (semi-positive) net output vector (where net output is defined exclusive of wage goods), followed by the vector of the means of production and the means of subsistence in the support of workers needed to produce this net output vector, then the vector of the means of production and the means of subsistence needed to produce the previous vector of inputs, and so on. Charasoff calls the first input vector 'capital of the first degree' (*Kapital erster Ordnung*), the second input vector 'capital of the second degree' (*Kapital zweiter Ordnung*), etc. This series 'has the remarkable property that each element of it is both the product of the following and the capital of the preceding element; its investigation is indispensable to the study of all the theoretical questions in political economy' (Charasoff, 1910, p. 120).

The series under consideration is closely related to the expanded Leontief inverse. Let y denote the n -dimensional vector of net outputs and A the $n \times n$

matrix of the ‘augmented’ input coefficients, i.e. each coefficient represents the sum of the respective material and wage good input per unit of output, since von Charasoff like the classical economists and Marx reckoned wage payments among capital advances. Then the series is given by

$$\mathbf{y}^T, \mathbf{y}^T\mathbf{A}, \mathbf{y}^T\mathbf{A}^2, \dots, \mathbf{y}^T\mathbf{A}^k, \dots$$

With circular production this series is infinite. Tracing it backward, first all commodities that are ‘luxury goods’ disappear from the picture, next all commodities that are specific means of production needed to produce the luxury goods, then the specific means of production needed in the production of these means of production, etc. On the implicit assumption that none of the commodities mentioned so far enters in its own production, ‘it is clear from a certain finite point onward no further exclusions have to be made, and all the remaining elements of the series of production will always be made up of the selfsame means of production, which in the final instance are indispensable in the production of all the different products and which therefore will be called *basic products* [*Grundprodukte*].’ Charasoff adds: ‘The whole problem of price boils down...to the determination of the prices of these basic products. Once they are known, the prices of the means of production used in the production of luxuries and finally also the prices of the latter can be derived’ (ibid., pp. 120–1). The analysis has therefore to focus primarily on the conditions of production of the basic products.

A further property of the ‘series of production’ deserves to be stressed: the capital of the second degree ($\mathbf{y}^T\mathbf{A}^2$) is obtained by multiplying the capital of the first degree ($\mathbf{y}^T\mathbf{A}$) by \mathbf{A} . ‘Yet since the physical composition of a sum of capitals is obviously always a medium between the physical compositions of the summands, it follows that capitals of the second degree deviate from one another to a smaller extent than is the case with capitals of the first degree’ (ibid., p. 123). The farther one goes back in the series, the more equal the compositions of the capitals become, i.e. capitals of a sufficiently high degree ‘may practically be seen as different quantities of one and the same capital: the *original* or *prime capital* (*Urkapital*).’ This finding is of the utmost importance for determining the rate of profit and the maximum rate of growth of the system. For it turns out that ‘this original type, to which all capitals of lower degree converge, possesses the property of growing in the course of the process of production without any qualitative change, and that the rate of its growth gives the general rate of profit’ (ibid., p. 124).

The rate of profit can thus be ascertained in terms of a comparison of two quantities of the same composite commodity: the ‘original capital’. Let \mathbf{u} designate the n -dimensionaal vector of an elementary unit of the

‘original capital’, $\mathbf{u} \geq 0$, then $\mathbf{u}^T \mathbf{A}$ is the (original) capital corresponding to \mathbf{u}^T , and we have

$$\mathbf{u}^T = (1 + r)\mathbf{u}^T \mathbf{A}$$

with r as the general rate of profits. Charasoff emphasizes: ‘The original capital expresses the idea of a surplus-value yielding, growing capital in its purest form, and the rate of its growth appears in fact as the general capitalist profit rate’ (ibid., p. 112). In the hypothetical case in which all profits are accumulated, the proportions of the different sectors equal the proportions of the ‘original capital’. In this case the actual rate of growth equals the rate of profit: the system expands along a von Neumann ray (cf. von Neumann, 1937).

These considerations provide the key to a solution of the problem of price. For, if the various capitals can be conceived ‘as different amounts of the selfsame capital...’, then prices must be proportional to the dimensions of these, and the problem of price thus finds its solution in this relationship based on law’ (ibid., p. 123).⁶⁹ Let \mathbf{p} designate the n -dimensional vector of prices, $\mathbf{p} \geq 0$, then we have the following system of price equations

$$\mathbf{p} = (1 + r)\mathbf{A}\mathbf{p}$$

Thus, while \mathbf{u} equals the left-hand eigenvector of \mathbf{A} , \mathbf{p} equals the right-hand eigenvector; $1/(1+r)$ equals the dominant eigenvalue of matrix \mathbf{A} . The solution to the price problem can therefore be cast in a form, in which ‘the notion of labour is almost entirely by-passed’ (ibid., p. 112): taking the technical conditions of production and the real wage rate as given, prices both of basics and non-basics and the general profit rate can be determined without having recourse to labour values.

Charasoff was perhaps the first author to note clearly what von Neumann more than two decades later was to call ‘the remarkable duality (symmetry)’ of the prices and the rate of interest (profit) on the one hand and the intensities of production and the rate of expansion of the economy on the other (cf. von Neumann, [1937] 1945, p. 1).

Charasoff's criticism of the subjective theory of value

According to Charasoff, the main task of political economy consists in developing a theory of capitalist development with technical progress as the main driving force. The classical economists and Marx are credited with having put forward such a theory: their emphasis on labour values is justified in terms of the fact that ultimately technical progress involves a saving of labour. ‘This is the fundamental idea underlying the classical law

of value. By abandoning this objective basis of the determination of value, the modern subjective theorists have rejected the only possible explanation of technical progress and therefore are without any theory of the technical development of the capitalist economy' (Charasoff, 1910, pp. XV–XVI). "Nous avons changé tout ça"—as the false Doctor asserts in Molière. And indeed, they dispensed with all this in order to promote nothing but childish puns under the mask of thoughtful scholarship' (ibid., p. XIX). Charasoff is particularly critical of the new 'psychological explanation of profits' put forward by Böhm-Bawerk. First, it is not true that the classical economists and Marx neglected the 'psychological' side of the problem: on the contrary, their economic theories are much more deeply rooted in an analysis of the psychology of the agents of bourgeois society than the theory of the subjectivists, which is called superficial. Second, Böhm-Bawerk's theory of profits founders on the 'correctness of the proposition that profits come from surplus labour whatever the arbitrarily given price system'; Charasoff takes pride in having provided a 'rigorous mathematical proof' of that proposition (ibid.).⁷⁰ Böhm-Bawerk's explanation which centres around the notion of time preference is rejected since (implicitly) it assumes an absurd behaviour on the part of workers: 'since future goods are consistently estimated more highly than present goods, one works year after year, i.e. both in the present and in the future, more than is necessary' (ibid., p. XXIII). Rather than entertaining these fancy ideas about subjective time preference, economists should investigate the objective causes of the prolongation of the working day beyond what is necessary to reproduce the workers' means of subsistence.

The analytically demanding works of Bortkiewicz and Charasoff had hardly any impact on the contemporary discussion of alternative theories of value and distribution. Their main achievement (in the tradition of the work of Dmitriev), that is, the reconstruction of the classical approach freed from the labour theory of value, went almost unnoticed both by friend and foe: advocates of that approach kept defending and its opponents kept criticizing that theory as the alleged core of the edifice. Amongst those who considered themselves as working in the classical and Marxian tradition, Franz Oppenheimer and Emil Lederer are perhaps two of the more interesting cases in point. In addition, the contributions by Wassily Leontief and Robert Remak will be mentioned as amongst those which can be said to continue the 'classical' tradition leading from Dmitriev, Bortkiewicz and Charasoff to John von Neumann and eventually to Piero Sraffa.

THE CLASSICIST-SOCIALIST CAMP: OPPENHEIMER,
LEDERER, LEONTIEF AND REMAK

Franz Oppenheimer

According to Schumpeter, Franz Oppenheimer 'had done more than anyone else to excite anew an interest in theoretical work in Germany' (Schumpeter, 1917–18, p. 502; similarly 1954, p. 854). Oppenheimer had written his *Habilitation* (1909) under the supervision of Adolph Wagner and Gustav Schmoller in Berlin and then became a *Privatdozent* in the same university. He was thus a colleague of Bortkiewicz, who was appointed to the position of an *Extraordinarius* in 1901. In 1910 Oppenheimer published his *Theorie der reinen und politischen Ökonomie* (Theory of pure and political economy). His determination of 'natural', or, as he prefers to call them, 'static' prices follows the conventional (labour) value-based reasoning and offers nothing new (see also Oppenheimer, 1931). Bortkiewicz's contributions are not mentioned, nor are his insights taken on board. The cause and magnitude of the profits of capital are explained in terms of the so-called 'enclosure of land [Bodensperre]'.⁷¹ This is Oppenheimer's answer to the then heatedly debated question which, in Böhm-Bawerk's pointed formulation, was 'Macht oder ökonomisches Gesetz?' (Power or economic law?) (cf. Böhm-Bawerk, 1914). In accordance with Böhm-Bawerk, Oppenheimer advocates the view that social power does not work outside and against, but inside and through, economic laws. In contradistinction to the Austrian economist he was, however, of the opinion that the impact of power is not transitory, but permanent, and that in capitalism it is manifested in a positive rate of profit. In order for profits to be positive in the long run, wages must be smaller than the average net product of labour, which in turn, he surmises, requires a demonstration that in the labour market there is a permanent tendency towards an excess supply of labour. Oppenheimer rejects both the 'classical' explanation of this tendency in terms of the Malthusian theory of population and the one given by Marx in terms of the labour displacing effect of technical progress. In his view the excess supply of labour can in the last instance be traced back to the existing 'class monopoly' of land (cf. Lowe, 1965).

Oppenheimer attacked marginal utility theory on several occasions; it is interesting to notice that over time his criticism became more adamant and bitter. In the first edition of his *Theorie*, in which he devoted only a few pages to marginal utility theory, he argued that 'as a doctrine of the abstractly conceived value in use it is perfectly correct and forms the indispensable basis for an understanding of true economic values.' He added however: 'It concerns...*individual*-psychological facts and therefore does not belong to sociology in general and to economics, which are *collective*-psychological

disciplines' (1910, p. 332). As a theory of relative commodity values it is applicable only in the case in which there are no costs of provision (ibid.). In the fifth edition of the *Theorie*, which had become the third of the four double volumes of his monumental work *System der Soziologie* (cf. Oppenheimer, 1923), the theory is criticized in greater detail, reflecting also the increased importance of that theory in German academic economics. In Oppenheimer's view, the 'bourgeois' marginal utility theory and the 'socialist' theory of Marx are diametrically opposed to each other. Notwithstanding his many objections to Marx's theory of value and distribution, Oppenheimer sides broadly with the latter and suggests that marginal utility theory should be rejected. The reasons he gives include the following.⁷² It lacks unity and clarity: its basic concepts are not and indeed cannot be well defined, given the diversity of phenomena for an analysis of which these concepts are designed. It attempts to solve the problem of value in a 'monistic' way: this constitutes its 'fundamental error' (ibid., vol. I, p. 120) since it cannot be presumed that in fields so different as economics and psychology the same basic law applies. Its evaluation of given stocks of goods in terms of marginal utilities is flawed, since the total stock may have value although the marginal units may be worthless. It confounds value and price: in order to get from values, which in this theory are individual magnitudes, to prices, i.e. social magnitudes, one needs an external and cardinal measure of value, i.e. money. To assume that money has value involves taking as known what has yet to be determined, i.e. prices (ibid., vol. II, pp. 805 et seq.). Finally, the theory is apologetic: 'More is at stake than just an intellectual construction—what is at stake are the last shreds, the last possibility of good conscience of the bourgeoisie' (ibid., vol. I, p. 138).

Oppenheimer's criticism was answered by several marginalist authors, including Wilhelm Vleugels, one of the few German economists who were declared advocates of marginal utility theory. His pamphlet *Das Ende der Grenznutzentheorie?* (The end of marginal utility theory?), published in 1925, contains a detailed criticism of Oppenheimer's views on the matter. Vleugels shows that Oppenheimer has misunderstood certain propositions of certain marginal utility theorists, but concedes that some of these misunderstandings are due to misleading and incomplete formulations of the doctrine to be found in the literature. However, over time the new doctrine is said to have gained in maturity and is now available in a form that is logically unassailable. Vleugels fervently rejects the widespread accusation shared by Oppenheimer that marginal utility theory is apologetic of bourgeois society. If this were true it would be difficult to understand why 'the group of socialists is growing steadily, who are sufficiently discerning to adopt marginal utility theory or at least find a compromise with it' (Vleugels, 1925, p. 44). Vleugels mentions, among others, the German socialists Carl Landauer, Emil Lederer and Eduard Heimann.^{73, 74}

Emil Lederer

Lederer was appointed to a chair in 1918 in Heidelberg and in 1931 to the chair previously held by Sombart in Berlin; in 1933 he emigrated to the USA. He was a leading academic socialist in the 1920s in Germany. Because of his undogmatic attitude he was highly regarded also by members of the historical and the marginalist schools. In his *Grundzüge der ökonomischen Theorie* (An outline of economic theory), first published in 1922, he takes firmly the standpoint of Marx's theory and tries to defend it against Böhm-Bawerk's criticism: with Marx's 'demonstration' that the sum total of values equals the sum total of prices, and that of surplus values equals that of profits, Marx's 'formula of production prices is a solution and not just an "illusion" [Scheinlösung], as Böhm-Bawerk thought' (Lederer, 1922, p. 104).⁷⁵ It goes without saying that Bortkiewicz's findings are ignored. Lederer admits, however, that in two cases the 'principle of labour values' is of no avail; these concern: (i) the problem of the quantities consumed and produced and (ii) the problem of monopolies. As to the former he writes: 'With the labour theory of value it is *presupposed* that the distribution of labour is adjusted to "the needs of society".... Yet *how* these relative magnitudes are determined by the distribution of income, property relationships and finally also individual needs and wants is left in the dark, or rather taken to be given.' Marginal utility theory steps into the breach left by the labour theory of value. It provides the much needed '*analysis of demand*, the investigation of the market from the *point of view of the buyer*. Indeed, the entire modern theory of value is an attempt to approach the problem of exchange and continuous production from the demand side—just as the labour theory of value tackled the same problem from the supply side' (ibid., pp. 105 and 115). The two perspectives are thus complementary to each other and together provide a full picture of the process of production, distribution and consumption in modern society.

As we have seen, the view expressed by Lederer was anticipated by Dietzel and the 'revisionist' literature, and was shared in one version or another by many academic economists with a socialist bent. It expressed the now defensive position of the classical and Marxian point of view relatively to the marginalist one which, after the turn of the century, quickly gained ground in the economics profession. However, before we turn to major representatives of marginalism early this century the works of two authors deserve mention who were unyielding critics of the subjectivist theory and attempted to revive a 'naturalistic' point of view in value theory: Wassily Leontief (1928) and Robert Remak (1929).

Wassily Leontief and Robert Remak

Unfortunately the contributions of both authors shared the destiny of those of Bortkiewicz, i.e. of being largely ignored by contemporaries. Interestingly, Bortkiewicz was Leontief's Ph.D. supervisor at Berlin university and in all probability stimulated directly or indirectly, via a group of economists around him, the mathematician Remak to study the problem of the conditions under which positive solutions of systems of linear (price) equations obtain. In their description of the economic process both authors start from a given system of production (and 'productive consumption'). Setting aside the problem of non(re)produced goods, they investigate which set of relative prices is able to support that system. As Leontief (1928, p. 598) stresses, the concept of value adopted by him has nothing to do with any intrinsic property of goods as judged by the consumer; it rather refers to the 'exchange relation' deduced from the 'relation of production'. He shows that (long-period) prices are fully determinate once, in addition to the methods of production, a rule fixing the distribution of income between the different classes of society (workers and capitalists) is given.

Similarly Remak who objects to demand and supply analysis:

All existing approaches in theoretical economics always start from these [demand] functions, which characterize the buyer's behaviour at different prices. However, since this behaviour can neither be experimentally nor theoretically ascertained quantitatively, there is no way to get from these theories to practical calculations. We will therefore take into consideration approaches which result in quantitative calculations that can also be carried out practically.

(Remak, 1929, pp. 711–12)

Yet Remak's concern is not only positive, it is also normative. This becomes clear when we turn to his concept of 'superposed prices' (*superponierte Preise*): 'A superposed price system has nothing to do with values. It only satisfies the condition that each price covers the prices of the things required in production, and the consumption of the producer on the assumption that it is both *just* and *feasible*' (ibid., pp. 712–13). He also talks of 'reasonable prices' (vernünftige Preise). His paper is indeed intended to contribute to the then politically heated debate on socialism versus capitalism (ibid., p. 704). He conjectures that a major source of the 'non extremality' of capitalism, which is reflected in unemployment and forgone production possibilities, is the way in which prices are actually fixed in capitalist economies: high mark-ups on costs of production decided independently of each other by producers are said to raise both the problem of underconsumption and that of miscalculation. The question then is whether by abandoning the capitalist mode of price formation and adopting a different, i.e. 'socialist' one, one can get rid of the evils of

capitalism. Without being able to demonstrate that a system of ‘reasonable’ prices actually exists, the socialist alternative would be deprived of its rational basis. Remak takes pride in having shown with his concept of ‘superposed prices’ that such a solution in fact exists and how it can be determined. Towards the end of his article he also expresses the conviction that the technical problem of numerically solving large systems of linear equations can be expected to be overcome soon, given the progress made in the development of electric calculating machines (cf. *ibid.*, p. 735).⁷⁶

THE MARGINALIST CAMP: WICKSELL, SCHUMPETER AND CASSEL

Major advocates of the marginalist point of view in German-speaking countries around the turn of the century were the Swedish economists Knut Wicksell and Gustav Cassel and the Austrian Joseph Alois Schumpeter. The reception of Wicksell’s contributions was impeded by the demanding formalism of his analysis, which the ordinary German and Austrian economist was either unable or unwilling to appreciate.⁷⁷ Ironically, Cassel’s success in the economics profession of the Weimar Republic was partly due to the widespread misconception that his analysis constituted a fundamental break both with the classical-socialist and the marginal utility doctrines. Schumpeter played an important role as an interpreter to the German profession of the latest achievements in theoretical economics abroad.

Knut Wicksell

In his *Wert, Kapital und Rente* published in 1893 Wicksell presents the fundamentals of the ‘modern’ theory of value and of Böhm-Bawerk’s theory of capital and counterposes it to the older theories of value and distribution.⁷⁸ Wicksell does not share the contempt for Ricardo’s analysis entertained by some of the Austrian economists. In the preface he specifies one of the intentions of his essay as follows:

It consists of an attempt to evaluate the classical theory of value as it left Ricardo’s hands—its merits, especially when compared with the later theories of the ‘harmony economists’ and the socialists, and its defects. At the time when it has almost become a fashion to speak of Ricardo in disparaging terms, it may be permissible to emphasize once again the unquestionable merits of this acute thinker. I can by no means share Wieser’s opinion, that Ricardo’s works exhibit ‘the great youth of economic science’. On the contrary; as I see it, his presentation, compared with the vagueness of many later schools, the superficiality of a Carey or a Bastiat and the ‘Hegelian’ darkness—and conceit—of Karl Marx, is distinguished by what I should choose

to call its masculine features. He appeals to the understanding of his readers instead of to their emotions.

(Wicksell, [1893] 1954, p. 17)

In Wicksell's view, classical analysis, though 'incomplete', was on the right track; the 'analytic-synthetical method' employed by it is considered capable of eventually resulting in satisfactory 'doctrines concerning the economic life of nations, their internal economy and mutual intercourse' (ibid., p. 32). The modern theory of value is said to be based on principles well known to Ricardo: 'The theory of rent, especially, shows a marked analogy with the modern concept of marginal utility' (ibid., p. 40).⁷⁹

Yet Ricardo need not only be defended against unfair criticisms by marginalists; his analysis has also to be protected from abuse by socialists:

The socialists, especially of the Marxist school, believed...that they could use Ricardo's theory of value as a weapon of direct attack against the whole capitalist structure of society. This is certainly wrong. Ricardo's dictum is quite formal. His sole aim was to lay down a general measure and regulator of exchange value; he never speaks of labour as the exclusive source of value, even in our presentday society.

(Ibid., pp. 34–5)

Contrary to Böhm-Bawerk three years later (cf. Böhm-Bawerk, 1896), Wicksell emphasizes that the socialist doctrines 'in fact include many things' that do not stand or fall by the theory of value as put forward in Volume I of *Capital*, which, he surmises, has 'scarcely the virtue of being able to be discussed seriously' (ibid., p. 44). Wicksell is particularly critical of Marx's search for a 'common factor' and anticipates all of Böhm-Bawerk's respective objections (see pp. 32 et seq). The opinion entertained by Marx and his followers that different values in use or the 'utilities' are incommensurable he rejects on empirical grounds: 'Every day we compare different utilities with one another and weigh their reciprocal magnitudes against each other' (ibid., p. 45). While Marx in writing the first volume of *Capital* could not have known marginal utility theory, this is not a valid excuse for Kautsky who in his well-known account of Marx's economic doctrines (cf. Kautsky, 1887) showed himself 'totally uninfluenced by recent investigations, although these investigations have attracted increasingly lively interest in the learned world' (ibid., p. 46).

The year 1913 brought the publication of Wicksell's *Vorlesungen über Nationalökonomie auf Grundlage des Marginalprinzipes* (Wicksell, 1913), the Swedish original of which had appeared already in 1901. As regards the merits of Ricardo and the classical school and the demerits of Marx and the socialists, the book reiterates essentially the opinion expressed in the earlier study. There is however one aspect which gets special accentuation in the

Vorlesungen: Wicksell accuses both the apologists and critics of modern society, i.e. the ‘harmony economists’ and the Marxists alike, of having contributed with their ‘absurd’ arguments ‘more than anything else to the charge of dishonesty and subservience to the interests of the powers that be which has been levelled against scientific, or quasi-scientific, economics.’ Wicksell adds: ‘The establishment of a new and better-founded theory of exchange value was, therefore, not only of abstract theoretical importance, but also of eminent practical and social interest’ (Wicksell, 1934, p. 28).

Joseph Alois Schumpeter

Schumpeter entered the debate on alternative theories of value and distribution on several occasions. In 1908 he published his voluminous *Das Wesen und der Hauptinhalt der theoretischen Nationalökonomie* (The essence and the main content of theoretical economics) which aimed at the special situation in Germany and intended ‘to bring the theory of other countries closer to German social sciences’ (Schumpeter, 1908, p. XX). The book is a kind of ‘Marshall plan’ to save German theoretical economics, which after the years of dominance of the historical school was in ruins. It would be more correct to call it a ‘Walras plan’, since the book contains essentially an exposition of Walras’s theory of general economic equilibrium, which according to Schumpeter constitutes the *Magna Carta* of theoretical economics.⁸⁰ In the following years Schumpeter published several papers in which he reviewed major socialist, classical and neoclassical contributions to the theory of value and distribution and developed his own views on the matter starting from a Walrasian position. His papers include critical discussions of Tugan-Baranowsky’s social theory of distribution (cf. Schumpeter, 1916–17), Oppenheimer’s theory of a class monopoly in landed property (cf. Schumpeter, 1917–18) and Gustav Cassel’s *Theoretische Sozialökonomie* (cf. Schumpeter, 1927a).

Here attention will focus especially on the first essay mentioned, entitled ‘Das Grundprinzip der Verteilungstheorie’ (The fundamental principle in the theory of distribution). The main aim of the paper is the following. While, as Schumpeter observes, marginal utility theory is ever more widely accepted in the economics profession as an adequate theory of value and price, its critics keep claiming that ‘it fails with respect to the problem of distribution’ (1916–17, p. 4). This was most forcefully argued by Michal Tugan-Baranowsky in his *Soziale Theorie der Verteilung* (Social theory of distribution) (Tugan-Baranowsky, 1913).⁸¹ According to Schumpeter some kind of ‘class monopoly’ approach to income distribution was also advocated by German scholars, most notably Oppenheimer and Diehl. Schumpeter’s concern is both constructive and critical: he attempts to show that ‘marginal productivity theory’, which is but ‘the name of marginal utility theory applied to the problem of distribution’ (ibid., p. 5n), is able to

solve that problem and he intends to refute the alternative approach in the theory of distribution.

With regard to the first task, Schumpeter draws on the writings of Walras, Böhm-Bawerk, Marshall, Wicksell, Wicksteed and especially J.B. Clark. In his view marginal utility theory in combination with its twin, marginal productivity theory, manages to overcome 'the patchwork of the classical economists' and to unravel 'the true determinants of income formation' (Schumpeter, [1927b], 1954a, p. 28; similarly 1916–17, p. 19). The laws of production and those of distribution are said to be insolubly intertwined: 'Each productive activity is at the same time a distributive act, and *vice versa*' (1916–17, p. 10). To treat production and distribution as two spheres that are largely independent of each other, the former being governed by technical and economic factors, the latter by sociological and historical ones, as is done in the theories emphasizing 'social power relations', is mistaken. Schumpeter's point of reference is a long-period general competitive equilibrium of the economy characterized by a uniform rate of interest. Given initial endowments, consumer preferences and technical alternatives, all prices, including the prices of factor services, and all quantities, including the quantities employed of these services, are simultaneously determined by supply and demand in the respective goods and services markets. 'Hence, seen from the point of view of economic theory, the distribution question concerns but a group of price problems that are separated artificially from the general system of mutually dependent quantities and values of goods' (ibid., p. 32). Marginal productivity theory is also said to have solved the (in)famous imputation problem, with which the Austrians grappled in vain.

When Tugan-Baranowsky talks of the 'social power' of the propertied classes as the source of shares of income other than wages, if his way of speech is to make any sense at all, then he ought to mean 'the relative marginal importance of their means of production'. Schumpeter adds: 'Once this is understood, it is not difficult to see that the situation would exhibit economically essentially the same features, if workers and capitalists were the same persons, that is, if the capital were to be distributed among the workers' (ibid., p. 30). In short: 'The relative power of the capitalist class is nothing but an expression of the relative importance of a marginal quantity of capital' (ibid., p. 31). All theories derived from Marx's concept of 'exploitation' are unsatisfactory since they presume that with regard to distribution there exist degrees of freedom that can be decided at will politically, whereas in truth distribution is determined by the relative scarcities of the available factors of production: labour, land and capital.

Schumpeter then discusses in some detail the marginal productivity theory of wages. Emphasis is on the role of 'substitution' in consumption and production in deriving demand and supply functions with regard to labour, land and 'capital', where Schumpeter makes it clear, following J.B.

Clark, that in order to be consistent with the long-period notion of equilibrium employed, 'capital' has to be conceived as a *value* sum, whose physical composition is determined endogenously (ibid., p. 48): we have to assume, he stresses in another place, that 'the available physical capital is given in terms of an abstract jelly' (1927, p. 25). With the price of one factor rising relatively to the prices of the other factors, the demand for that factor can generally be expected to fall due to the principle of substitution, and *vice versa*. The adjustment of consumers and producers is said to generate a tendency towards the full employment of all factors, including labour, and a payment of workers according to their marginal productivity.

Interestingly enough, towards the end of his essay Schumpeter mentions a case which throws doubt on the general validity of the conventional neoclassical theory. The case under consideration is characterized as follows: 'It may happen that with a rise in wages entrepreneurs find it advantageous to use less of the *other* means of production and to increase the demand for *labour*'. Schumpeter hastens to add, however, that this case 'has only theoretical [!] interest' and leaves it at that (1916–17, pp. 85–6 n). No explanation is given under what circumstances such a nonconventional choice of technique is possible nor what would be the implications of it in terms of the stability of general equilibrium.

Before we turn to Cassel's contribution it deserves to be mentioned that the work of another Russian economist had an important impact on the debate about alternative theories of value and distribution in German-speaking countries. The reference is to Bukharin's *Economic Theory of the Leisure Class*. The Russian original of the book was published in 1919, a German translation in 1925 (cf. Bucharin, 1925).⁸² Bukharin was answered by Leo Köppel from a fundamentalist Austrian viewpoint in an essay entitled *Grenznutzentheorie und Marxismus* (Marginal utility theory and Marxism) (cf. Köppel, 1930). Köppel reiterates Böhm-Bawerk's criticism of Marx and expounds in some detail the Austrian doctrine and why, in his opinion, Bukharin's methodological and substantive objections to the latter are either wrong or not pertinent.

Gustav Cassel

In his essay 'Der Anteil Deutschlands an der nationalökonomischen Forschung seit dem Weltkrieg' (The contribution of Germany to economic research since the world war) in the Festschrift in honour of Lujo Brentano published in 1925, Adolf Weber observes:

One could have perhaps expected that the Austrian marginal utility theory would have benefited from the newly awakened theoretical interest in the German Reich. Yet its influence with us is still relatively small.... To the failure of the Austrians in Germany perhaps nothing

contributed more than the penetrating and systematic exposition of economics put forward by F.v.Wieser from the point of view of the marginal utility school. Here we have a brilliant example showing how surprisingly sterile marginal utility theory is despite all its ingenuity and embracing knowledge.

(Weber, 1925, p. 27)

Weber's judgement refers to Wieser's 'Theorie der gesellschaftlichen Wirtschaft', published in 1914 in the *Grundriß der Sozialökonomik* (Outline of social economics) edited by Max Weber (1914).

An entirely different reception was bestowed by the German economics profession upon Gustav Cassel's *Theoretische Sozialökonomie*, published in 1918 (cf. Cassel, [1918] 1932): within a few years it advanced to the most popular textbook in German universities.⁸³ Adolf Weber in the essay just mentioned pointed out that 'since Wilhelm Roscher no economist has exerted such a strong influence on German economics as Gustav Cassel' (Weber, 1925, p. 25; similarly Schumpeter, 1954a, p. 69). The reasons for this surprising success are manifold. Apart from its skilful composition and fluent exposition, which render the book an ideal text for the classroom, Cassel's openly displayed disregard both for the 'socialist' and the Austrian doctrine may have also helped.⁸⁴ In the preface Cassel stresses that 'it ought to be possible to do away with the whole of the old theory of value as an independent chapter of economics and build up a science from the beginning on the theory of prices, and that we would be able to rid ourselves in this manner of a lot of unnecessary discussions, mostly of a rather scholastic nature, which had burdened earlier treatises on economics' (Cassel, 1932, p. vii). On the socialist analysis he passes the following verdict:

The thesis of the socialist theory of value is that the value of a commodity is equal to the amount of labour which is necessary under normal conditions to produce it. This assumption is quite arbitrary, and in contradiction to the actual facts. It not only excludes in advance interest as such, but also makes a sensible theory of interest impossible, for in it there is no place for an objective treatment of the problem of pricing, and interest cannot, consequently, be conceived as a price in this general process. A theory of interest based upon such an assumption is evidently nonsensical, and cannot claim to be regarded as a scientific exposition. A science which on this point makes concessions to Marxian scholasticism does not know what it owes itself.

(Ibid., p. 189)

Böhm-Bawerk, on the other hand, is said to have been unable 'to assimilate the new scientific conception of pricing as that of a single, general process

determining simultaneously not only the prices of finished goods, but also those of factors of production. His ideas are still at least partly of the type characterized by the question: Is the value of the goods determined by that of the factors of production, or, *vice versa*, is the value of the factors of production determined by that of their products?' And with regard to certain aspects of his theory of capital and interest it is claimed that 'Böhm-Bawerk has, in the main, taken over Jevons's theory, with all its faults' (ibid., pp. 195–6). Statements of this sort fell on fertile soil in parts of the German economics profession, prejudiced as it was against the Austrian doctrine.

Cassel's book rapidly gained a reputation for making a fresh start in the devastated field of price theory. Cassel did nothing to prevent this interpretation from developing, on the contrary. In his essay 'Grundriss einer elementaren Preislehre' published in 1899 (cf. Cassel, 1899), which anticipated the message of his book in all important respects, he had made it clear that his theory was nothing but a simplified version of Walras's. In his *Theoretische Sozialökonomie* the name of his famous precursor is mentioned not once, nor are the names of Pareto or other representatives of the Lausanne school. It is left to Wicksell, Schams and Schumpeter to clear up the misunderstanding that Cassel is more than a popularizer of Walras. They show that the impression conveyed by Cassel that his explanation of prices can do without any recourse to subjective value theory is spurious. Although Cassel takes pains to avoid the established conceptual apparatus of marginal utility theory, his relabelling cannot gloss over the fact that he is essentially using the same notions: 'The old friends come to the feast with masks', as Schumpeter (1954a, p. 75) mocked: 'marginal utility' is disguised as 'the principle of scarcity' and Gossen's Second Law as 'The Principle of the Uniform Satisfaction of Wants'. In view of these critical voices it comes as no surprise that towards the end of the 1920s Cassel's star went down almost as rapidly as it had risen a decade earlier. On the occasion of the Dresden conference on the theory of value (see p. 67 et seq), Oskar Morgenstern formulated the judgement: 'Cassel's theory of price appears to me to be *res judicata*; after the absolute refutation of the system of equations by Wicksell and Schams, we need waste no more words on it' (Morgenstern in Mises and Spiethoff, 1933, p. 93; see also Mises, ibid., p. 6). While there are several critical statements on Cassel's analysis put forward during the conference, there is not a single favourable one.

The appeal that Cassel's promise to provide a theory of price that can do without subjective value theory appears to have had for the German economics profession can be exemplified with regard to Alfred Amonn. In his essay 'Der Stand der reinen Theorie' (The state of pure theory) in the Brentano *Festschrift* he distinguishes between two currents of marginal utility theory: one that goes back to Jevons and Walras and the Austrian

variant. He then remarks on the former, with Wicksell's *Vorlesungen* as its most advanced formulation:

The mathematical form in which this explanation is presented here... cannot gloss over the fact that there is no content hidden behind the form. For the utility functions which Wicksell employs here are no proper mathematical functions; they do not contain or represent extensive magnitudes with which alone one could perform mathematical operations.... This is the *decisive* objection to *all* attempts at a purely subjective explanation of price.

(Amonn, 1925, pp. 286–7)

Apparently without being aware of the recent developments in (ordinal) utility theory, Amonn concludes his exposition with the remarkable observation: 'The development of marginal utility theory has extensively and intensively come to a close. In past decades it was neither able to gain ground nor internally to improve.... Something new is needed if the theory is again to become lively and prone to further development.' The new he believes to discern in Cassel's theory, 'which is not affected by the psychological problems inherent in large measure in marginal utility theory' (*ibid.*, pp. 288–9).⁸⁵

Seven years later, at the Dresden conference, we encounter a different Alfred Amonn. He now calls Cassel's system a 'torso of the Walrasian theory' and the former critic of marginal utility theory has transmuted into one of its most ardent advocates. In his opinion the triumph of that school is complete, which prompts him towards the end of the discussions to call upon his fellow economists to demonstrate moderation:

And finally a word to us marginal utility theorists. We do not want to be dogmatic or doctrinaire. We want to remain open to criticism from whichever side it may come.... One cannot, however, expect us to abandon the results of the scientific work of a large number of conscientious and learned authors without showing us conclusively in terms of specific objections to our own propositions that the latter cannot be sustained. Until now objections of this kind have not been raised by anyone.

(Amonn in Mises and Spiethoff, 1933, p. 126)

Let us have a closer look at the proceedings of the Dresden conference which can be said to mark both the end of one and the beginning of another *Sonderweg* (special development) of economics in Germany: the Historical School had exhausted its influence, German academic economics had been relinked again with international developments; yet with the seizure of power by the Nazis in 1933 and the following 'cleansing' of German universities (and after the *Anschluß* in 1938 of Austrian universities as well) of all that was defined as 'undeutsch' ('un-German'), the economics

profession in Germany (and Austria) lost its most brilliant scholars, many of whom went abroad or died in concentration camps.

THE 1932 DRESDEN CONFERENCE ON PROBLEMS OF VALUE THEORY: THE TRIUMPH OF MARGINALISM

Reading through the papers given and the summary of the discussions held at the 1932 Dresden conference on 'Probleme der Wertlehre' organized by the Verein für Socialpolitik, one gets the impression that marginal utility theory had won an all-out victory. As one discussant remarked, the debate was in danger of dying from agreement on the matter. How is this unusual picture of an almost perfect harmony in the German economics profession to be explained?

The first thing to be observed is that the brunt of the preparation of the conference was borne by Ludwig von Mises. He managed to solicit altogether eleven papers from authors representing major orientations regarding value theory in the German, Austrian and Swiss profession for the preparatory volume edited by Mises himself and Spiethoff (1931). It would be an exaggeration to call the selection of authors totally unbiased. Five papers are straightforwardly marginalist: one by Morgenstern (1931a), two by Mises (1931a, 1931b), one by the Swiss Furlan (1931) (on Paretian general equilibrium theory) and one by Vleugels (1931). In addition there are papers by Kromphardt (on Cassel) and Zeisl (on Marx and the socialists), and by Liefmann, Gottl-Ottlilienfeld, Oppenheimer and Spann (on themselves). Apart from Zeisl none of the latter authors attended the 1932 Dresden conference. In the discussions participated the Austrian marginalists L.von Mises, G.Haberler, F.A.von Hayek, O.Morgenstern, E.Schams, P.Rosenstein-Rodan and F.X.Weiß, out of a total number of twenty active combatants. Nobody at the conference stood for the views of Liefmann, Oppenheimer or Spann. The classical approach was hardly present, setting aside a brief intervention by Emil Lederer, who, as the chairman of the discussion, was obliged to stay aloof. Apart from him only G.Colm and W.Mackenroth put forward critical views on marginal utility theory. The representative of the Marxist perspective, Hans Zeisl from Berlin, had already given in to marginal utility theory in his contribution to the preparatory volume of the conference. There he expressed the opinion that 'all Marxian laws concerning *price relations* can be formulated in terms of the subjective theory'. He went even a step further maintaining that 'a very important part of Marx's theory, namely the laws of distribution of the capitalist economy can only be given an exact formulation in terms of the subjective theory' (Zeisl, 1931, p. 196).

The intervention of Arthur Spiethoff, then president of the Verein für Socialpolitik and a major representative of contemporary historicism, answering an attack by Mises against the Historical School, is also of some

interest. He expressly subscribes to the principle put forward by Mises that doctrines should be judged on the basis of their last and most advanced formulations only. However, Mises, plainly contradicting himself, is said to have ‘described the point of view of the historical school according to a state of affairs that is at least fifty years old.’ Spiethoff adds: ‘I believe that no representative of the historical point of view—it is most certainly not possible to talk of anything else, a school really does not exist—denies that pure theory is justified and important.’ The present situation, he continues, is rather ‘characterized by the adoption of marginal utility theory by the representatives of the historical point of view’ (cf. Mises and Spiethoff, 1933, pp. 58–9).

With representatives of the classical, historical and socialist points of view having left the field to the marginal utility theorists, be it because the former could not attend the conference or because convincing counterarguments were not at hand, the question remains whether instead of a debate between different orientations there was at least one within the marginalist camp. The recent past was characterized after all by occasionally heated discussions between advocates of the Austrian, the Anglo-American and the Lausanne doctrines, and it was not even the generally accepted view that these constituted but variants of a theory which is in principle unified. Yet, surprisingly, there is little to be seen of these differences of opinion during the meeting. There are reasons to believe that Oskar Morgenstern’s contribution ‘Die drei Grundtypen der Theorie des subjektiven Werts’ (The three basic types of the theory of subjective value) to the preparatory volume had exerted a pacifying effect. The result of his disquisition is that there is only a single theory of subjective value. It is beyond doubt that Menger, Jevons and Walras had started from the same fundamental idea. Morgenstern continues:

And now the incomprehensible miracle is supposed to have taken place that from this common origin three different and partly even conflicting doctrines should have emerged.... Reflecting upon this makes one see at once that there are no other ways out of the dilemma than to assume that: (a) all three theories are wrong; (b) all three theories are correct and *de facto* identical and differ only in terms of various formulations of certain problems, the use or not of the mathematical form of presentation, etc.; (c) one theory is correct, whilst the others are wrong; (d) two theories are identical (cf. sub b), the remaining one is wrong. Since it is clear without further reasoning that case a can be excluded straight away, only hypothesis b can be taken into consideration: only the latter conforms to reality.

(Morgenstern, 1931a, p. 39; similarly Morgenstern, 1931b, p. 506)

Morgenstern’s judgement is echoed by Mises: ‘One will have to admit that today there is only *one* economics. This holds true, I should like to stress

explicitly, also for the German linguistic area' (Mises in Mises and Spiethoff, 1933, pp. 9–10).

The unprejudiced observer at the Dresden conference, who knew little about the *querelles d'Allemand* that had shaken the economics profession around the turn of the century, must have got the impression of a *unité de doctrine* on value and distribution in German-speaking countries. However, appearances are deceptive. Interestingly, it was the same Oskar Morgenstern who in a paper published in 1931 on 'Offene Probleme der Kosten-und Ertragstheorie' (Open problems in the theory of cost and returns) expressed doubts as to the general validity of the 'modern' theory of value (cf. Morgenstern, 1931b). Morgenstern's paper summarizes some recent discussions in England and Italy, placing special emphasis on Piero Sraffa's 1925 essay on the relationship between costs and quantities produced (cf. Sraffa, 1925). Morgenstern is full of praise for Sraffa's essay which he calls 'one of the most valuable and stimulating contributions' that deserves 'the greatest attention'. He agrees entirely with Sraffa's criticism of the supply curve and the negative implications it has for the Marshallian analysis. The finding that in such a framework free competition is compatible with constant unit costs only, i.e. a horizontal supply curve, throws into doubt, as Morgenstern notes, the importance of 'demand' and the factors determining it: 'Whether, as Sraffa maintains, constant costs were given little attention only because their presence disturbs the symmetry of supply and demand (in Marshall)—and, one should add, endangers the supremacy of demand (in the Austrian authors)—remains to be seen. Yet a motive would have been found' (Morgenstern, 1931b, p. 518). As is well known, Sraffa in his 1926 paper on the laws of returns drew the conclusion:

In normal cases the cost of production of commodities produced competitively—as we are not entitled to take into consideration the causes which make it rise or fall—must be regarded as constant in respect of small variations in the quantity produced. And so, as a simple way of approaching the problem of competitive value, *the old and now obsolete theory which makes it dependent on the cost of production alone appears to hold its ground as the best available.* (Sraffa, 1926, pp. 540–1; emphasis added)

And there we may let matters rest.

NOTES

- * This paper is partly based on earlier work of mine; see, in particular, Kurz (1989). I had the great privilege of discussing some of the material covered with Adolph Lowe, who was one of the few people to have not only an intimate

knowledge of the literature under consideration (he even contributed to it) but who knew personally many of the combatants whose contributions will be dealt with. I should also like to thank Evelyn Zessar for librarian assistance, Dorothea Schmidt-Rohr for screening some of the literature referred to in the text, Karl Acham, Stephan Böhm, Karl Brandt, Pierangelo Garegnani, Christian Gehrke, Vitantonio Gioia, Thomas Huth, John King, Gerhard Mozetic, Heinz Rieter, Paul Samuelson, Bertram Schefold and Ian Steedman for valuable hints and comments on an earlier draft of the paper, and the participants of the workshop 'Marginalism and Socialism' at the University of Amsterdam, 2–3 April 1993, for useful discussions. Any errors and misconceptions are of course entirely my responsibility. (In what follows all translations from German sources of which no English versions exist are mine; unless otherwise stated, all emphases in quotations are the author's.)

- 1 With few exceptions, authors who were native Swiss or taught in Switzerland played a relatively minor role in the debate. One of these exceptions was Julius Wolf who was born in Brünn (Austria) and taught economics at the University of Zürich; see, for example, Wolf (1886). On Wolf see Howard and King (1989, pp. 29–31).
- 2 For the following see Hennings (1972, ch. 3), Mozetic (1987, chs II and IV), Kauder (1970) and Lehmann (1968, ch. 4).
- 3 A useful survey of the developments in the theory of value and price in Germany in the nineteenth century is provided by Karl Diehl in his contribution to the *Festschrift* dedicated to Gustav Schmoller on the occasion of the latter's seventieth birthday; see Diehl (1908). See also Brentano (1908), Diehl (1916, ch. 8), Diehl's introduction in Diehl and Mombert (1920), Schumpeter (1914), Surány-Unger (1927) and Hennings (1972).
- 4 It is interesting to note that Diehl in the Schmoller *Festschrift* observes that contrary to what might be expected, Schmoller did not put forward principles of value and price that are peculiar to the different economic periods, 'but rather clings to a *general* theory of value and price' (Diehl, 1908, p. 69). The theory advocated by Schmoller (cf. Schmoller, 1904, book 3, section 4) is dealt with by Diehl under the heading 'eclecticism and scepticism'. Schmoller's theory is said to be 'eclectic' because it combines marginal utility considerations with classical cost aspects; and it is called 'sceptical' because in Schmoller's view received economic theory is of little use in analysing real-world phenomena. On Schmoller as an economic theorist see also Schefold (1989).
- 5 It goes without saying that there was no such thing as a membership in the Historical School as there are memberships in political parties. However, since the Verein für Socialpolitik was dominated by the younger Historical School, a membership in the former was almost one and the same thing as subscribing to the intellectual programme of the latter.
- 6 This explains also the chilliness with which Menger's *Grundsätze* were received in Germany; see, for example, Schmoller's review of Menger's *Grundsätze* (Schmoller, 1873). For a qualification of the widespread opinion that the Austrian marginal utility theorists were staunch supporters of *laissez faire*, see Böhm (1985).
- 7 On the role of the Anti-Socialist Law for the development of German political economy, see the observation by Knut Wicksell ([1893] 1954, p. 31, fn).
- 8 Wagner (1876), a major 'state socialist' of conservative orientation of the time, saw his own analysis as similar to, and partly inspired by, the analyses of Rodbertus and Schäffle. Nowadays he is known, if at all, as the originator of

the 'law of the rising share of state activities'. However, around the turn of the century he was considered an important representative of classical economics. This judgement is based on the observation that while he did not totally reject marginal utility theory, he saw only a very limited role for it. His position in this regard bears some resemblance to the positions taken by authors such as Heinrich Dietzel and Karl Diehl; see also pp. 15 et seq.

- 9 Interestingly, Bauer never published his objections to marginal utility theory (cf. Mozetic, 1987, p. 38). It is also reported (cf. Mises, 1978, p. 40) that he did not think very highly of Hilferding's 1904 counter-attack (see pp. 38 et seq): in his view, 'Hilferding had never really even comprehended the nature of the problem.'
- 10 This is perhaps somewhat surprising, given Menger's openly displayed admiration of Roscher's intellectual achievements (see p. 15).
- 11 See on this especially Streissler (1990) who aptly called Menger a 'German' economist. Cf. also Hofmann who, for different reasons, opined that 'there was hardly ever in economics a work and its author less suited to found a school' (Hofmann, 1964, p. 147).
- 12 The *Jahrbücher* published also pieces by Scharling (1888) and Lehr (1889), among others; Lehr had used the term 'Grenzwert' ('marginal value') in the title of his paper. The revival of interest in the theory of value in the late 1880s was not limited to the *Jahrbücher*. it is also reflected in the pages of the *Zeitschrift für die gesamte Staatswissenschaft*; see, in particular, the contributions by Wolf (1886), Gärtner (1887) and Flatow (1889). See also Howey (1960, pp. 139–42).
- 13 Dietzel spoke also of 'the older British-German dogmatics [Dogmatik]' which had been challenged by 'the innovators [die Neuerer]'.
- 14 Dietzel's view resembles that expressed by John Stuart Mill in 1848 (cf. Mill, 1965, p. 465).
- 15 In his interpretation of the classical authors Dietzel refers approvingly to Adam Smith's statement that 'labour was the first price, the original purchase-money that was paid for all things' (Smith, 1976, vol. I, p. 48).
- 16 Interestingly, Franz Oppenheimer, who also advocated the labour theory of value, two decades later called marginal utility 'the *measure* but not the *cause* of price' (Oppenheimer, 1910, p. 366).
- 17 To this Borkiewicz (1921, p. 16, fn 1) objected that the difficulty of the quantitative measurement of a factor does not give the theorist the right to substitute this factor by another one.
- 18 Dietzel specifies the 'economic principle' wrongly as involving 'the attainment of a *maximum* of want satisfaction in terms of a *minimum* of cost' (ibid., p. 583).
- 19 This point of view was anticipated by Jevons (1871) and Wicksteed (1884). I am grateful to Ian Steedman for drawing my attention to this fact. It should also be noted that Wicksteed exerted a considerable influence on some British socialists, in particular George Bernard Shaw, who gave up the Marxian in favour of the Jevonian theory of value; see Steedman (1987, 1989). See also the following section.
- 20 More recently Leif Johansen (1963) undertook to clarify the relationship between the labour theory of value and marginal utilities in a single production framework.
- 21 In what follows we shall set aside the comment by Lehr (1890) who claims that the doctrine put forward by himself (cf. Lehr, 1889) is altogether independent and original and thus must not be confounded with that of 'the innovators'.

- 22 This opinion was expressed already by Walras ([1874] 1954, p. 416). It recurs in the writings of all major marginalist authors; see also pp. 59 et seq.
- 23 The notion of 'successivism' was introduced by Ladislaus von Bortkiewicz in his critique of Marx's explanation of the general rate of profit and prices of production; cf. Bortkiewicz (1906–07, II, pp. 37–8). Yet, as Bortkiewicz stressed, the Austrian search for ultimate causes of value and price can also be characterized as 'successivist'. We shall come back to this at p. 50.
- 24 As Meek (1972, p. 500) stressed, 'a feature of marginalism which all Marxists...have always claimed is *a*, if not *the*, leading characteristic of the doctrine,...is the way in which it in effect set the seal upon that crucial historical process of *abstraction from the socioeconomic relations between men as producers* which began in theoretical economics in the years following Ricardo's death.'
- 25 See also Eckstein (1902, p. 811) and Scharling (1904, pp. 29–31). Scharling tried to compromise between classical and marginalist value theory. In his view the latter is useful as a theory of consumption, involving however a static view of society. Its claim to provide a full-fledged theory of value is to be rejected (ibid., p. 157).
- 26 Rosa Luxemburg makes fun of the theory of use value in terms of the following examples: 'Herr Borsig produces first machines to satisfy the needs of his family. The superfluous machines are then sold. The producers of mourning-clothes first work for deaths in their own families. What is left over of mourning cloth due to an insufficient family death rate is then exchanged' (Luxemburg, [1925] 1970, pp. 541–2; see also the stories invented by Eckstein (1902) to make fun of marginal utility theory). Examples of this kind were quite common in the earlier socialist literature, i.e. the one prior to the 'marginalist revolution' proper, and were meant to ridicule the received doctrine that capitalism could be conceived, in Marx's terms, as 'simple commodity production' in which the surplus of production over the producer and his family's own consumption is brought to the market and exchanged. While in the earlier literature the 'realism' of the underlying view of capitalism was questioned, it is now the logical consistency of a theoretical argument that is disputed.
- 27 On Steffen see the paper by Lönnroth in this volume. Steffen's paper is referred to by Diehl (1898, p. 42), in whose view Marx's mistaken idea to derive prices from (labour) values in combination with the findings of the marginal utility theorists implied that the criticism had to be directed 'against the objective method in the theory of value as such.'
- 28 In 1891 W.Boehmert had published a long article on Jevons and the impact of his theory on the economics profession in England (cf. Boehmert, 1891). In it Jevons is assessed from the point of view of the 'historical-ethical school' of economics. Jevons's concern with individual value considerations is applauded, whereas his mathematical method is despised. Because of the first aspect, in Boehmert's opinion Jevons's lasting contribution, marginal utility theory is compatible with, and is said to provide in fact an enrichment of, the historical-ethical point of view. Boehmert concludes: 'Such a theory of value is much more akin to ethics than to the exact sciences' (ibid., p. 758). This assessment is shared by the majority of scholars working in the tradition of the German historical school. The most important textbook aiming at a compromise between the two traditions was that of Philippovich (1893). On Schmoller's opinion on the matter, as summarized by Diehl, see footnote 4 above. See also the statement by Arthur Spiethoff, p. 68.

- 29 In 1887 Kautsky had published *Karl Marx' ökonomische Lehren* (cf. Kautsky, 1887) which contained in effect a summary of Volume I of *Capital*; Kautsky's book was extremely influential in socialist circles; it had several editions and was translated into five languages.
- 30 This was only the beginning of the German debate on 'revisionism'; for a summary statement of it, see Gustafson (1972), Meyer (1977) and Howard and King (1989, ch. 4); see also Günther (1905). For a discussion of the intervention, in German, by the Russian Peter B. Struve in the debate, which touches upon the theory of value, see Howard and King in the present volume.
- 31 For Böhm-Bawerk's assessment of the views entertained by Schmidt and Bernstein see Böhm-Bawerk ([1884] 1921, pp. 399–411).
- 32 A summary of Bernstein's criticism of the Marxian theory of value coupled with the proposition that the latter is devoid of any practical importance is to be found in Bernstein (1899a, pp. 37 et seq.).
- 33 As we shall see in the following sections, after Hilferding's 1904 anti-critique to Böhm-Bawerk (1896) this view became a major line of defence in Marxist circles.
- 34 It is interesting to note that Stolzmann in his 'ethical-organicist economics' criticized both the classical and socialist theories of value of Ricardo and Marx and marginal utility theory (cf. Stolzmann, 1896, 1909) for failing to take properly into account that economies are purpose-oriented, cultural entities that cannot be analysed by using a purely naturalistic (Ricardo), materialist (Marx) or subjectivist (Menger, Böhm-Bawerk) method. His books contain detailed, often opinionated expositions and criticisms of the classical, Marxian and marginalist doctrines. For example, he interprets Marx's 'law of value' as an ethical postulate constituting the 'ethical core' of the latter's 'historical materialism' (cf. Stolzmann, 1909, pp. 576–92; see also Kaulla, 1906, pp. 272–3). Stolzmann mentions the works of Rodbertus, Schäffle, Othmar Spann and especially Adolph Wagner as his main sources of inspiration and pleads for a 'marriage of convenience' between the classical-socialist, the marginalist and the universalist point of view. (He also draws heavily on the works of Komorzynski (1889, 1897).) Politically he declares himself a kind of (progressive) socialist. Stolzmann's 'social organic' approach was a major target of Böhm-Bawerk's in his essay on power or economic law (cf. Böhm-Bawerk, 1914). Stolzmann has also received some attention in the more recent 'socialist' literature; see especially Lehmann (1968).
- 35 In the introduction to the collection of essays edited by them, Meixner and Turban (1974) provide a useful summary of the Marx critique put forward by authors writing from an 'Austrian' point of view. Emphasis is on Böhm-Bawerk (1896) and Johann von Komorzynski (1897). The latter is especially concerned with refuting any kind of labour-based theory of value, irrespective of the particular form in which it is presented. (He in fact gets close to identifying Marx's value doctrine with that of Smith and Ricardo.) For in his opinion the explanation of profits in terms of the 'exploitation' of workers is an implication of the labour-based theory of value (cf. *ibid.*, p. 244).
- 36 In what follows all references to Böhm-Bawerk's essay will be to the Sweezy edition of it (cf. Böhm-Bawerk, 1949).
- 37 It should be noted that in the first edition of the *Geschichte* Böhm-Bawerk was mainly concerned with criticizing the German socialist Karl Rodbertus. It was only in a second step that he addressed Marx's analysis (cf. Kurz, 1994). He did so by generalizing the conclusions he had reached with regard to Rodbertus to Marx on the assumption that Marx advocated essentially the same views as

- Rodbertus. In particular, Marx is said to have shared Rodbertus's view that *all* value rests in labour. However, while this idea is indeed to be found in Rodbertus, it is explicitly rejected by Marx. The lack of a careful distinction between the doctrines of Rodbertus and Marx carries over to Böhm-Bawerk's essay. See on this Garegnani (1980, part IV).
- 38 The objection of the 'irreconcilable contradiction' and the related accusation that Marx was unaware of the value-price problem when writing Volume I of *Capital* was reiterated, among others, by Karl Diehl and Heinrich Dietzel. For a criticism of it see, for example, Vornberg (1903, pp. 359–60) and Bortkiewicz (1906–07, I).
 - 39 In fact, much of what Böhm-Bawerk puts forward against Marx is already to be found in the earlier literature, in particular in the writings of Knies, Hermann and Stein.
 - 40 For a similar point see Böhm-Bawerk (1949, pp. 87–90).
 - 41 Gottl-Ottlilienfeld in his contribution to the 1932 Dresden meeting of the Verein für Socialpolitik talks of a 'kabbalistic solution to the problem of value' and calls Marx's approach to price theory 'value metaphysics' (cf. Gottl-Ottlilienfeld, 1931, p. 141).
 - 42 In Böhm-Bawerk ([1884] 1921, p. 381) Marx's omission is called 'a mortal sin'.
 - 43 It remains somewhat unclear whether Böhm-Bawerk himself was of the opinion that value in use, or utility, is the *tertium comparationes*. Hence it is also unclear whether he contradicted his initial statement that the old Aristotelian idea is 'wrong'.
 - 44 Knies in 1873 put against Marx's concept of 'abstract labour' that of 'a value in use *in genere*' (cf. Knies, 1885, p. 160): all commodities are considered reducible to a 'common use value' ('*ein gemeinsames Gebrauchswertiges*') (ibid., p. 155). He thus anticipated Wicksteed's proposal of 'abstract utility as the measure of value' (cf. Wicksteed, 1884). See also Wicksell's criticism of Marx's 'free application of the *principium exclusi tertii*' (Wicksell, [1893] 1954, p. 44) to which we shall come back on p. 60.
 - 45 This has been argued by Garegnani in several contributions; see especially Garegnani (1980, part IV).
 - 46 An English translation entitled 'Böhm-Bawerk's Criticism of Marx' was published in either 1919 or 1920; see Sweezy (1949, p. xvi n). In what follows all references will be to the Sweezy edition of Hilferding's essay (cf. Hilferding, 1949).
 - 47 As we have seen above, Bernstein in his review of Hyndman's book and then in his debate with Kautsky had already opposed this view. In his review of Hilferding's treatise he expressed his amazement that a socialist could be of the opinion that a value in use is an individual relationship between a thing and a human being. On the contrary: 'In fact, the value in use with which economics is concerned is a thoroughly social category and, as a factor of demand, historically conditioned' (Bernstein, 1904, p. 156). Bernstein qualifies Hilferding's position as 'rigid orthodox Marxism' (ibid., p. 154).
 - 48 Hilferding actually holds the remarkable view that Marx's 'law of value' provides an adequate basis for the theory of profits and normal prices, although it was not designed for that purpose. Indeed, Hilferding puts forward the doubtful proposition that Marx looked 'upon the theory of value, not as a means for ascertaining prices, but as the means for discovering the laws of motion of capitalist society' (ibid., p. 139).
 - 49 The essay by Heimann (1913) provides a detailed discussion of the

methodological controversy in Germany, 'which has split the economics profession into two hostile camps' (ibid., p. 758): the advocates of 'methodological individualism' and 'methodological socialism', respectively. Heimann, who shares Schumpeter's opinion on the matter (cf. Schumpeter, 1908, p. 95), argues that intermediary positions, assumed, for example, by Alfred Amonn or Franz Oppenheimer, cannot be sustained (ibid., p. 775). Marx's value-based determination of prices, which Hilferding defended, is rejected on the grounds that prices depend on the relationship between supply and demand. The amount of profits actually realized will generally differ from the amount of surplus value, i.e. profits are partly generated in the sphere of circulation, whose analysis, however, requires one to start from the individual agent. Hence, there can be no 'objective' theory of prices. 'Methodological individualism', Heimann concludes, 'provides the only useful foundation of economic theory' (ibid., p. 794). It goes without saying that Heimann's entire argument is based on the lack of any distinction between 'natural' or 'normal' prices on the one hand and 'market' prices on the other. It seems to have escaped Heimann's attention that the exponents of both schools were concerned with hardly anything other than the former.

- 50 Böhm-Bawerk commented on Hilferding's counter-attack in the third edition of his *Geschichte und Kritik der Kapitalzins-Theorien* that it had not impressed him and had not made him change his opinion; cf. Böhm-Bawerk ([1884] 1921, p. 396, fn 1).
- 51 The example is dealt with in greater detail in Böhm-Bawerk ([1889] 1909–12, pp. 411–25).
- 52 There would, of course, still be the problem of the heterogeneity of labour, of which the classical economists were well aware; this problem is, however, neglected by Wieser in the present context.
- 53 For a discussion of the problem of joint production in classical and early neoclassical economists, see Kurz (1986).
- 54 The marginalist argument is generally developed on the (often implicit) assumption that there is single production, with the value of the product given, i.e. determined by utility valuations. The product under consideration is commonly taken to be a consumption good, which provides direct satisfaction to human needs, a 'good of first order', in Menger's terminology (cf. Menger, [1871] 1981, pp. 55–8). In the case of intermediate goods, or 'goods of higher order', their value is said to derive from the value of the goods of first order. The valuation of intermediate or capital goods is thus a particular aspect of the general imputation problem, which includes also the valuation of the services of 'original' factors of production.
- 55 For a summary statement of the Austrian opposition to 'functional' price theory, see in particular Mayer (1932). It should be recalled that to Böhm-Bawerk the notion of mutual dependence involved 'a mortal sin against all the principles of logic' (Böhm-Bawerk, 1892, p. 359).
- 56 See also Wicksell's comment on Wieser's approach to the imputation problem in Wicksell ([1893] 1954, pp. 24–5). In his 1910 entry on 'Grenznutzen' in the *Handwörterbuch der Staatswissenschaften* Wieser tried to solve the problem of imputation in terms of the marginal products of labour, land and a factor called 'capital'; see Wieser (1929, pp. 97–9).
- 57 What Walras effected for the marginalist theory, Bortkiewicz intended to do for the classical school. His reformulation of the theory of the rate of profit and prices of production (see p. 49) can indeed be seen as involving a shift from the 'causal-genetic' to the 'functional' method. Without such a shift, no coherent

- formulation of the classical theory of value and distribution is possible. This message is also accentuated by Sraffa (1960, in particular p. 6).
- 58 The view that marginal utility theory, conceived as a *general* theory, foundered on the imputation problem was widespread amongst its critics. See, for example, Alexander Schor who concluded that in the doctrine of goods of higher order the theory is confronted with 'the unsolvable problem to derive one original factor (the objective one) from another original factor (the subjective one)' (Schor, 1902, p. 255).
- 59 In Bauer's article the reference is also, among others, to Walras and Jevons, who, curiously enough, is taken to be an American (cf. Bauer, 1924, p. 106).
- 60 The 'apologetic' nature of 'bourgeois economics' is also stressed in Bauer (1926).
- 61 Reference is to the 4th edition of *Positive Theorie des Kapitals* (1921).
- 62 Hilferding wrote a favourable review of Petry's book (cf. Hilferding, 1919). Apparently his position in regard to the role of the labour theory of value had not changed much compared with that expressed in his criticism of Böhm-Bawerk.
- 63 Bortkiewicz is full of praise for Dmitriev's 'extraordinary theoretical talents', which have generated something that is 'really new' (Bortkiewicz, 1906–07, II, p. 34). Bortkiewicz deplores the fact that Dmitriev's seminal contribution was for several years not taken notice of in Russia (ibid.). In writing this he could not yet know that the destiny of his papers on Marx in Germany would be similar. We shall come back to this below.
- 64 For a more detailed assessment of Bortkiewicz's contribution to the revival of the classical theory of value and distribution, see Kurz (1989, pp. 34–43).
- 65 Surprisingly, Bortkiewicz accuses Marx of denying any link between his law of value and the 'motivated actions of those engaged in exchange' (ibid.).
- 66 Bortkiewicz (ibid., pp. 21–2) emphasizes that his view is similar to but not identical with Marshall's. A major difference, he maintains, concerns his interest in the cause of a *change* in long-period equilibrium.
- 67 Charasoff's two books were reviewed critically in *Der Kampf*. Otto Bauer accused Charasoff of falling back, in his second book, into 'the errors of physiocracy' and of 'happily ending with his mathematical analysis in the old petty bourgeois utopia' (Bauer, 1911).
- 68 The credit goes to Egidi and Gilibert (1984); for a summary statement of Charasoff's contribution, see Kurz (1989, pp. 44–6).
- 69 This finding throws new light on the time-honoured idea of a 'common factor' in (produced and reproduced) commodities, which in Böhm-Bawerk's view (cf. pp. 34–5) constituted the Achilles heel of Marx's entire edifice.
- 70 Today the proposition is known as the 'Fundamental Marxian Theorem'; see Morishima (1973).
- 71 Oppenheimer's position bears some resemblance to that of Henry George and that of Achille Loria. While George is referred to in Oppenheimer (1910), Loria is not. On the latter see the paper by Faucci and Perri in the present volume.
- 72 One of Oppenheimer's complaints was that the critic is confronted with a confusing variety of formulations of marginal utility theory that are not mutually consistent. He decided to focus attention predominantly on those versions which were most popular in German-speaking countries, i.e. those advocated by Menger, Böhm-Bawerk and Wieser.
- 73 The ideologically neutral character of marginal utility theory was also stressed by Weinberger (1926) and Köppel (1930).

- 74 Landauer expressed his acceptance of marginal utility theory in his book *Grundprobleme der funktionellen Verteilung des wirtschaftlichen Wertes* (Fundamental problems of the functional distribution of economic value) (cf. Landauer, 1923) and then again in a rejoinder to Liefmann's criticism of it (cf. Liefmann, 1924, and Landauer, 1925). Liefmann's main objection to marginal utility theory was that the utility estimations of consumers are expressed in a value of goods that is conceived in a 'quantitative-materialist' way. (On Liefmann's contribution see also the remark in n 77). Heimann's opinion on the matter is expressed, for example, in his methodological observations on the problem of value in Heimann (1913).
- 75 Essentially the same opinion was expressed by Engländer who concluded that Böhm-Bawerk's attempt 'to demonstrate a logical rupture in the system by pointing out a fundamental contradiction between volumes I and III of *Capital* has failed' (1928, p. 381). Nevertheless Marx's 'law of value' has to be rejected because with diminishing returns in agriculture prices cannot be considered as regulated by the average amount of labour needed in the production of commodities; and the 'law of value' cannot sensibly be applied to human labour to determine the real wage rate.
- 76 For a more detailed treatment of the analyses of Leontief and Remak and a conjecture how the latter's work relates to John von Neumann's famous analysis of the choice of technique, prices, distribution and growth (cf. von Neumann, 1937), see Kurz and Salvadori (1993 and 1995, ch. 13).
- 77 It cannot be excluded that quite a few economists made a virtue of necessity. There was a widespread sentiment in the profession that economic processes cannot be conceived quantitatively. See, for example, Robert Liefmann's polemics against the attempt to use equations and systems of equations in economics. This is said to be the 'culmination of errors' and to express 'a purely materialist point of view'. Liefmann's attack culminates in the outcry: 'And what is even worse is that nobody [?] notices this nonsense. Our entire economics is so deeply stuck in materialism that numerous economists like Clark, Fisher, Schumpeter, v. Bortkiewicz, Tugan-Baranowski and others are still able to publish whole books on this basis. It will take the most arduous work to get out of these errors' (Liefmann, 1917, p. 249). (Notice that none of the economists referred to is German.) Interestingly, Liefmann's own doctrine of value, the originality of which its author kept stressing obstinately, is essentially a clumsy variant of the Austrian doctrine; see Amonn (1925, pp. 299 et seq.), Vleugels (1931, pp. 267–8) and Schumpeter (1954b, p. 854). See also the assessment of Wicksell's contribution by Alfred Amonn quoted on p. 66.
- 78 On Wicksell's contribution see also chapter 4.
- 79 For a similar defence of Ricardo and the classical economists against some criticisms put forward by marginalist and especially Austrian authors, see Weinberger (1926, p. 110). In his view 'marginal utility theory is nothing but an elaboration of the doctrines of classical economics utilizing the results of psychological and mathematical-physical research. The erection of a wall separating the two schools is to a great extent the responsibility of the marginal utility theorists who presented the doctrines of the classical economists often in a distorted and misconceived way.'
- 80 It is interesting to notice that Schumpeter pleads for a profile of economics which is instructed by that of the natural sciences and stresses that mathematics is an indispensable tool of analysis. This does not prevent him from not using that tool, which is partly responsible for the remarkable length of his book.

- 81 For an exposition of Tugan-Baranowsky's doctrine, see the contribution by Howard and King in the present volume.
- 82 On Bukharin see chapter 9.
- 83 Cassel's role in the marginalism vs. socialism debate is dealt with in greater detail in chapter 4.
- 84 See the set of opinions on Cassel's book quoted in Alfred Amonn's extensive review article (Amonn, 1924a, p. 358); see also Branch (1989, p. 299) and Kurz (1989, pp. 24–5).
- 85 Cassel is also praised for having provided a solution to the problems left unanswered by Ricardo in an essay published by Amonn on the occasion of the centenary of Ricardo's death (cf. Amonn, 1924b). In Ricardo's "residual" theory the 'natural wage' is said to be a 'fixed point' which allows one to ascertain the rent(s) of land and profits. 'However, such a fixed point *does not exist* in the actual system of value relationships. Therefore the theory must, of necessity, be much more complicated. There is only an "equilibrium condition", but no fixed point' (ibid., pp. 121–2). The 'much more complicated theory' sought 'cannot be formulated other than in algebraic form in terms of a system of equations' (ibid., p. 118). It is identified with Cassel's, where the 'equilibrium condition' referred to involves the equality between the total supply and total demand of the 'means of production' (including labour) (ibid., p. 119).

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3

COOPERATION NOT OPPOSITION

Marginalism and socialism in Denmark,
1871–1924*

Niels Kærgård

INTRODUCTION

The general impression is that marginalism and neoclassicism are in clear opposition to socialism and Marxism. In the first decades of the history of marginalism there were conflicts well known to economists in many countries—especially the German-speaking areas—which were characterized by the ‘Methodenstreit’ between the Austrian marginal school with Carl Menger and the Historical and ‘Kathedersozialistisch’ schools with Gustav Schmoller.¹

This impression is supported by Marxian literature from the 1970s. Hunt and Sherman could be quoted among others:

Neoclassical economics was the principal purveyor of the classical liberal ideology of capitalism during the late nineteenth and early twentieth centuries. Since the 1930s, neoclassical economics has become more and more complex mathematically, which has enabled modern economists to gain many new theoretical and scientific insights. Its most important assumptions, however, those on which the entire theory rests, are still metaphysical in character. They have not been established on a scientific basis, either empirically or theoretically....

The classical liberal ideology was rejected by many, however, because it seemed to present a severely distorted picture of the realities of twentieth-century capitalism. Its basic assumption of pure competition—that no buyers or sellers were large enough to affect prices—was patently ridiculous.

(Hunt and Sherman, 1978, pp. 126–33)

In many senses this is of course a point of view that could be defended. The marginalists emphasized the importance of demand and markets and many

of them neglected the concept of value, while Marx was of the opposite opinion. Marx and other socialists were interested in relations between the classes and many of them in supporting the lower classes against exploitation by law. Neoclassicists demonstrated equilibrium and optimum established by means of the unregulated market. If one dives into the subject, however, the conflicts were somewhat muddled and if one focuses on Denmark 1871–1924 the main alliance was between the social reformers and the marginalists against the establishment and its old classical economics.

The topic of this chapter is the period between 1871 and 1924. 1871 is chosen as the year in which Julius Petersen published his first contribution in economics, and the Danish Economic Association as well as the Danish economic journal *Nationaløkonomisk Tidsskrift* were founded in 1872, whereby a new era began. The first Danish article with relations to neoclassicism is also from 1872. In 1924 the first Danish Labour government was formed and the discussions in Socialist circles changed from theoretical debates to practical implementation. It should be borne in mind that 1871 is very early in the history of both socialism and marginalism and over a decade before the outset of many of the chapters in this book. This should be taken into account in evaluation of statements; a radical leftwing statement in 1871 could be a very traditional one in 1891.

There are no well-known Danish contributions to the development of marginalism but there are some rather remarkable articles and letters (see Kærgård, 1995). Frederik Bing and Julius Petersen's articles in *Nationaløkonomisk Tidsskrift* from 1873 are the main contributions from the period before Jevons, Menger and Walras were well known—and of whom they were independent. The leading name in Denmark in relation to marginalism was, however, Harald Westergaard. He introduced the mathematical techniques of maximizing and Lagrange multipliers in economics in a letter to Jevons (see among others Creedy, 1980) and in an article in Danish (see Davidsen, 1986). His Danish textbook in economics *Indledning til studiet af Nationaløkonomien* (1891) was the real breakthrough for marginalism in Denmark.

This chapter is concentrated on Julius Petersen and Harald Westergaard, as the main pioneers in marginalism and mathematical economics, and on Jakob Kristian Lindberg as the main Marxian economist of the period.

All three have been regarded politically as left wingers but of three very different kinds. Julius Petersen belonged to a group of left-wing Social-Liberal intellectuals in Copenhagen in the 1870s, consisting mainly of atheistic writers and poets.² Harald Westergaard, by contrast, was a leading figure in the Social Christian movements in the 1890s, taking inspiration from the English Christian Socialists (especially John Malcolm Ludlow). Finally, Jakob Kristian Lindberg was an unorthodox Marxist and socialist with some political influence in the Labour movement during the turbulent

years after World War 2. He was appointed one of the three directors of the Danish Central Bank by the first Labour government in 1924.

Even if the chapter is centred on these three people, they are so characteristic of their respective movements that a description of the main features and attitudes in Denmark at that time will be apparent: the Social-Liberal intellectuals, Christian Socialism and the Labour movement.

JULIUS PETERSEN AND THE LEFT-WING SOCIAL-LIBERALS

Julius Petersen (1839–1910) was a qualified mathematician, who defended his doctoral dissertation in mathematics in 1871, taught mathematics at the Technical University 1871–86 and at the Military Academy 1881–87, and from 1886–1909 was Professor of Mathematics at the University of Copenhagen. His contributions to mathematics, especially graph theory, are considered to be extremely remarkable. On the 100th anniversary of his article *Die Theorie der Regulären Graphs*, it was celebrated with a number of articles in the international journal of mathematics, *Discrete Mathematics*, including a long biography of Julius Petersen (Lützen, Sabidussi and Toft, 1992), and an analysis of his graph theory (Mulder, 1992).

His contributions to economics were written in the years 1871–77. Internationally the year 1871 is characterized by the Paris Commune, and intellectual circles in Copenhagen attended Georg Brandes' lectures on 'Main Currents in Nineteenth Century Literature', in which he attacked the established literature and its idealism. These lectures were highly controversial and regarded as an assault against the cultural background, the authority of the church and the established politicians. The lectures by Georg Brandes started the so-called 'Modern Breakthrough' in Danish cultural life. In the following years the movement was established and got its own newspapers. The newspaper *Politiken* was founded in 1884 and has been the Danish newspaper with the widest circulation for long periods, and the left-wing Social-Liberals have had seats in the Danish Parliament ever since. Georg Brandes' brother Edvard Brandes was a member of the Danish Parliament from 1880 and Minister of Finance 1909–20.

Julius Petersen was part of this movement in the 1870s. In 1871 he published a privately printed pamphlet *Et bidrag til Løsning af det sociale Spørgsmaal* (Contributions to the solution of the social question). In the pamphlet he argued for a redistribution of society's goods in favour of the workers, financed by a progressive consumption tax. Many aspects of social policy were considered and his discussions about old-age pensions were later regarded as an early predecessor of modern social doctrines (see Petersen, 1986 and 1990, and Brems, 1990). However, his contemporaries looked upon these matters as 'socialistic and communistic in the extreme', as a reviewer wrote, and the pamphlet is still placed under the topic

‘Socialism’ in the library of the Danish Parliament. In 1872 Julius Petersen was one of the six members of the governing body of the Brandes supporters’ Society of Literature.

In the following years Julius Petersen took an active part in the economic debate, for instance in the newly founded Danish Economic Association, often in partnership with Frederik Bing.³ Their joint article ‘The Determination of the Rational Wage Rate, and Some Remarks on the Method of Economics’ was published in *Nationaløkonomisk Tidsskrift* in 1873, and this is the best known of their articles. The article was translated into English and was published in *International Economic Papers*, 1962, and in 1982 was thoroughly analysed by John K. Whitaker, who was very enthusiastic about it:

The authors...presented a theory of striking power and novelty. Focusing on the marginal choice between mechanized and handicraft production of various consumer goods, they outlined a comprehensive neoclassical theory of wages, interest, and prices for a multicommodity capitalist economy. Their analysis was marginal, but based on activity analysis rather than calculus.... It still remains virtually unknown, despite the appearance of an English translation (1962), yet it is one of the preeminent contributions to distribution theory of the latter half of the nineteenth century, ranking with the work of von Thünen and Walras in originality and generality of conception.... This essay has received almost no attention, yet it appears on close inspection to be a strikingly original and pathbreaking contribution to neoclassical distribution theory.

(Whitaker, 1982, p. 333)

The article by Petersen and Bing started an angry dispute in Denmark about the use of mathematics in economics. The article was somewhat polemical; Bing and Petersen explained that loose scientific formulations were the reason why there had been no progress in economics. They argued that economics was naturally suited for mathematical methods, being a science with quantities as subject matter.

These viewpoints were criticized very much by the establishment, for instance by the two Danish professors in economics; to say that ‘mathematical economics was officially declared invalid’ and that ‘the two authors were virtually read out of the economics profession’ (Boserup, 1980, p. 431) nevertheless seems unfair. The editor of *Nationaløkonomisk Tidsskrift* wrote a letter to Walras about the two authors:

deux mathématiciens danois, qui s’occupent aussi de l’économie politique, appliquent ainsi que vous la méthode mathématique à l’économie politique.

(Jaffé, 1965, p. 479)

Similarly Professor Falbe Hansen⁴ wrote to Jevons mentioning Bing and Petersen (cf. Black, 1977, p. 44).

It seems unlikely that the agitated debate was caused merely by different attitudes to mathematics in economics. It seems more likely that the real problem was wage theory. The iron law of wages was a central part of the political argument against social laws, and the economic establishment needed this keystone. This could explain why the establishment's attack on Bing and Petersen carried so much weight in the political and economic debate in Denmark while, at the same time, they circulated Bing and Petersen's article among international economic theorists in a rather positive or at least neutral manner.

Julius Petersen seemed very enthusiastic, both in his arguments for mathematics and in his arguments against the classical wage and distribution theory. A book review in the *Nationaløkonomisk Tidsskrift* from 1875 was a clear indication of this dual enthusiasm. The leading spokesman for the 'Kathedersozialismus' in Denmark, Vilh. Arntzen⁵ (1842–93) together with K. Ring (1845–1920) had published a general introduction to economics and to their political view, *Nationaløkonomi: En fremstilling af dens grundforhold og udviklingslove*. Julius Petersen's review reflected his interest in social problems:

I have several times had the opportunity to show that I am on the same side as the gentlemen Vilh. Arntzen and K. Ring in the dispute about social reforms. Like those gentlemen I am also of the view that the only solution of the labour problems is a limitation of ownership. I regard the economists' investigations about the effects of free competition as correct on the whole, so far as their research reaches, but I think that they have treated the case partially, as they put stress on the question of production, while the question of distribution should be given an equally important part. In cooperation with Mr. Bing I have previously treated the subject theoretically in this journal, and it is on the basis of the results acquired there that I am of the opinion that distribution cannot be left to free competition, but should be regulated by the State.

(Translated from Julius Petersen, 1875, pp. 313–14)

But the review also reflected his interest in the mathematical method:

My main complaint over the gentlemen authors is their lack of clarity and stringency. Their definitions are often incomplete and their evidence illogical.

(Translated from Julius Petersen, 1875, p. 314)

Bing and Petersen's general interest in economics also manifested itself in their translation and adaptation to Danish of Henry Fawcett's *Manual of*

Political Economy in 1872–74. The translation of the book was originally on the initiative of the Brandes Society of Literature.⁶

In the late 1870s Julius Petersen lost interest in political economy and he left the Danish Economic Association in 1882. However, as a member of the board of directors in private companies (among others the Workers' Bank and the insurance company Hafnia) he still played a part in practical economic life.

The close relations in Denmark between marginalism, social reforms and the intellectual circles around Georg Brandes were not restricted to Julius Petersen and Frederik Bing. In 1885 the journalist Ernst Brandes⁷ published a book called *Samfundsspørgsmaal* (Social problems). The book was mainly a political not a scientific one. The discussion in the book concentrated on development of population and the theory of value. It was an attack, founded on Jevons's marginal theory, on 'classical' economic theory and especially on Malthus's theory of population and the iron law of wages. 'I have learned a lot from Jevons' marginal theory, but it is not my intention to take cover behind his distinguished name', Brandes wrote (1885, p. 429). Today the book is interesting mainly because of its value as documentary evidence of the close relation between the Brandes circles and economic marginalism.

HARALD WESTERGAARD, MATHEMATICAL ECONOMICS AND CHRISTIAN SOCIALISM

Harald Westergaard was undoubtedly the man who established the marginal theory as a field of economic theory in Denmark. In contrast to the other persons considered in this chapter, he was a full-time teacher and scholar in economics, and thereby placed in the centre of Danish society. He became reader in economics and statistics at the University of Copenhagen in 1883 and from 1888 to 1924 he was one of the three full professors in economics at the one and only university in Denmark.

He obtained a master's degree in mathematics in 1874 and a degree in economics in 1877. In the 1870s he contributed a number of articles in mathematical economics. As mentioned earlier the older Danish professor, V. Falbe Hansen, was a friend of W.S. Jevons and it was probably he who established contact between Jevons and the young Harald Westergaard. The result was the well-known letter from Westergaard to Jevons in which he explains how the differential calculus could be used to solve Jevons's problems:

The chief problem in the book is a question of maximum and minimum. Such problems occur in most sciences, where mathematics are applicable.... It is the same with political economy.

(Black, 1977, p. 255)

The letter was first published in Black (1977), but it had led to a remark in the preface to the second edition of Jevons's *Theory of Political Economy* (1879) where the author wrote:

Two or three correspondents, especially Herr Harald Westergaard of Copenhagen, have pointed out that a little manipulation of the symbols, in accordance with the simple rules of the differential calculus, would often give results which I have laboriously argued out. The whole question is one of maxima and minima, the mathematical conditions of which are familiar to mathematicians. [However, he preferred to use his more laborious presentation] which is...convincing to many readers who, like myself, are not skilful and professional mathematicians.

(Jevons, 1879, p. XIII)

The letter's place in the history of mathematical economics is discussed in Creedy (1980).

Another remarkable contribution from this period is an article in the Danish mathematical journal from 1876, 'Den moralske Formue og det moralske Haab', inspired by the works of Jevons. Westergaard analysed the sum of the individual utilities for different distributions of wealth. He found that an equal distribution is optimal (and the results are generalized into a stochastic situation). Westergaard did not find the results realistic but, on the contrary, so unrealistic that they raised doubts about the underlying utility theory. Davidsen has recently pointed out that this article included the first use of Lagrange multipliers in economic theory (Davidsen, 1986).

In 1877–78 Westergaard was travelling in Europe, he visited England and Jevons and the journey seems to have changed his life but not in the direction of marginalism and mathematical economics. He met the German 'Kathedersozialisten' (for instance Lujo Brentano of Munich) and, above all, the English Christian Socialist John Malcolm Ludlow.⁸ The latter meeting led to a religious revival and from that time his scientific work was mainly in statistics and often about social relations. His book *Die Lehre von der Mortalität und Morbilität* (1882) established his name as one of the leading statisticians in Europe. It is typical of his work that the topic was the differences in mortality among social groups.

Westergaard's interest in social problems was not just academic; he was a leading spokesman for social reforms and protection by law of labour (for instance, prescribed leisure on Sundays). His social engagement was quite closely connected with his Christian attitude; he established a place for himself in Danish ecclesiastical history as a leading member of a committee financing the building of churches in the new working-class districts in the rapidly growing Copenhagen. Most of the churches in Copenhagen were built in the decades before World War 1 and the Christian Social movement had

considerable influence in this period. This movement was more humanitarian than socialistic, but in 1899, when the first major conflict between the newly formed trade unions and the employers took place, Westergaard, as well as a number of clergymen, supported the workers by publishing articles in the newspapers and by food-supply to the workers on strike.

Westergaard's scientific work took another path than pure mathematical economics in approximately 1880; he seems to have found statistical research more useful for social reforms. But he was still positive about marginalism. In the preface to the third edition of Jevons's *Theory* (1888), Harriet Jevons (Jevons had died in 1882) thanks 'Wicksteed, Edgeworth and Professor Harald Westergaard of Copenhagen, for the trouble they have taken in revising proofs for me, as in supplying me with the titles of those books which ought to be included'. In 1891 Westergaard published an elementary textbook in economics based on marginalism, and this marked the final victory of marginalism in Denmark. Since then the theory was accepted and applied among others by Westergaard himself in an argument about income taxation in 1897.

In the German-speaking area the well-known 'Methodenstreit' raged between those in favour of abstract theory and market economy and those in favour of historical economics and social reforms. Nothing like that has ever been the case in Denmark. Harald Westergaard was the leading spokesman of both marginalism and the social movements and this prevented conflicts from occurring. As was the case with both Julius Petersen and Ernst Brandes, Harald Westergaard found marginalism (and the historical economics) of major importance because of its contradiction to classical wage theory (the iron law of wages). The 'classical' wage theory was the main academic argument against social reforms and consequently all arguments against that theory would be praised by economists engaged in social reform. Westergaard expressed this evaluation in 1896:

It is often said that the mistake of classical economics was that it was too abstract. It is true, but it was not the only mistake. A sufficiently serious analysis from given axioms would have shown the need for more careful observations.... The old economics was remarkably superficial.

(Translated from Westergaard, 1896, pp. 106–7)

This is the Danish combination of marginal theory going hand in hand with economic history and social movements.

JACOB KRISTIAN LINDBERG AND THE LABOUR MOVEMENT

The Danish Labour Party (Socialdemokratiet) was founded in 1878 after imprisonment of some of the forerunners in the early 1870s (later the police

offered the forerunners freedom if they accepted a one-way ticket to the USA—which they did). The party got its first two members in the Danish Parliament in 1884 and was from that time steadily growing; see Table 1.

The two main parties in the nineteenth century were the Liberal Party (*Venstre*—‘The Left’) mainly farmers and intellectuals, and the Conservative Party (*Højre*—‘The Right’) mainly landed proprietors and the urban upper classes. *Venstre* fought for parliamentarism in opposition to the government formed by the Conservative Party until *Venstre* formed its first government in 1901. In 1905 the members of *Venstre* were split into *Venstre* and a social liberal party (*Det Radikale Venstre*—‘The Radical Left’), the members of which were smallholders and intellectuals; the intellectuals emerged from the Brandes circles in the 1870s, among others Edward Brandes (see p. 89).

Table 1 Distribution of the Members of Parliament, per cent

<i>Year</i>	<i>Labour Party</i>	<i>Social Liberal Party</i>	<i>Liberal Party</i>	<i>Conservative Party</i>
1881	0	—	74	26
1884	2	—	76	22
1887	1	—	73	26
1890	3	—	73	24
1892	2	—	68	30
1895	7	—	71	22
1898	11	—	76	13
1901	13	—	80	7
1903	14	—	74	12
1906	21	10	57	12
1909	21	16	44	19
1910	21	18	50	11
1913	28	28	38	6
1915	28	28	38	6
1918	28	24	31	17
1920	31	12	35	22
1924	37	14	30	19

Source: Elklit (1984, p. 29) and Haue, Olsen and Aarup-Kristensen (1979, p. 357). The figures for 1920 are an average of the three elections that year.

Since the start of the Social Liberal Party in 1905 a close cooperation existed between them and the Labour Party, and a government was formed in 1929–40 by those two parties. The Labour Party got its first cabinet post in the all-parties Government during World War 1, and in 1924 the party became the largest in the Danish Parliament with 32 per cent of the votes. The same year the party formed a government with Thorvald Stauning as Prime Minister. In this period the trade unions and some cooperative firms were established in close relation to the Labour Party.

Throughout the period 1878–1924, the most prominent economist in the movement was Jacob Kristian Lindberg (1873–1932).⁹ He obtained a master's degree in economics from the University of Copenhagen in 1897. For the next four years he was Harald Westergaard's assistant in the statistical department at the university. In 1901 he became a secretary at the Factory Inspection Authorities, in 1913 head at the same place, and in 1914 managing director. When in 1924 the Labour Party formed the government for the first time, one of its first tasks was to appoint J.K.Lindberg as one of the three managing directors of the Danish Central Bank, a task he discharged until his death in 1932. While he had considerable influence on the practice of the Factory Inspection Authorities, about working hours, rules of non-working days, etc., he hardly had a decisive influence on the policies of the Danish Central Bank; his health failed, and from the very beginning he disagreed with the board of directors, among other things in the field of monetary policy. He wanted to reintroduce the gold standard immediately at the current exchange rate, while the other members of the board of directors wanted the pre-war gold standard.

Apart from these main tasks, J.K.Lindberg discharged a number of important subsidiary ones. He was senior lecturer in economics and legislation at the Technical University in Copenhagen from 1908–19. He was editor of the industrial reports published annually by The Federation of Danish Industries and thereby contributed to producing much statistical material (among others, the first attempts to tabulate statistics of production). He was a member of the city council of Frederiksberg from 1909–17. Throughout his life he was engaged in substantial literary and lecturing activities, for scientific, informative and agitating purposes. During the first post-war years he was the guiding spirit in the Labour Party and the labour movement's plans about socialization, arguing for a decentralized market socialism with employee-governed firms in contrast to a centralized planned economy.

Lindberg's main work was the two-volume work *Magt I–II* (Power I–II) of 790 pages, published in 1933 (the year after his death) by his son Niels Lindberg (later professor in economics at the University of Agriculture). The publication itself is thus beyond the period in question here, but Lindberg had worked on the book for decades and large parts were published as articles, especially a seventy-eight-page article about the theory of value in 1919. Lindberg no doubt conceived his ideas before 1914 and his theories seem to have been developed before his administrative and political career escalated in 1913. The main proposals in *Magt I–II* bore the marks of being conceived in the hectic years just after World War I.¹⁰

For thirty years Lindberg worked with the question: 'Why do not all men benefit equally from the economic progress which actually took place over the centuries?' (*Magt I*, 1933, p. 7). The reason, he answered, was the

power structure as expressed in prices, wages and income distribution, and this was normally hidden in the neoclassical theory.

A theory of value was outlined for the exchange of economic goods, and the deductive tendency within economics ignored more and more that there were living, mutually fighting men behind this exchange. The real situation is, that in every economic society all prices indicate a power structure between men.

(Translated from *Magt I*, p. 16)

The basic goal is therefore an analysis of an economy, with free access to jobs and free access to the use of all available resources (i.e. without property rights). In such an economy everybody will have incomes corresponding to the work they perform and all goods will be exchanged in relation to the efforts devoted to the work. Such an ideal has, of course, no descriptive purpose. It only serves to define institutions in society under which everybody gets the results of their own work. Anything above that, J.K.Lindberg calls 'income of power':

with the expression 'income of power' denotes any income, which in accordance with the existing legislation or customary law is achieved apart from my own work. I do not think of plunder and theft or other haphazard use of force when using the expression 'income of power'.

(Translated from *Magt I*, p. 358)

His relation to marginalism becomes therefore somewhat ambiguous.

In this section I work purely mathematically. By this I achieve the advantage of utilizing the theorem of marginal utility. Karl Marx did not know this theorem, but any truth-loving person, who nowadays wants to master the questions of economics, cannot by-pass it. If Marx had known the theorem of marginal utility, 'Das Kapital' would have been different and more comprehensible to economists of our time. But the conclusions drawn from 'Das Kapital' about the development of economic society would thereby not be much different.

(Translated from *Magt I*, p. 68)

Lindberg was thus willing to use the theory of marginal utility and did not see it as a contradiction to the labour theory of value and Marxism, but he undoubtedly thought that marginalism had been misused to blur some real conflicts of interest.

As he wrote in a debate in *Nationaløkonomisk Tidsskrift* in 1919 about the main spokesman of marginalism, L.V.Birck:¹¹

Birck would build his whole theory of value on demand. And this in spite of his awareness of the fact that the demand is determined by

income distribution, and he probably also knew that demand is not dependent on a free market, but on political and social relations of power. But would it then not have been more natural to choose as the basis of our argument a society where these relations of power were non-existent? When awareness of how value and price should be connected in such a society had been achieved, it could be analysed how relations of power would influence distribution of income and price-relations.

(Translated from Lindberg, 1919, pp. 286–7)

To put forward such an alternative theory was then the purpose of *Magt I–II*. Lindberg would thereby take his starting point in the labour theory of value and Karl Marx, but he was far from unsympathetic towards marginalism:

The marginal utility theory is the theory of profiteering...the labour resources used are of secondary importance for the value of coal, the main thing is the scarcity of coal on the market.... Marx took the full consequences of the classical theory of value and with that in mind he expressed his damnation on the capitalistic society. Had Marx known the marginal utility theory, he could have expressed the damnation with even more certainty.

(Translated from Lindberg, 1919, pp. 360–3)

To Jakob Kristian Lindberg marginalism was an explanation of a market economy, but the labour theory of value is the only justifiable foundation for an economy.

CONCLUSION

There has never been a distinct conflict between marginalism and socialism in Denmark. On the contrary, the first users of marginalism, Julius Petersen and Harald Westergaard, mainly used the theory to argue against the classical theory of wages (the iron law) and consequently as an argument to advocate possibilities of social reforms. All the prominent advocates for the new theory in the last decades of the nineteenth century were politically placed on the left wing of the political spectrum, and they used a mixture of mathematical and historical economics in their argumentations against the old attitude. There was no ‘Methodenstreit’ in Denmark between mathematical and historical methods, but mainly political conflicts.

After the turn of the century socialists such as Jacob Kristian Lindberg found that marginalism had been too dominating and thereby repressed other theories—especially Karl Marx’s labour theory of value—which detects the profound conflicts in society. Yet even he was willing to use the

concepts of marginalism in the discussion of Karl Marx's questions. An anti-marginalistic socialism is a much later phenomenon.

NOTES

- * I would like to thank all those who have contributed to this volume and especially Ian Steedman and Heinz D.Kurz for their useful comments on earlier versions of this article. I would also like to thank Hans Brems for his valuable comments.
- 1 To which degree 'Kathedersozialismus' is a kind of socialism is of course a matter for discussion, but without any doubt the school in Denmark in the 1870s seems to have been the main basis for the fight against the iron law of wages and the *laissez faire* policy and consequently an academic foundation for social reforms, and as such a part of the socialistic and social left-wing movements. For a more detailed discussion about 'Der Kathedersozialismus' see chapter 2. One of the central economists in chapter 4, Gustaf Steffen, studied with Schmoller in Berlin and was influenced by him.
- 2 In many respects Julius Petersen's attitudes were similar to Knut Wicksell's, cf. chapter 4, but Julius Petersen's contributions were decades before Wicksell's which means that a conflict between the socialists and non-socialist left wingers is out of the question—the socialists were unestablished in Denmark in the 1870s.
- 3 Frederik Bing (1839–1912), graduated in engineering in 1863 and studied mathematics in Paris; he became actuary and director of the State Life Insurance Company. He was a close friend of Professor Julius Petersen. His brother Herman Bing was one of the three founders of the Danish newspaper *Politiken* mentioned above.
- 4 Vigad Falbe Hansen (1841–1932), was Professor of Economics at the University of Copenhagen 1877–1902 and head of the Danish Statistical Bureau 1873–77 and 1902–04. He made early contributions to the theory of index numbers and for that reason became an honorary member of the English Royal Statistical Society.
- 5 Vilh. Arntzen was in 1872 one of the founding fathers of the Danish Economic Association and of *Nationaløkonomisk Tidsskrift*. Conflicts occurred, however, between the professional economists and the social reform group, when the reform group wished to have a socially engaged poet (Holger Drachmann) as a member of the association. The economists won and consequently Arntzen was forced to retire after only one year from both the editorial staff of the journal and the board of directors of the association.
- 6 It may come as a surprise that they translated a rather traditional classical textbook. The reviewer of their book in *Nationaløkonomisk Tidsskrift* also wondered in 1874 why these economists 'who do not hold the economic authorities in respect', have translated a book written by 'the most dogmatical of the authorities' (translated from Petersen, 1874). They must have found that the elaboration of the book was more precise and scientific in its style than the Danish literature and therefore useful as a foundation for economic discussion.
- 7 Ernst Brandes (1844–92) was the least known of three famous brothers and had a rather tragic fate. He had his own newspaper, where he tried to combine stock-price-lists and radical literature—he failed and committed suicide.
- 8 For a description of his life and work, see Christensen (1962) and Mastermann (1963).

- 9 Another prominent theorist in the party was Gustav Bang (1871–1915); he made a number of more popular publications about Marxian economics, but he was a historian and his main scientific contributions were about the decline of the old nobilities in the sixteenth and seventeenth centuries. A main characteristic of the Danish development, in contrast to the one described by Lönnroth for Sweden, is explained by the fact that the leading Labour Party members in the 1880s and 1890s were workers, not theorists.
- 10 As was the case for many of the economists of that period Lindberg used very few references and therefore the source of his ideas is hidden.
- 11 The debate began when L.V.Birck published a book about the neoclassical theory of value. J.K.Lindberg's article was a combination of a review and statement of an alternative. This article was followed by long contributions by Harald Westergaard and Frederik Zeuthen. All the prominent authors in Danish economics thus participated in the debate.

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SWEDISH MODEL MARKET SOCIALISM

*Johan Lönnroth**

EARLY SOCIAL DEMOCRACY

When in the beginning of the 1880s socialist ideas were spread in Sweden they were, at least if one limits the perspective to written sources, mainly an import from Germany. The emigrant tailor August Palm, who came back from Germany via Denmark in 1881, was the first leading figure in Swedish social democracy. In 1885 he started a weekly journal, *Socialdemokraten*, soon to be the leading mouthpiece for the movement. There he published the first Swedish party programme, almost literally taken from the German Gotha programme with its famous opening sentence about labour as the only source of wealth.

The early Swedish socialists had a bad relation to academic economics, at this time integrated as a part of the Faculty of Law. In an unsigned editorial of December 1885, Palm identified ‘national economics’ (a literal translation of the Swedish term, which in its turn was a literal translation of the German term *Nationalökonomie*) with capitalism and wrote in his journal: ‘National economics tramples the theorems of mechanics and physiology under its feet when it appropriates more labour power from the worker than the amount compensated by the wage.’ Palm also attacked ‘Jeremias’ Bentham for his defence of the right to impose interest as a human right (*Socialdemokraten*, 18 December 1885).

After a conflict in the beginning of 1886, the autodidact Palm was replaced by the natural-science student Hjalmar Branting as editor of the party journal. Soon Branting became the leading figure in the movement—and later the first social democratic member of parliament and prime minister. On the 24 October 1886 he made a speech in Gävle, where he attacked bourgeois economic thought and developed the reasons for the Swedish workers’ movement to be socialist. He said, among other things, that a direct consequence of free competition is that the worker’s wages are so low as to be only just enough for his most basic needs. Capitalist concentration can give a small increase in wages, but in the long run this will not be enough, since the workers will be more and more alienated from

the bigger and fewer capitalists and socialism will come as a necessary consequence ('Varför arbetarrörelsen måste bli socialistisk', in Branting, 1926, p. 91).

WICKSELL

In the beginning of the 1880s, Knut Wicksell belonged to a radical group of students in Uppsala. They were influenced by Drysdale's *The Elements of Social Science* (translated into Swedish as *Samhällslärans Grunddrag* 1878) and by some of Mill's essays (translated into Swedish 1880 as *Om orsakerna till arbetslönernas förändringar och om hjälpmedel mot låga löner* (see Carl G. Uhr's essay on Wicksell in Sandelin 1990).

In February 1880 Wicksell was invited by a temperance society in Uppsala to give a lecture on *The most common causes of habitual drunkenness and how to remove them*. (Later the same year this was published as a tract.) There he explained that the use of alcohol and prostitution among factory workers was a consequence of monotony in work and of bad housing conditions and he agitated for the use of contraceptives and health controls. The public reaction was strong; he was condemned in the conservative press and hailed among the socialists.

From that time on Wicksell was to be more and more well known as a neo-Malthusian left-winger and a radical opponent of royalty, the altar and the sword. In a lecture in November 1886 for a liberal workers' association in Stockholm he attacked Marxism. Branting wrote in *Socialdemokraten* 'that it is a pity to have to count a man like Wicksell with his materialist conception of life as an opponent of social democracy. But as a national-economist he regrettably belongs to the school of Mill and Spencer, which has got stuck in empirical analysis and not been able to make a synthesis' (*Socialdemokraten*, 5 November 1886, unsigned article that must have been written by Branting).

Later the same month Wicksell gave another lecture. According to a new article by Branting, Wicksell now criticized the Swedish socialists for underestimating the threat of overpopulation and he also attacked the Marxist labour theory of value for neglecting nature as a source of wealth ('Knut Wicksell och socialismen', *Socialdemokraten*, 26 November 1886. The article is reproduced in Branting, 1926, Part I).

WICKSELL VERSUS ATTERDAG WERMELIN

Probably the only party ideologist who tried to make an independent interpretation of Marxist political economy during the pioneering years of the 1880s was the journalist, poet and bohemian Atterdag Wermelin. He was offended by Wicksell's attack on Marx and he challenged him in a public advertisement in *Socialdemokraten*. So a debate between the two

was organized at the Workers' Association in Stockholm. Branting was secretary of the meeting and he made a very detailed review in the party journal (*Socialdemokraten*, 17 December 1886, read from a microfilmed version at the university library in Göteborg. It was hard to read in parts).

According to Branting, Wermelin started the debate by saying that Wicksell had attacked the 'popular form' of Marx's 'fundamental statement' about labour as the source of wealth instead of its 'scientific form', which was that 'labour was the source of all wealth *in its social form—its value*' (Branting's emphasis). Wermelin also said that Marx was fully aware that nature was also needed to produce 'use-values'.

Wicksell replied that this 'scientific' form of the statement was wrong too and that if nature is the mother of production, labour is at most 'the small boy holding on to his mother's apron strings'. He continued by saying that Marx was wrong when he claimed that 'use-value and exchange-value were incomparable'; and that utility and scarcity—and not only labour—had an influence on exchange-value. You can understand that, Wicksell said, when you consider the rising price of cotton after a bad harvest. In this case the amount of labour done can very well be smaller compared to the good harvest. Wicksell also denied that capitalists necessarily always exploit workers and he gave an example where a capitalist invests in a virgin forest in the north of Sweden and thereby creates new jobs and new income for the population.

Wermelin answered, that if satisfaction really was a part of the determination of value, it could only give 'relative', but not 'absolute' value. He also said that he had difficulties with the cotton example, since he knew little about this, but in the case of rye he knew that a bad harvest would consume practically the same amount of labour as the good harvest. And concerning Wicksell's example with the capitalist 'up north', Wermelin simply wanted to note that the people themselves could just as well have started production without a capitalist.

An angry worker said that Wicksell's Malthusianism meant 'a society after the example of bees and ants, where a small minority could have children and where the rest were infertile and a working bunch of slaves'. Another opponent said that Wicksell had forgotten to ask how the capitalist got his capital. August Palm, also present at the meeting, said that 'it was clear as the sun', that labour alone is the source of wealth. And Axel Danielsson, later to become the main author of the 1897 party programme, said that Wicksell's Malthusian ideas would be of good use for the bourgeoisie to stop the revolution.

The discussion ended at half past midnight after the chairman had pointed out that Wicksell had not answered the question whether he wanted nature to be publicly owned or not. Wermelin probably had a feeling that he had lost the debate, at least in the ears of Branting and the intellectual part of the audience. In 1887 he wrote a pamphlet about the

value theory of Marx, where he tried to give a better answer to Wicksell: the phrase 'Labour is the source of all wealth' was only 'a popular expression intended to make the hearts of the millions beat' (Wermelin, 1887, p. 8).

Wermelin's new pamphlet was reviewed by Branting. He was evidently not impressed and wrote that the 'truth of socialism' was not necessarily coupled to the theory of value. The socialist conception of life was in his opinion more based on the 'necessary development of history' than on 'abstract economics' and 'I for my part', wrote Branting, 'think that it rests safer that way' (*Socialdemokraten*, 6 August 1887).

AXEL DANIELSSON AND GUSTAF STEFFEN

In the late 1880s, social democracy grew and in 1889 the party was officially founded. Axel Danielsson, imprisoned for blasphemy (a fate that Wicksell would share two decades later), celebrated the event in jail by writing a pamphlet on the Marxist labour theory of value. He wrote that he was aware that price and value seldom coincide but that this is no problem, since the same type of relation between 'law and phenomenon' exists in natural science. In crystallography, for example, there are in the real world always small deviations from the theory, but this cannot abolish the natural laws (Danielsson, 1889, pp. 17–20). Danielsson also treated the socialist system of Rodbertus, 'the father of Prussian state-socialism'. He wanted to use 'labour-money', that is certificates of labour-time performed issued by the state as means of payment in state-owned stores for goods. Danielsson considered this system to be Utopian, since only 'free competition' can realize the 'law of labour-time' in the mechanism of exchange. By this he meant that demand and supply determine prices, but behind those forces there is a 'higher law', that forces the prices to fluctuate around production costs (*ibid.*, pp. 23–4).

Danielsson founded the journal *Arbetet* in Malmö 1887 and one of his foreign correspondents was Gustaf Steffen. He was made immortal as a dogmatic socialist in a short story by August Strindberg, with whom he had travelled in France and in vain tried to win for socialism. Steffen had studied with Wagner and Schmoller in Berlin; he moved to London in 1887 and got in close contact with Philip Wicksteed and the Fabian Society and his political opinions were influenced by them all.¹

In a pamphlet from 1890, Steffen gave an enthusiastic report on the rebirth of economic (in Swedish: *nationalekonomi*) science, which in its native country, England, for a century, has been called the 'dismal science par excellence'. Jevons—wrote Steffen—worked out the fundamental ideas. Before that Gossen in Germany, Cournot in France and—contemporary with Jevons, but independently—Menger in Vienna, Böhm-Bawerk in Innsbruck and Walras in Lausanne have found those new 'fundamental

principles'. The 'Jevonian Economics' has already won many teachers as supporters in America and England. Marshall, Edgeworth, Sidney Webb and Wicksteed being among them.

Steffen went on: This new theory deals with how economic conditions are, not with how they should be, that is what in England is called 'the art of political economy'. The Jevonians think that the theory of exchange must be founded on the theory of consumption. In this respect, Smith, Ricardo and the followers in their footsteps are decided opponents. John Stuart Mill uses a labour theory of value as a theory of exchange and Marx says that socially necessary labour time will decide exchange value. According to the Jevonians those doctrines are both false and metaphysical (*ibid.*, p. 3).

In order to show the importance of demand, Steffen presented several examples and new concepts: nobody can be without food, but on the other hand nobody can consume a 'horse-carriage' every day. If a family gets more and more meat, its desire for more diminishes. The ability to satisfy needs is called use value or utility (in Swedish: *nyttä*), which varies between different meateaters. The exchange-value is then decided by marginal utility, which in its turn is decided by the quantity of the good (*ibid.*, p. 12).

Steffen then went on to exemplify how the new theory could be used to explain marketprice as a combined result of supply and demand. If many producers of sewing-machines sell under free competition, the willingness to sell will disappear when the price falls below production cost. But in this case supply will go down and the price will go up. If free competition is 'absolute'—a case which 'strictly speaking' will never occur—then the price/exchange-value will coincide with cost. But no labour theory of value could explain price; it is enough to consider the price variations of old Dutch paintings (*ibid.*, p. 16).

An investigation into price as a measure of human needs is, according to Steffen, the primary task of economics 'of our time'. And the result of this study will decide the social and political attitude towards the existing order. The ideal must be a society where a given population, given needs and given natural, human and technical productive forces will be directed towards production and consumption of maximal total utility. Steffen concluded: If we consider the helpless confusion of the old type of theoretical economics, which resulted in a deep disrepute for this exceptionally important science, it is impossible to give a high enough estimation to Jevons's clear and powerful theory (*ibid.*, pp. 17–18).

STEFFEN AND BRANTING

In 1892 Steffen held lectures about labour economics and labour movements at University Hall in London, with which Wicksteed was strongly associated. They were published as 'Six Hundred Years of English

Poverty' in *Nineteenth Century*, No. 196, June 1893. (This is as far as I know the only result of Steffen's lectures in written English. This article was later expanded in Swedish as *Studier öfver lönesystemets historia i England*, and published in two parts in 1895 and 1899.)

Steffen's combined plea for social reform and a better understanding of the new school of marginalist thinking was sent home to Sweden in a stream of articles in the social democratic and liberal press. His message was very much in line with the spirit of the new social democratic leadership.

In 1892 Branting was ready to collect his own thoughts on political economy in an ambitious brochure. He referred to Steffen and to the new theory of value, which is 'embraced by the majority in the scientific world'. Branting's conclusion was that under free competition Marx's law of value will 'almost' hold true, but also that price will follow the rules set up by Jevons. Among the followers of this new theory one can find 'full-blooded socialists' as well as social reformers. Branting did not want to go into the question of how the Marxists had answered the Jevonians, but the issue was not so important, since Engels once said that Marx had not based his demand for socialism on the labour theory of value (Branting, 1906, p. 68).

Branting in 1896 became the first social democratic member of parliament. In 1897 a new party programme was produced, this time mainly inspired by the German Erfurt programme. But in contrast to its German counterpart, the concepts of surplus-value and exploitation were not used. In a speech to a student club with Wicksell as chairman in 1900, Branting spoke in favour of Bernstein's right to express his views. It was not yet a clear stand for revisionism—but that was soon to come (Bäckström, 1971, p. 277).

STEFFEN AS A PROFESSOR

Steffen collected his lectures and articles from his German and English periods in a substantial work published in 1900. There he wrote that Marxism was a doctrine for a 'narrow workers' socialism' during its 'primitive stage', when its leaders were 'agitators and bitter enemies of the higher classes'. In its more 'mature' form, socialism finds leaders who are 'social scientists or politicians' (Steffen, 1900, p. 192).

In the opinion of Steffen, this mature form of socialism must reject the labour theory of value. Marx drove Ricardo's theory 'in absurdum', when he made labour the source of all wealth and when he drew 'the false conclusion that the capitalist was unnecessary'. Marxism also made a gross underestimation of the spiritual resources of the working class and of the importance of moral qualities in modern society (ibid., pp. 240–2).

At the turn of the century, the liberal and progressive establishment in Göteborg persuaded a rich merchant to make a donation to finance a professorship in economics and sociology at the newly founded academy

there. The chair was tailored for Steffen. (Probably the sociology part was there in order to exclude Cassel from competition.) Steffen defended a German version of the book from 1900 as his thesis in 1902 in Rostock and was inaugurated in Göteborg 1903.

When Steffen got his chair, David Davidson in Uppsala was the only professor of 'Nationalekonomi' in Sweden. In 1904 the subject was definitely to be established as a separate academic discipline in Sweden with two new chairs: one in Lund for Wicksell and one in Stockholm for Cassel. (In Sandelin (ed.) *The History of Swedish Economic Thought*, where Carl G.Uhr writes the chapters about Davidson and Wicksell and Lars Magnusson writes about Cassel, a more comprehensive picture is given of the appointments in 1904.)

In a review dated 1904 of Werner Sombart's *Kapitalismus*, Steffen agreed with the German author that labour-value was not a measure of exchange-value, but a 'theoretical construction outside the consciousness of the capitalist' and that such an 'objective' method in principle was necessary. The pure economic man is a fiction and the 'subjectivism' of marginalism must be complemented with a historical and ethnographical method. But Steffen could not understand why Sombart defended the Marxist labour theory of value in itself, which was 'materially false' (Steffen, 1904, p. 493).

As a professor Steffen published his *Sociala Studier*, in seven booklets during the period 1905–12. They combined marginalism with German-type socialism/nationalism. He propagandized for social reform, economic education for everyone and the good state and he spoke against strikes, liberalism and party egoism. In 1910 he wrote to Branting and expressed his willingness to become a member of parliament for the social democrats. Branting asked him to write an article in a party journal, and there Steffen wrote that he was not a socialist but a 'radical in social economy', who wanted to raise the level of education in the working class in order to benefit the nation. He was elected in 1911 and was soon to become a leading spokesman for the right wing of the party.

In 1914 Steffen summarized his opinions on Marxism: Marx was right that 'capitalist private property must yield to economic citizenship for the proletariat'. But the idea that the world order will collapse is a construction in the spirit of Hegel, and Marx is wrong if he believes that the proletariat is capable of power and leadership. The reform of private ownership is a 'means' and not an 'end' for socialists. Therefore the socialists must prepare for socialism within the boundaries of capitalism (Steffen, 1914, pp. 87 and 138).

WICKSELL AS A PROFESSOR

During the 1890s Knut Wicksell became the leading neoclassical economist in Sweden but he maintained his strange combination of neomalthusianism

and political radicalism. In 1894 he published a pamphlet *Våra skatter. Hvilka betala dem och hvilka borde betala.* (in English as 'A new principle of just taxation', in R.A.Musgrave and A.T.Peacock (eds), *Classics in the Theory of Public Finance*, 1958, Macmillan) under the pseudonym Sven Trygg. There he explained why the existing Swedish tax system was regressive and he criticized it as a consequence of the wealth-based voting system. He demanded direct and progressive taxes on income and wealth with the arguments that marginal utility of income is comparable between individuals and falling with rising income.

In a review of the first volume of Vilfredo Pareto's *Cours d'Economie Politique* (1897), Wicksell argued for the necessity of interest also under socialism: '...the transition to a socialist state would not bring about any essential change in the organization of production, the allocation of production, and so on...everything would be practically as before with regard to the rate of interest, except that it would be paid to the state instead of to private persons' (Wicksell, 1958, p. 150, translated from German into English).

In 1899 Wicksell was given work as senior lecturer in Lund and in the same year he published a paper in the newly founded *Ekonomisk Tidskrift* where he wrote that he wanted to 'even out the contradictions between the socialists and the new theory'. In Wicksell's opinion Marx was right on the point that capital has its origin in labour and not in the thriftiness of capitalists. But this was a problem of only 'ethical and social interest'; from 'an economic perspective' it was of no interest (Wicksell, 1899).

In 1901 Wicksell published the first part of his textbook *Föreläsningar i nationalekonomi* (in English as *Lectures on Political Economy* 1934), which was to become the neoclassical bible in Sweden for decades. In the introduction he developed his credo: 'The very concept of political economy...implies...a thoroughly revolutionary programme'. (Before that the author has explained why 'political economy' is a doubtful term, since the subject has become more and more scientific and apolitical. Wicksell, 1934, p. 4.)

The first part of the textbook, dealt with the theory of value. There Wicksell in a number of logical steps took the reader to the 'economic principle' for exchange: '...that we only exchange for the purpose of gain and, under given conditions, we always endeavour to exchange in such a manner, and in such quantities or proportions, as will yield the greatest possible gain. The doctrine that marginal utility is proportional to price; that the subjective utility of the last unit acquired is equal to that of the last unit disposed of; and that the increase in utility at the margin of exchange is zero, are all different ways of expressing this postulate, and closely correspond with the criterion which indicates a maximum or minimum value in mathematics' (Wicksell, 1934, p. 72).

But Wicksell also warned his readers against jumping to conclusions: 'It

is easy—though it would involve a serious confusion of ideas—to cite this as a proof that free exchange brings a maximum of satisfaction of needs to all participators; that is to say, as great a measure of satisfaction as is generally consistent with the prevailing conditions of property or ownership...it was not the advocates of the theory of marginal utility who first advanced this view.’ This is rather a ‘dogma’ of the ‘Manchester School’. The ‘harmony economists’ even ‘endeavoured to extend the doctrine so it might become a defence of the existing distribution of wealth’ (ibid., pp. 72–3).

In his textbook Wicksell then presented the theory of production and distribution, that is the theory of marginal productivity. After having rejected a number of older definitions of capital and interest—including Marx’s and Ricardo’s—he gave his own: ‘Capital is saved-up labour and saved-up land. Interest is the difference between the marginal productivity of saved-up labour and land and of current labour and land.’ The principle of profit maximization leads the individual to invest or to use his capital up to the point where marginal utility of saving is equal today and in the future (ibid., p. 154).

But according to Wicksell, there is a tendency for the individual to undervalue future needs and overvalue future resources. The reason for this is ‘primarily due to the fact that, to the individual, the future is always in a high degree uncertain. He does not know whether he himself, or those in whose well-being he is most interested, will really profit by his sacrifices’. Even the ‘technical return’ on individual capital accumulation is uncertain. And enterprises in which individual capital is invested ‘must always be regarded as unprofitable unless the chances of gain considerably exceed those of loss.’ The ‘modern concentration of capital and the credit and insurance system’ show the need for levelling out and reducing those risks (ibid., p. 211).

And at this point Wicksell saw the argument for socialism: ‘...a collectivist society would afford a much better guarantee for the rapid accumulation of capital than does the existing individualistic society. The capital saved by united efforts would equally benefit all individuals and the whole of society in the future; and the failure of some enterprises would be of little importance, if those which succeeded yielded a correspondingly greater return. Though this is opposed to current opinion, it is precisely in a collectivist society that we should expect a progressive accumulation of capital until production was fully supplied with new capital and the national dividend reached its technical maximum—assuming that interest in the well being of future generations was not less than in existing society’ (ibid., pp. 211–12).

In his inaugural lecture as a professor (1904), Wicksell was ready to sum up his view on the relation between the labour movement and the new science. After having rejected Bastiat and the German historical school he

asked his audience: 'Who could then be surprised that the workers and their leaders were filled with contempt for such a pseudo-science, and on their part set up a system of their own, which, however deficient, survives comparison with that of the harmony economists as far as intrinsic truth is concerned, and who could blame them if, in interpreting history, they preferred their own version to that of the other people.' ('Ends and means in economics', inaugural lecture delivered on 16 September 1904, at the University of Lund, originally published in *Ekonomisk Tidskrift*, 1904, pp. 457-74, in Wicksell, 1958, p. 64.)

Wicksell concluded: 'I have always regarded the fact that the former derision by the workers' parties of everything concerned with economists has now died down, as an indication that modern theoretical economists are on the right track.... It seems that the workers instinctively realize that the aim of economics has once again become a search for truth that takes nothing for granted, and they are inspired with the noble consciousness that they and their cause have nothing to fear from the truth' (*ibid.*, pp. 64-5).

CASSEL

The second Swedish economist of (later) world fame, Gustaf Cassel, was also engaged in the debate on the relation between the new economic science and socialism. In an article of 1899, he thought that it was difficult to attack Marx, who had said very little about what he meant by socialism. Instead Cassel analysed what he took to be the more interesting sort of socialism 'in its modern German meaning', by which he meant the state-socialist system of Rodbertus. Cassel's main point of criticism was that Rodbertus thought that wages could follow labour-content in his socialist system and that consequently he had not understood the nature of 'scarcity-interest' (Cassel, 1899).

Cassel returned to the problem of distribution under socialism in 1901. Now he referred to Bernstein, 'who wanted to raise the proletariat to the level of the bourgeoisie and not the other way around as Marxists normally wanted'. Even Engels had said that it should be possible to get rid of class differences without a decline in total production. But according to Cassel, statistics from Prussia show that it is impossible to increase the standard of living for the working class by taking money from the rich, since this would damage capital accumulation. Only when the worker himself learns to form capital, can 'emancipation in real-economic terms' be achieved (Cassel, 1901, p. 130).

In his first big textbook (1902), Cassel debated with Marxism: 'In its foundation' Marx's labour theory of value was 'just an expression' of labour's right to the whole product. But instead of saying this in a simple and straightforward manner, Marx 'wraps himself in a mystic veil, woven by Hegelian phrases'. In this way Marx imposes upon the working class the

false belief that no part of production must go to capital accumulation (Cassel, 1923, p. 16).

In *Nature and Necessity of Interest* (1903)—the first book by Cassel originally published in English—the author once again attacked the labour theory of value: ‘...if labour made up the whole of the value of any commodity, there was of course no room left for the capitalists’ claim of the share in that value; and it is difficult to understand why the socialists troubled themselves with further demonstrations of the wrongness of interest’ (Cassel, 1903, pp. 32–3).

Cassel also devoted a chapter of this book to the problems of pricing and interest in the ‘socialist community’, which he defined as a community created in order to realize the labourer’s right to the whole produce of his labour. ‘The principal point’ in the schemes of distribution in such a society is the creation of ‘labour-money’, which means that the labourer receives his wage in a certificate of ‘normal’ hours worked and that the prices of commodities are ‘simply the hours which have been required to produce that commodity’. Cassel then showed that in an absolutely stationary socialist society, there is no reason for charging prices above labour cost and there it is possible to do away with interest (*ibid.*, p. 171).

But, wrote Cassel, in a socialist society with economic progress, labour must be spent in production which will be completed only in some future year, or on durable goods, which will repay immediately only a small part of the labour spent on them. Then prices must be raised above labour cost so that ‘the total profit made on them equalizes the quantity of labour invested for the sake of progress.... Hence it follows that the socialist community will have to put a price on waiting; that is to say, demand interest on its capital’ (*ibid.*, pp. 176–7).

In his second big textbook—first published in German in 1918 and then in Swedish in 1934—Cassel returned to the problem of socialism. Now he also wanted to give advice to the labour movement under capitalism: It is necessary to reject the idea of wage and profit as the result of a struggle between employers and workers. Objective methods, based on economic necessities, must be introduced. Cassel referred to the Webbs’ *Industrial Democracy* and *The Public Organization of the Labour Market* (1909) as useful for the trade unions. But in neither capitalism nor socialism should social policy even out wage differentials, which are necessary for progress. Social policy should only ‘raise inferior work’ (Cassel, 1934, p. 307).

KARLEBY AND HIS FOLLOWERS

Axel Hägerström was the founder of the ‘Uppsala school’, the Swedish version of analytical positivism. He was considered to be close to social democracy in his political outlook. He accused Marxism of being a ‘social teleology’ but he also defended Marxism against the common accusation

that it was deterministic. To look at politics as a mere part of the 'superstructure' and as only a passive reflection of economic conditions is 'a complete distortion of the Marxist theory'. Rather there is a more or less conscious tendency in Marxism to create a 'morale' for the proletariat and, if so, this is just an example of the everyday experience, that human beings have to construct reality after their wishes (Hägerström, 1909, p. 46).

One of the followers of Hägerström in his ambition to change the ideology of the Swedish labour movement in a revisionist, positivist and normativist direction was Nils Karleby. In 1926 he published his *Socialismen in/or verkligheten* (Socialism facing reality)—referred to half a century later by the prime minister Tage Erlander as the ideological masterpiece of Swedish social democracy. There the author tried to create a compromise between 'subjectivist economics' and 'Marxist sociology'. The latter shapes the background and the 'frame', the former shapes the 'scientific content'.

Karleby referred to Böhm-Bawerk and vindicated the claim that workers are 'exploited' (in Swedish *utsugna*) by the capitalists. The reason for this is that the workers have no property and so they are unable to wait for their wages and thereby they have less power than the capitalists who can wait for their profits. However the workers are paid in 'present-values', but the capitalist gets less valuable 'future-values'. This value-analysis was in Karleby's view in principle the same as that of Marx, but the conclusion is that the exploitation in a certain sense is 'fair' (Karleby, 1926, pp. 182 and 197–9).

According to Karleby, in the same degree as the working class participates in social life, capitalism in Marx's sense of the word—which means absolute power for the capitalists—ceases to exist. This also means that interest ceases to be a means of exploitation and becomes instead a necessary instrument for pricing, choice of production and accumulation. Crises can then also be avoided through the choice of a 'proper rate of discount' and by 'correcting purchase-power' (*ibid.*, pp. 209–10 and 277–8).

CONCLUSION

The economic theory of Swedish social democracy was from its beginning more liberal, more reformist, more for markets and marginalism and less for revolutionary Marxism than in perhaps any other labour movement. I think there are five main reasons for this: the fact that Sweden had peace after 1815; old traditions of political compromise; a state bureaucracy relatively nearer to the people; a relatively more liberal peasant movement compared to the rest of Europe; and, finally, the strong influence from leftwing economists like Knut Wicksell who spoke for a combination of markets and equality.

Hjalmar Branting and the other leaders of the early workers' movement

in Sweden were practical politicians with little interest in theoretical speculation. They also had limited possibilities of calling into question the arguments from academic authorities like Wicksell, Cassel and Steffen, all of them seen as progressive when they wrote and spoke for marginalism and against the labour theory of value around the turn of the century.

Steffen never gave a clear definition of his 'mature form of socialism'. Wicksell never explained what he meant by a 'collectivist' society or whether its 'united efforts' were supposed to be made at the workplace or in the society as a whole. Karleby never explained what he meant by 'working-class participation in social life'. None of them gave the proper combination of markets, 'workers' control' and central planning. But even so it is perhaps possible to say that they developed a form of 'market socialist' ideas in Sweden.

Karleby died soon after the publication of this book. With him died for a long time any interest in the question of relations between marginalism and socialism. For the group of economists that later was called the Stockholm school of economics, socialism became social engineering. They had close contacts with Anglo-Saxon economics and with the pragmatic and technocratic social democratic and liberal establishments. Their hegemonic ideology left only a narrow space for continental-type Marxist—or conservative—alternatives. Sweden became not only the 'middle road' but also the kingdom of mainstream economics.

NOTES

- * Lars Herlitz, Katarina Katz, Stefano Perri, Bo Sandelin and Ian Steedman have given valuable advice.
- 1 A longer article of mine about Steffen can be found in *Ekonomisk Debatt*, no. 3, 1989. Ian Steedman has informed me that whilst Wicksteed's *Coordination* was dedicated to Steffen, Wicksteed's 'official' biography, 1931, contains absolutely no reference to Steffen.

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SOCIALISM AND MARGINALISM IN ITALY, 1880–1910*

Riccardo Faucci and Stefano Perri

INTRODUCTION

Virtually in the same period, between 1880 and 1900, both marginalism and Marxism were introduced to Italy, by the same group of social scientists. This may seem rather paradoxical, since we are accustomed to considering Marxism and marginalism as conflicting views of economics. But these scholars were dissatisfied with the ‘optimist’ school of economics led by Francesco Ferrara (see pp. 118–19), and welcomed new influences from outside Italy. Moreover, imbued with positivism, they aimed to reshape the social sciences along similar lines to the natural sciences. This meant, on the one hand, a stress on social evolution and the impact of ‘history’ in determining the social and economic structure; and, on the other hand, a stress on quantification and ‘rigour’ in economic reasoning. In fact, the two metaphors which from that time onwards began to dominate in the social sciences, the mechanical and the biological, are considered by Italian economists not as opposed, but rather as complementary, their use depending on the kind of problem involved. Thus, we find such authors as Conigliani and Ricca-Salerno switching between ‘marginalist’ and ‘Marxist’ approaches in their work (see pp. 129–32, 134–7).

Unfortunately, most of the economists who fostered this double operation did not have a sufficient intellectual stature to handle the issues involved with clarity. The ideological implications of preferring marginalism to Marxism (and *vice versa*) were not emphasized. In particular, the distinction between ideology and science was not made clear. In what sense could Marxism be considered ‘scientific’? And, if it could, to what extent could marginalism also be considered ‘scientific’? A first attempt to reply was made by Achille Loria, who concluded that Marx’s historical materialism alone (in his words, ‘historical economism’) was truly scientific, while the individual analytical categories of Marxian economics (especially the transformation of values into production prices) were inconsistent. On the other hand, according to Loria, marginalism was ‘rigorous’ in its tools of analysis, but its foundations were unsound, since

the 'economic man' which its psychology assumed was unreal. These conclusions, although clearcut, were mixed with Loria's exposition of his own theory of 'landed' capitalism, which for several years enjoyed a great success, but was later rejected and even derided. In this way they did not receive the acknowledgement they deserved (see pp. 119–24).

At the end of the century there was an intense debate on Marxian economics, which led to a dismissal of the labour theory of value by almost all 'socialist' economists. Antonio Graziadei rewrote the concept of surplus value in terms of surplus labour. Thus, he intended to maintain the authentic scientific core of Marxism, i.e. the exploitation principle, discarding what he considered a false, and unnecessary, addition. In fact, as far as his treatment of exchange and prices was concerned, he followed Marshall (pp. 125–7).

A further effort was made by Enrico Leone to demonstrate that several Marxian concepts could be reformulated in marginalist terms. Moreover, according to him the aims of a socialist economy could be determined better in terms of 'hedonistic maxima' than in the Marxian terms of collective expropriation of the means of production (pp. 137–43).

Croce's influential positions on Marxism and marginalism run as follows. Marx's theory is based on a comparison between capitalist society, in which exploitation is measured in terms of surplus value, and an imaginary 'socialist' society, without exploitation. Although Croce points out that this method does not involve economic theory, but rather comparative sociology, he stresses that it is impossible to interpret Marx by neglecting 'value'. It is worth noting that Croce's model of scientific reasoning in economics was supplied by the Austrian school, based on value as marginal utility. This led Croce to his well known conclusions about the importance of Marxism simply as a methodological device for interpreting history, while his idea of economics as *scienza dell'utile* led him to assert a *momento economico*, as a particular and distinct branch of *filosofia della pratica*, which was in fact an extension of Austrian economics (see pp. 124–5).

In his debate with Croce, Pareto observed that the philosopher was himself a prisoner of an outdated notion of economics, based on 'value', while the most recent economic thinking, such as the Lausanne school, considered value a metaphysical and troublesome word. Croce was, however, successful in stressing the incommensurability of Marxism and (marginalist) economics. This eventually engendered indifference among economists for Marxian economics, as well as for Marxian methodology.

Both Pareto and Barone considered Marxian economics as useless, and demonstrated that only marginalism could provide a consistent theoretical answer to the questions of a socialist (market) economy, pioneering a branch of research which was to be launched in Britain during the 1930s. But in Italy Liberal economists, such as Einaudi, considered these studies as merely sterile exercises, in so far as 'socialism' was inextricably intertwined

with Marxism, and marginalism with liberalism. Thus the debate on socialism and marginalism in Italy was over once and for all.

This chapter is divided as follows. The first part provides the intellectual background to the new schools of thought which emerged in Italy during the last thirty years of the nineteenth century. The second part deals with criticism of Marxian economics, especially the labour theory of value and its inability to explain the setting of prices and the profit rate. It also examines the use of various tools of marginalist analysis—in particular drawn from the Austrian school—in explaining problems, such as capitalist exploitation, which Marx's analysis did not adequately explain. Finally there is a section which outlines Pareto's and especially Barone's work on 'market socialism'. Their work was inspired by the Lausanne school of economics, and opened up a new field of research which was no longer dependent on Marxian economics.

THE INTELLECTUAL BACKGROUND

Italian economists and the 'need for cosmopolitanism' after Unification

The two decades following Italy's Unification were not particularly brilliant in the field of economic thought. During the 1860s the best intellectual talents were engaged in trying to resolve the most urgent administrative and financial problems of the country. The 1870s were dominated by a lengthy, and by no means original, dispute about method in economics between the historical school influenced by German *Kathedersozialisten*, and the orthodox school led by Ferrara. The main theoretical issues of economics—those regarding value, production and distribution—did not appeal to the economists, who preferred to deal with 'practical' matters, such as banking, fiscal policy, agricultural economics, tariffs, social security, and so on.¹

Yet an effort was made to fill the gap in economics between Italy and the rest of Europe. If we compare the first two series (1850–68) of 'Biblioteca dell'economista' edited by Francesco Ferrara, with the third series (1876–93) edited by Gerolamo Boccardo, there is a marked difference of tone. Ferrara (1810–1900) was an individualist liberal, an ideal disciple of the French 'idéologues,' who made private property the cornerstone of economics. An enthusiastic follower of Say and Bastiat, he opposed the Ricardian theory of value because it removed the land factor, and the Ricardian theory of distribution because it led to class antagonism, if not to 'socialism'. A fierce adversary of socialism in all its forms, Ferrara once wrote: 'Man must not discuss socialism; man must just crush it'.² As a theorist, in spite of his subjectivist approach, which led him to perceive the opportunity-cost element in his theory of value as reproduction cost, he did

not pay attention to the marginalist revolution. The younger Italian economists considered him old-fashioned.

Unlike Ferrara, who concentrated on economics and politics, Boccardo (1829–1904) wrote on sociology, anthropology, geology and geography. He edited dictionaries and encyclopaedias, and in a typically positivist manner was more fond of spreading ideas among the public than of exploring them deeply. Nevertheless, it is to him that we owe a volume of ‘Biblioteca’ devoted to such authors as Quetelet, Jevons, Cournot and Walras.³ On the other hand, he devoted a three-volume work to a collection on the ‘heretics of economics’,⁴ i.e. utopian and scientific socialists, as well as social reformers (Owen, Proudhon, Lassalle, Marx, Tchernichewsky and George).

Salvatore Cognetti de Martiis (1844–1901) was the editor of the fourth series, started in 1896. In his scholarly *Socialismo antico*⁵ he pointed out that the Platonic and other ancient Greek ‘socialist’ utopias had an ‘intrinsic rationality’, according to the degree of development of the economic forces at their time. Following the same interdisciplinary approach, he eventually extended his research to contemporary socialism in the USA, which he explained both in economic and religious terms.⁶

In fact, neither Boccardo nor Cognetti was interested in the *economics* of socialism.

Loria’s ‘landed theory’ of capitalist evolution

A step forward was made by Achille Loria (1857–1943) who, for more than a decade, was considered the leading Italian economist. He responded to the ‘need for cosmopolitanism’ which was strongly felt among the younger generation of economists. Like a cook, or rather like a confectioner, he apparently succeeded in blending a variety of different ingredients (Ricardianism, Marxism, historicism, etc.) in a fairly coherent system: an impressive synthesis, both theoretical and historical, which not only aimed at accurately describing social phenomena, but also at explaining their genesis and forecasting their evolution toward a form of ‘socialism’.

In an autobiographical sketch, Loria wrote that ever since his early studies in economics he had classified the economists in the following order of importance: ‘at the top, Ricardo—Thünen—Marx, the great triumvirate...; next, in a very high position, but slightly lower, Stuart Mill; still lower, Rodbertus.... The others I considered as a marginal fringe to them’.⁷ These authors illuminated his first work, *La rendita fondiaria e la sua elisione naturale*, really his life work, which he continually amplified and re-wrote in different forms.

Here, he attempts to build up a model of the capitalist system starting from landed property and explaining accumulation, distribution and growth on the basis of its structure and evolution. He defines rent in pure

Ricardian terms, both as regards the extensive and the intensive margin.⁸ He then examines how rent has developed in history, and tries to show that in all pre-capitalist ages rent was 'elided' through its transfer to other economic agents.⁹ But under capitalist conditions and owing to population pressure, land ownership is monopolized, and the 'elision' of rent is no longer possible. All independent farmers are expropriated; many of them become industrial labourers, earning a subsistence wage.¹⁰ The rent ratio to the total product will tend to grow, owing to the over-valuation of agricultural goods including rent, compared to industrial goods. The remedy is not land-tax reform or land nationalization, as advocated by Henry George, but 'a system of small farms cultivated cooperatively—a system of associated ownership, satisfying the demands of agricultural progress'.¹¹ This form of associated ownership of land would have led to 'a union on equal terms between the capitalist-producer...and the simple labourer'.¹² The subsequent 'elision' of rent 'will include again [the value of land] in the general law of value',¹³ since that value will depend solely on the quantities of capital and labour employed.

Far from being spontaneous, this process would be stimulated by an external factor, such as the workers' movement, which, struggling for higher wages, would compel the industrial capitalists 'to make good their losses, elevating the prices of the manufactured goods at the expense of the landed proprietors'.¹⁴ At the end of the process, not only rent would be annihilated, but labourers would gain a 'natural wage' according to their productivity.

In his subsequent works, Loria merely expanded this line of thought, considering the relationship between rent and profit, so that the latter depended on the former, and both of them depended on the existence of 'free land'. While free land exists, 'producers are reluctant to combine their work.... The most common economic form of production is therefore based on independent producers.... If land yield is low, producers are prepared to join together',¹⁵ for instance in share-cropping or *métayage*. These agricultural agreements are not entirely capitalist, because the labourers are still free to occupy new land. When all the land has been occupied, the labourer is completely subjugated to the landed proprietor, who increases the yield of his land through machinery and capital investments, and pays the labourer a minimum wage, which prevents him from becoming a landowner himself. This is the main source of profit. As long as land is free, profit does not exist at all, and the economy resembles the Smithian 'rude state of society'; only when all the land is cultivated and appropriated, do the combined effects of land appropriation and of diminishing returns in agriculture (increased by population pressure)¹⁶ give way to class difference between proprietors and proletarians.

The law of decreasing returns in agriculture, which gave rise to increasing rents, combined with the law of the progressive appropriation of

free land, which gave rise to increasing capitalist accumulation, were converging to determine the success of capitalism all over the world.¹⁷

Loria examined the relationship between the structure of agrarian production, landed property and forms of government.¹⁸ He derided the contractualist and natural law theories of the state, labelling them apologetic of the existing economic order. Instead, he stressed the link between the form of government and the appropriation of land. His definition of the state as a mere expression of landed interests convinced many people that he was a Marxist.¹⁹ Furthermore, his stress on the agricultural rather than the industrial sector as the basic source of capitalist accumulation seemed to fill a gap in Marxian theory, rendering it more suitable for interpreting the economic and social history of countries which followed a different path from Britain.²⁰ But in Britain too Loria was considered with respect, if with a certain amount of dissent.²¹

Loria's attitude towards marginalism

It is a general feature of Loria's discussion of the various schools of thought—especially those which seemed closer to him—to exaggerate differences between them and his own theories.²² In this way, he hoped to avoid charges of plagiarism, which were not infrequent. On the other hand, he showed an extreme kindness in replying to his critics.²³ These rhetorical devices may have contributed to his reputation for academic fairness and moral superiority, although they really sound professorial, not to say hypocritical.

Loria's strategy was to present himself as a critic of marginalism from a classical-Marxian point of view, and a critic of Marxism from a special, 'Lorian' point of view.

Let us begin with marginalism. In his first book he showed interest in some marginalist analytical tools, transferring them into the frame provided by his own theory. For instance, he hinted at the Walras-Dupuit multiple prices determination as well as at Walras's *tâtonnement*²⁴ in order to explain the exchange between industrial commodities, which were monopolized, and agricultural commodities, which were produced under competitive conditions. The rate of exchange was unfavourable to agriculture and contributed to 'eliding' land rent. These attempts, however, seemed to be dictated more by the desire to appear up to date, than by an intrinsic need.²⁵ In his later works, he did not actually refer to Walras. In a letter of 1938 to his friend Augusto Graziani, he defined the concept of general economic equilibrium as 'a humbug'.²⁶ He generically criticized Pareto²⁷ for his treatment of the links between economics and sociology, for his passage from cardinalism to ordinalism, and for his law of distribution.²⁸

On various occasions, he explained the rise of marginalism using the

same points made by Marx in explaining the passage from classical to 'vulgar' economics.²⁹

He devoted a committed paper to criticizing the Austrian school. Utility is a condition of value, not the cause which alone determines it. Moreover, all the utility theories of value are subject to circular reasoning. Wieser determines the value of the production factors through the value of the finished goods, but his equations need a previous determination of the costs, which implies that the profit rate is known.³⁰ So the imputation mechanism is wrong. As Loria put it, his dissent from the Austrian school was not a matter of method (since he also claimed to share an abstract-deductive way of reasoning), but a matter of substance. Marginal utility is a mere 'shadow', which hinders one from seeing the core of value.

His attitude towards Marshall was more respectful. He welcomed *Industry and Trade* as a book in which the author abandoned those 'dismal lucubrations on the final degree of utility, the consumers' rent, the quasi-rent etc.', and re-evaluated 'the old classical principle of production cost'.³¹ In his correspondence with Augusto Graziani he classified Marshall in the same train of thinking which originated with Ricardo and was continued by John Stuart Mill and Cairnes, although in a somewhat inferior position.³² Consequently, he respected the English neoclassical school in so far as it did not conflict with the lesson of the classics. He considered Pigou—not Keynes, whom he rejected—to be the legitimate heir of Marshall.³³

Loria's attitude towards Marxism

When he was still a young graduate student in Bologna,³⁴ Loria contacted Karl Marx, sending him his *Rendita fondiaria*,³⁵ and later offering himself as his secretary, since 'il est un bonheur de demeurer pendant une année le secrétaire d'un homme de génie'.³⁶ This offer came to nothing, but eventually, in 1882, he spent several months in London, where, although he was unable to meet Marx (who was absent), he met Engels and two of Marx's daughters. Almost twenty years later, in a personal recollection, he described his efforts to convince his hosts of the fallacy of the labour theory of value, and of the inconsistency between this theory and the existence, postulated by Marx himself, of a uniform rate of profit.³⁷

In his obituary on Marx, Loria stressed another shortcoming in Marx's theory: the definition of 'constant capital' given to technical capital (machinery). 'Truly, if capital which is not employed in wages, is *constant capital*, i.e. it gets no profit [*recte*: surplus value], the industries which for technical reasons employ constant capital in a greater proportion, must therefore obtain a rate of profit lower than the others; but this is absurd, since it contradicts an economy based on free competition, and it would bring to failure all industries in which fixed capital prevails. Marx himself acknowledged this contradiction (chapter XI),³⁸ he recognizes that the rate

of profit is the same in the different industries and that this fact seemingly contradicts his theory'.³⁹ Loria mocked Marx's intention of resolving this contradiction in a further volume, which he 'always threatened to his critics and never published'.

Engels wrote a very angry and harsh letter to Loria,⁴⁰ who prepared (but probably never sent) a reply to the German revolutionary in which he continued to stress the fact that 'if two capitalists employ capitals in different proportions, while they will have the same Mehrwert, they will have different rates of profit,...which is a nonsense and the *reductio ad absurdum* of Marx's theory of value'.⁴¹

The way out was to separate profit analysis from value analysis.⁴² He apparently followed the teaching of Ricardo, who had determined first the rate of profit through the 'corn model', and subsequently the value in an exchange economy. When the third volume of *Capital* was finally published,⁴³ Loria reviewed it, observing that the 'transformation problem' was the logical consequence of Marx's fatal stubbornness in opposing all evidence. In fact, a value which differs from price is nonsense: 'No respectable economist ever occupied his mind in studying values which do not regulate the exchange of commodities'.⁴⁴ It was not decisive to object that, according to Marx, total values equal total prices. The concept itself of 'total value' is an absurdity. Elsewhere, Loria explicitly denied that the third volume of *Capital* could be considered a revelation, since 'no page of Marx's posthumous work was written after 1867'.⁴⁵

As is well known, Engels's defence of the labour theory of value in his *Supplementary considerations* to the third book of *Capital* are far from convincing. He argues against Loria that 'the Marxian law of value has general economic validity for a period lasting from the beginning of exchange, which transforms products into commodities, down to the 15th century of the present era.... Thus the law of value has prevailed during a period of from five to seven thousand years. And now let us admire the thoroughness of Mr Loria, who calls the value generally and directly valid during this period, a value at which commodities are never sold nor can ever be sold...'.⁴⁶ This was of course a crucial concession to all critics of the labour theory of value. Its validity ended with the birth of capitalism, so it could not explain the working of the latter.

One might ask oneself which aspect of Marxian theory was acceptable to Loria. He appears to approve of historical materialism, albeit stripped of dialectics—which Loria rejected for cultural even more than theoretical reasons—and understood as *economismo storico*, based on the concept of a 'technical instrument',⁴⁷ capable of overturning, through its own development, the old social forms. This represented a reduction (and an impoverishment) of the Marxian concept of 'forces of production', as Croce was to observe in his essay on Loria.⁴⁸ Nevertheless, this version of 'Marxism' was generally accepted among economists, particularly since it

was an easy target for criticism. In 1930 Luigi Einaudi attributed to Marx the false belief in the ‘myth of the technical instrument’,⁴⁹ and Gramsci in his *Prison Notebooks* considered Einaudi as another of Loria’s followers, or rather victims.⁵⁰

Antonio Labriola’s Marxism and Croce’s ‘marginalism’

In 1937 Benedetto Croce wrote that between 1895 and 1900 the theoretical debate on Marxism in Italy was raised and concluded, in both cases thanks to himself and to Antonio Labriola.⁵¹ In fact, Labriola had accepted his younger friend’s invitations to publish some of his essays on such subjects as an appraisal of the *Communist Manifesto*, the meaning of historical materialism, the relationships between socialism and philosophy, and so on.⁵² Labriola was principally concerned with the distortions of Marx’s original thought, stemming for political reasons from the ‘revisionist’ socialist parties⁵³ (especially the German Social Democrats), as well as from the academic-professorial milieu, which Labriola—himself a university professor—particularly disdained. But Labriola was above all a philosopher, interested in interpreting Marx as a thinker who worked in the same tradition as Bruno, Spinoza, Vico and Herbart.⁵⁴ Consequently, according to him, Marx’s ‘critique of political economy’ merely meant that economic theories sprang from the problems of concrete historical societies,⁵⁵ while the inner logic of Marxian economic theory did not attract his interest. As a defender of orthodoxy, he hoped to have an ally in Croce. But if the latter followed the former in his harsh criticisms of Loria, not even Croce was a Marxist. His main interest was in matters of historiography, and he intended to utilize Marx as a weapon to oppose all those theories of historiography which seemed to him fallacious, especially those based on the idea of Divine providence, on the one hand, and those depending on the collection of data and anecdotes in the positivist manner, on the other.⁵⁶ In his vision, Marx acted as an antidote more than a positive model to follow.

Soon after having ridiculed Loria’s miscellany of Marxism and positivism, Croce presented his own interpretation of what Marxian economics really was. He denied that ‘Marxian economics [was] the *general economic science*’, and that ‘the labour-value [was] the *general concept of value*’.⁵⁷ For Croce, the labour theory of value is imperfect and ‘not general’, since it does not explain why some commodities which are not produced nevertheless have value. On the contrary, the law of value according to pure economics is able to explain even this case. For this reason pure economics is not at all ‘psychology, but is the true and essential *general science of economic facts*’.⁵⁸ Croce concludes: ‘For my part, I hold firmly to the economic notion of the hedonistic guide, to utility-ophelimity, to final utility, and even to the (economic) explanation of interest on capital

as arising from the different degrees of utility possessed by present and future goods. But this does not satisfy the desire for a *sociological*, so to speak, elucidation of interest on capital, and this elucidation, with others of the same kind, can only be obtained from the comparative considerations put before by Marx'.⁵⁹

Labriola reacted strongly against what he regarded as a distortion of Marxism,⁶⁰ but he was unable to develop arguments in favour of Marxian economics, as he lacked the necessary economic competence.⁶¹ Croce had a better grounding in economics, and tackled the vexed question of the falling rate of profit.⁶² His criticism of Marx takes place from within the labour theory of value, which Croce demonstrates is inconsistent with the law of the falling rate of profit.

Marx examines a technical progress which presupposes a widening of constant capital and thus of the organic composition of capital. But Croce objects that this is precisely what does not happen. For technical progress is introduced with the aim of reducing the value of the overall capital, and thus not only v but also c .⁶³ When the rate of surplus value is constant, a proportional reduction of $c+v$ keeps the profit rate constant.

The second part of Croce's article considers the employment of workers who were unemployed due to a reduction in variable capital as a result of technical progress. Croce maintains that they would find a new employment, in so far as a production of less value, but of greater quantity, not only would not make the profit rate fall, but would even increase it. For the cost of employing these workers is reduced, but the product which these workers obtain by their work is increased. Croce's argument, however, involves the theory concerning the conversion of a part of the new commodities into savings and thus into new capital. This argument seems alien to the logic of Marxism,⁶⁴ and is based rather on the classical compensation theory.

Graziadei: surplus labour against surplus value

Antonio Graziadei (1873–1953) was one of the leading intellectual figures of Italian socialism before Fascism. He graduated in Bologna under a former student of Ferrara, Tullio Martello, discussing in 1894 a thesis on 'Il capitale tecnico e la teoria classico-socialista del valore',⁶⁵ which followed Loria's criticism of Marx, particularly as regards the equalization between total values and total prices. After taking part in the debate in 'Critica sociale' on Marx and Loria,⁶⁶ he published his main theoretical work, *La produzione capitalistica* (1899), in which he associated himself with the European 'revisionist' debate on the future of capitalism and on the consequent need of a correction of Marxian theory. His subsequent works may be considered as extensions and enrichments of this first volume. Comparing his writings from different periods is legitimate, we think, in so

far as Graziadei frequently repeated himself and we cannot observe a substantial evolution in his main ideas over time.

According to Graziadei, neither Marxism nor marginalism may be considered as complete systems of thought, since they contain internal flaws. However, if we eliminate these flaws, it is possible to reconcile Marxism and marginalism, without incurring serious contradictions. Marxism fails to demonstrate that value is a concept which precedes production. But value is only 'the rate at which producers exchange their products'.⁶⁷ Production can be determined independently of value, but not *vice versa*. Graziadei follows the physiocratic and classical 'surplus approach'. 'In the field of production...we must observe through which process—and through what social classes—the aggregate social product and the three great parts into which it divides itself; what the means of increasing it are, and what are the influences on production of an increase, say, of wages.'⁶⁸ This is a Ricardian programme. In particular, 'profit may be clearly explained, when we conceive of it in its real and immediate form of a quantity of products, and, more accurately, of the quantity of products consumed by capitalists'.⁶⁹

The implication is the dismissal of the labour theory of value, but not of the theory of capitalist exploitation, which can be ascribed to surplus labour, or to a surplus of products, which capitalists obtain owing to class relationships, i.e. to historical reasons. The advantage of this approach is, according to Graziadei, that value is no longer involved with production and is reduced to explaining circulation and distribution phenomena.

As far as marginalism is concerned, Graziadei rejected all marginalist explanations which referred profit to capital productivity. He labelled them as apologetic.⁷⁰ More generally, Graziadei tended to identify marginalism with hedonism. He objected that the law of decreasing marginal utility (as formulated by Gossen, Jennings and others) had no scientific foundations, since its psychological or physiological basis is not well demonstrated. Graziadei compares the hedonist premises of Pantaleoni, Jevons and Wieser, with the result of the more recent research in the field of physiopsychology (Wundt). He concludes that a hedonimeter is not available,⁷¹ and never will be.

In his criticism of marginalism, Graziadei made two exceptions: Marshall and Pareto. He studied the working of special markets in a Marshallian way,⁷² and entered into correspondence with Pareto soon after 1900, when Pareto began to dismiss the concept of 'ophelimité'.⁷³

A full appraisal of Graziadei's impact on Italian economic culture is not easy. As a socialist, and later communist, deputy (he was among the founders of the Communist Party in Livorno, in 1921), he was regarded as a black sheep in the corporation of economists,⁷⁴ to which he belonged as a professor in the universities of Cagliari, Parma and (after Fascism) Rome. Nevertheless, his attitude against Marxism and his 'reformist' ideas in

politics led him to isolation (he was expelled from the Communist Party in 1928⁷⁵ as a 'right-wing deviationist'). It is no surprise that he had no followers!

ECONOMIC ANALYSIS

Loria's 'real and 'imaginary' labour, price equations and surplus equation

Despite his criticism of the third book of *Capital*, Loria tried to work out for himself a theory of prices, starting from the quantities of labour.

Professor Garegnani has recently shown that there are two 'different and equivalent' methods of determining the rate of profit according to the classical (and Marxian) theory. The first consists in solving the profit rate and the price equations simultaneously. The second, called 'surplus equation method', 'depends on the possibility to express profits and capital, which appear in the surplus equation, in terms that are proportional to their prices but, at the same time, do not include unknown prices. The rate of profits will appear as the only unknown variable in the equation'.⁷⁶

Loria, following the steps of another Italian economist, Emilio Nazzari,⁷⁷ obtained some interesting results on the elaboration of the surplus equation method.⁷⁸

Thus, although Loria denied the existence of a transformation problem, because he defined the values and the natural prices to be the same thing, nevertheless he developed a solution that can be read, in the light of the recent debate, as a chapter in the history of the labour theory of value.

Loria divides capital employed in the production of commodities into two classes: wage capital, i.e. the subsistence wages given as an advance to the workers, and technical capital, i.e. all the other means of production, which are the result of past labour. As Loria himself acknowledges, this distinction is equivalent to the Marxian categories of variable and constant capital. Loria, however, as already noted, criticizes the Marxian terms, because if capital were only composed of wages, the exchange value of commodities would be proportional to the quantity of embodied labour. Thus the wage capital is constant, as far its effects on the value of goods are concerned, while the technical capital is variable, i.e., it causes the value of goods to vary in comparison with the quantities of labour contained. The price of goods containing more technical capital must rise with respect to the price of goods containing less technical capital to assure an equal rate of profit to all the sectors of the economy.

The technical capital is present...with all its profit in the value of goods, in which it is employed. Thus, to have the value of goods

obtained with technical capital it is necessary to add the profit on the value of technical capital to the quantity of labour contained in them.⁷⁹

In general the exchange value of commodities cannot be reduced to the quantity of ‘real’ labour contained in them. According to Loria the value of commodities is determined by a ‘complex’ quantity of labour, composed of the *real* quantity of labour plus

the quantity of labour contained in the technical capital multiplied by the rate of profit, an *imaginary* quantity, because no part of it is found in the final product, and *variable*, because it changes with each variation in the rate of profit, even if the technical conditions of production remain constant.⁸⁰

As we shall see below, Loria is able to determine the rate of profit separately from the price of goods by means of the ‘surplus equation’. Moreover, although not presenting a general formalization of his price theory, he provides several examples. One of these regards a commodity produced with the aid of direct labour and a circulating (technical) capital produced only by direct labour. Here, according to Loria, the price is given by the formula

$$L_{a1} + L_{a2} + rL_{a2} = L_{a1} + L_{a2} (1 + r) = p_a$$

where L_{a1} is the quantity of direct labour contained in the commodity and L_{a2} the quantity of labour contained in the circulating capital.

It is interesting to compare Loria’s equation to that of Bortkiewicz. If w is the wage rate and p_a' Bortkiewicz’s price, in the simple case proposed by Loria, he would have written:

$$wL_{a1} (1 + r) + wL_{a2} (1 + r)^2 = p_a' \quad (1')$$

Evidently Loria’s price is equal to Bortkiewicz’s price divided by $w(1+r)$. But, if one divides the prices of commodities by $w(1+r)$, the exchange relationships remain unaltered: Loria, calculating his prices by adding the ‘imaginary’ quantities of labour to the real ones, obtains the same exchange relationships as in Bortkiewicz’s system.⁸¹

Of course, Loria needs another equation to determine his system, as his price equations include one extra unknown variable (r). Thus the rate of profit ‘becomes a necessary element to reduce the cost of products to a common denominator’.⁸² Loria is able to write a ‘surplus equation’ in which the rate of profit is determined by the quantity of labour commanded by a wage basket and by the quantity of direct and indirect labour contained in it.

In Loria's example, the wage of L days of labour is composed of given quantities of goods a and b . The production of these quantities needs respectively L_{a1} and L_{b1} , quantities of direct labour and two everlasting technical capitals that are produced by the quantities L_{a2} and L_{b2} of direct labour.

The rate of profit, according to Loria, is given by the following equation:⁸³

$$r = \frac{L - (L_{a1} + rL_{a2} + L_{b1} + rL_{b2})}{L_{a1} + rL_{a2} + L_{b1} + rL_{b2}} \quad (2)$$

Thus Loria's system is consistent, and the rate of profit is determined by the conditions of production of the given basket of wage goods. Significantly, Loria calls the wage commodities, which determine the rate of profit, *basic products*.⁸⁴

Now it is clear why Loria defines as 'imaginary labour' the part of value that resolves itself into profit. In the capitalist system the waiting time is an element in the cost of production like labour.⁸⁵ But this is an 'imaginary' element. The source of the profit is not 'abstinence', but the class relationships and, according to Loria's theory, private ownership of land.⁸⁶ However, 'imaginary labour' (abstinence) explains why in capitalist economies the prices of goods are not proportional to the 'real' quantities of labour.

The rate of profit is determined by the division of the produce of the wage goods sector between capitalists and labourers. A change in the real wage causes the rate of profit and the values of goods to change, independently of every change in the technical condition of production and in the waiting time.

Loria states:

Thus the real element of value refers to the conditions of production of the commodity, and it cannot vary when they remain unchanged. The imaginary element of value refers only to the will of the contracting parties of the wage relationship, and can change endlessly, though the conditions of production remain unchanged.⁸⁷

The quantity of imaginary labour depends on the distribution of the income, and in no way can it be related to the 'productivity' of capital.

Conigliani, the vertically integrated sectors and the role of perspective utility in the division of social labour

Two essays by Carlo Angelo Conigliani, *Il profitto sul capitale tecnico* (1899), and *Sul congruaglio dei saggi di profitto* (1900), both concerning the

problems raised by the Marxian transformation of values into production prices are of some interest.⁸⁸

Conigliani stresses the differences between Loria's, Cherbuliez's and Marx's hypotheses about the determination of the general rate of profit. As already seen, Loria maintained that the general rate of profit is determined only by the conditions of production of the wage goods sector, while Cherbuliez and Marx calculated the equilibrium rate of profit as a weighted average of the rate of profits in labour-value of all the various productive sectors of the economy.⁸⁹

Conigliani emphasizes that Marx (following Cherbuliez), in his transformation process, expresses the prices and the wages in terms of a Ricardian ideal and invariable measure. This measure corresponds to a given quantity of labour, i.e. it is a unit of money whose production price is equal to its value. As Conigliani implicitly suggests, this invariable money measures the aggregate product (the GNP) independently of changes in the relative prices caused by variations in the distribution of wealth. Evidently the labour contained in goods matches this constancy, because it does not vary with changes in distribution, given the conditions of production.

According to Conigliani, Loria and Marx-Cherbuliez had different theories about the wage rate. Loria assumes that the wage rate is given in terms of particular commodities, and thus is paid in terms of variable money (although it is constant in real terms).⁹⁰ So the wage goods sector determines the general rate of profit. In other words, the wage is a given physical quantity of some particular wage basket and so, once the labour-values are transformed into prices, its own value varies, because its relation to the GNP changes.

Marx, on the contrary, assumes a given value of the wage in terms of the invariable measure. Wage is not given in terms of some particular wage basket, but in terms of a share of the GNP. Given this assumption, the general rate of profit resolves itself in a weighted average of the single rates of profit in value of each sector.

Conigliani's analysis suggests, albeit implicitly, that with his transformation method Marx leaves aside the subsistence theory of wages, to maintain that the wage is negotiated as a share of the GNP.⁹¹

The second question stressed by Conigliani is the use of the 'vertically integrated sectors'⁹² in determining the profit rate. Evidently, the transformation process must take into account the prices of capital goods used in production, while Cherbuliez and Marx leave them unchanged. According to Conigliani, to calculate the prices of production, it is necessary to consider that 'the division of the whole productive process into different stages, some stages devoted to the production of technical capital, and the others devoted to the production of final goods' is not technical and economic, but only legal. In other words, according to Conigliani, all the

different stages of production are linked to one another: the aim of the whole process is the production of consumer goods. However, the firms operating in the various stages are owned by different capitalists. We thus have a single process of production, that is composed of different stages, but many capitalists, each of them claiming the normal profit on the invested capital.⁹³

As the general equilibrium rate of profit results from a change in the prices due to a variation in the quantities produced,

the balance [of the rate of profit] must be completely harmonious in each sector of production, so that it results from an exit or an immigration of capital, and thus from a decrease or an increase in the quantities produced, in the technical capital sectors, when a variation in the same direction and of the same intensity takes place in the final product sector which uses those technical capitals.⁹⁴

It follows that the rate of profit must be calculated not in relation to the single sectors of production, but in relation to the 'vertically integrated sectors'.⁹⁵ Once the rates of profit of each vertically integrated sector are obtained, the general rate of profit would result from the weighted average of them. This is not true in general, because of the powers of the rate of profit multiplied by different quantities of dated labour. However, Conigliani's description of the vertically integrated sectors still remains very interesting.

Conigliani draws some conclusions from his vision of the economic system as a set of vertically integrated sectors.

First, the classical and Marxian idea of the origin of profit is confirmed. Profit exists because 'a class which owns the subsistence goods obtains, by exchanging them with the labour of the under-privileged, a part of the product of this labour'.⁹⁶

The profit of the technical capital is an extra income in addition to the normal profits of the wage capital, caused by the increase in the prices of goods obtained by more roundabout processes.

Following Böhm-Bawerk, Conigliani assumes that the adoption of more roundabout methods involves an increase in production time. The distribution of social labour among different sectors of production is related to the utility of the different commodities produced—not to the 'effective' utility of the commodities, but in relation to their 'prospective' utility, i.e., the utility of the future products as valued at the beginning of the productive process. It follows that the longer the production time, the lower the 'prospective utility' in respect to the 'effective utility'. A smaller share of the social work is devoted to the production of goods requiring more roundabout processes. So these goods will be comparatively scarce at the end of the productive process, and their prices will increase in relation to the other goods.⁹⁷ The surplus that remains over the advanced wage capital

in the more roundabout vertically integrated sectors is higher than the surplus from the other goods, so that it is proportional not only to the wage capital but also to the technical capital, or to the time necessary for the productive process.⁹⁸

In this way Conigliani tries to characterize the process of division of social labour as the result of a comparison between the present utilities of future goods. A neoclassical vision of the market process, that leads to the equilibrium prices and rate of profit, is combined with a classical and Marxian analysis of the determination of prices.

Loria on the labour market: the use of marginalist tools

While Loria's theory of prices is fully developed along classical lines, in his labour market analysis he uses some marginalist tools, albeit emphasizing the clash of interests between capitalists and labourers.

In his book *La costituzione economica odierna* (1899), he states that generally the subsistence wage does not maximize the profits of capitalists.⁹⁹ When the workers are organized in trade unions, they can hold strikes to obtain wage rises. According to Loria, capitalists and labourers carry out a rational calculation about their interests, based on a perfect foresight of the consequences and the length of the strikes, and of other economic data, such as the normal rate of profit. So all the economic agents are rational and maximize their incomes in the labour market. Thus the labourers *must* ask for a rise in wages which is higher than the profits (computed at the equilibrium rate) on their incomes lost during the strikes. In the opposite case, in fact, they would have maximized their income if they had not gone on strike, saving their wages and investing them. On the opposite side, capitalists find it profitable to grant the rise in wages only if the consequent loss of profits is smaller than the profits on the income that would have been lost during the threatened strike. In other words, the prospective value of the loss in future profit caused by the rise in wages must be smaller than the loss in income caused by the strike.¹⁰⁰

In Loria's formalization, $\Delta\pi$ is the profit loss caused by the rise in wages, n the profit loss during the strike and r the profit rate. If $nr < \Delta\pi$, it is in the capitalists' interest not to give in to the strike, while if $nr > \Delta\pi$ it is in their interest to grant the wage rises. Where W_s is the wage lost during the strike by the labourers, and Δw the requested rise in wage, the strike is in the labourers' interests only if $rW_s < \Delta w$.

Loria draws some interesting conclusions from this analysis. The strikes are likely to be successful only if technical capital is a considerable proportion of the whole capital invested. In fact, when capital consists only of wage advances, we have $n=rW_s$ (the profits lost by the capitalists are of course equal to the profits on the wage advances), while by definition $\Delta\pi = \Delta w$. Then we have $nr < \Delta\pi$, i.e. it is in the interest of the capitalists not to

give in to the strike. Only when capital consists also of technical capital $n > rW_s$, can the capitalists also lose the profits on this technical capital during the strike. Thus the condition $nr > \Delta\pi$ can be met.

On the other hand, in a rational economic world, it would be sufficient for the labourers to threaten a strike when the requested rise in wages is compatible with the capitalists' interests, without putting it into practice. Loria seems to say that in the real world strikes are actually carried out only because the economic actors are not able to calculate all their consequences. Moreover, the labourers will continue to request wage rises till the minimum wage rise that it is in their interest to ask is higher than the maximum rise that is in the capitalists' interest to grant.¹⁰¹ This leads to the equilibrium level of wages in a labour market where there is clash of interests, given the conditions of production.¹⁰²

According to Loria, however, this maximum wage level is the prevailing one only when there is full employment on the labour market. Capitalists soon realize that they can wear down the contractual power of workers just by setting a limit to their labour demand. The smaller the wage the capitalists want to impose, the higher the number of unemployed workers competing with the employed workers they have to create.¹⁰³ Thus the wage rate is a proportional function of employment, and the capitalists, who control the labour demand, can impose a wage rate that maximizes their profit, equalizing the marginal productivity of labour and the increasing marginal growth of the wage fund, caused by the rise in employment.¹⁰⁴

According to Loria's example, the marginal productivity of labour is supposed constant and equal to the average productivity, because the production function is a straight line that starts from the origin of the axes.¹⁰⁵ In essence Loria, in his numerical example, propounds these functions:

$$1 \quad w = bO \quad (w = \text{rate of wage, } O = \text{employment; } b \text{ is a parameter}).$$

From (1) we have:

$$2 \quad W = wO = bO^2 \quad (W = \text{wage fund})$$

$$3 \quad s' = \frac{dW}{dO} = 2bO \quad (s' = \text{marginal increase of the wage fund})$$

$$4 \quad PT = p_m O \quad (PT = \text{total product, } p_m = \text{constant productivity of labour})$$

$$5 \quad p_m = p' \quad (p' = \text{marginal productivity of labour}).^{106}$$

Loria's wage rate that maximizes the profit of capitalists is shown in Figure 5.1. It is worth noting that the second part of Loria's theory of wages does not conflict with the first part, concerning the economic rationality of

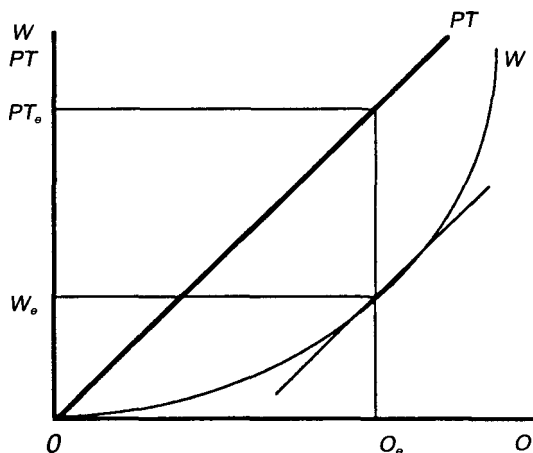


Figure 5.1

strikes. Loria introduces the marginalistic theory of monopsony into a conflictual vision of the labour market. In this framework it is because the workers can cause the wage rate to rise, by threatening strikes, that the wage rate is not at the subsistence level and is an increasing function of employment.

On the other hand, Loria's theory of monopsony on the labour market is not presented as an exploitation theory, as is the case with other economists.¹⁰⁷ According to Loria labourers have, after all, a wage which is higher than 'the equivalent of pure work', i.e. work not assisted by capital. Exploitation derives precisely from the division of society into classes, and from the private ownership of land.¹⁰⁸

Ricca-Salerno: intertemporal preferences and the labour market

Another economist, Giuseppe Ricca-Salerno (1849–1912),¹⁰⁹ used some typical tools of the neoclassical theory inserting them in a classical (but also Marxian) vision of the economic process. In some articles he attempted to elaborate an organic theory of the capitalist production relationships, stressing class distinctions.

Following the classical economists (but also Böhm-Bawerk), Ricca-Salerno defines wages as advanced wealth. Capital allows, according to the Austrian theory, an increase in the production period, and an increase in labour output. From a utilitarian point of view, capitalists will employ labourers only when they value the present utility of the future labour output more than the utility of the wealth provided as wage advance.¹¹⁰

According to Ricca-Salerno, Böhm-Bawerk and Jevons developed from this concept an 'absolute' idea of capital, while it would be more suitable to develop a 'relative' idea of capital, understood as a historically determined production relationship. In fact, the problem is to explain why labourers are compelled to give up the future product of their labour in exchange for their wage. Capital must 'presuppose a remarkable inequality in the economic condition of individuals, so that those who accept the present wealth from others, because they value it more, are ready to return a higher quantity of it in the future'.¹¹¹ The class distinction of society, and the exclusion of labourers from 'the possession of the necessary elements to the practice of labour',¹¹² are characteristic of capitalist economies. The ratio between the utility of present goods and the utility of future goods becomes much higher for the labourers in comparison with the capitalists so that the wage relationship can be established.

The capitalists gain with the future product, as the workers with the present wealth, a higher value from their point of view. While the wage represents a lower sacrifice for the former, it represents a higher utility for the latter.¹¹³

According to Ricca-Salerno, the exchange between present and future wealth is the fundamental peculiarity of capitalist economy.¹¹⁴ It determines the level of the wage and of the profit, that is the surplus of future product in comparison with the present wealth advanced as wages.¹¹⁵

Böhm-Bawerk stressed the basic importance of the intertemporal preferences as far as the origin of the interest is concerned, but in the end he maintained an 'absolute' theory of capital, based on the productivity of the more roundabout methods of production.¹¹⁶ *Vice versa* profits do not spring out, as a distinct income, from the productivity of capital, but from class divisions in society.

From this point Ricca-Salerno develops his analysis using Ricardo's theory of comparative advantage, Mill's theory of reciprocal demand, and Cairnes's theory of non-competing groups. As in international trade there exists a difference in comparative costs, so there is a difference in comparative intertemporal preferences in the exchange between labourers and capitalists, who in this respect are non-competing groups. The ratios of value of present goods to the value of future goods of each social class determine whether the exchange is worthwhile. The reciprocal demands of present goods from the labourers and of future goods from the capitalists determine the effective wage level, and thus the profit level.

It is useful to show Ricca-Salerno's analysis using the Marshallian diagram of reciprocal demand.

In Figure 5.2, the straight lines OD and OF represent the preferences for the present relative to the future product, of the labourers and capitalists respectively, i.e. the comparative intertemporal preferences of the two social

classes. Both straight lines have a slope of less than 45° , as everybody prefers the present product in relation to the future one, but the labourers show a greater present preference. The $0L$ and $0C$ curves are the reciprocal demand curves of labourers and capitalists respectively. The wage rate OB and the profit per unit of labour ($0A-0B$) are determined by the point of intersection of the reciprocal demands. The rate of exchange between the present and the future product (the straight line $0E$) is convenient for both social classes, but the social and economic conditions of capitalism determine the initial preferences.¹¹⁷

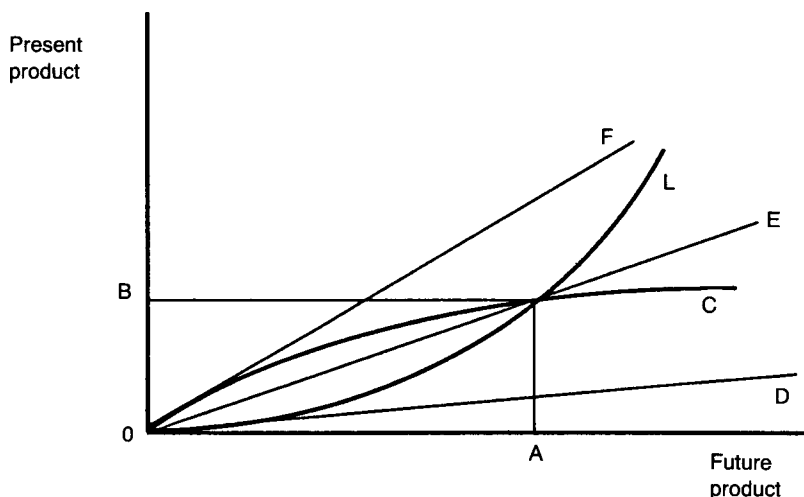


Figure 5.2

As far as determining the profit rate is concerned, Ricca-Salerno appreciates Loria's analysis.¹¹⁸ The profit rate depends on the conditions of production of the wage goods sector and on the rate of exchange established on the labour market. Consequently 'relative capital' affects the evaluation of 'absolute capital'. In fact the value of capital goods depends on distributive relationships: 'what is called value of capital does not concern the technical elements of production, nor is it fixed and invariable, but it depends on the substitution rate of the wealth exchanged between workers and capitalists.'¹¹⁹

Ricca-Salerno agrees with Marx's definition of capital as a social relationships, but—evidently sharing Loria's criticism of Marx (see pp. 122–4)—he criticizes Marx's statement that variable capital is the only source of profits. To produce a given quantity of wage goods it is necessary to advance the same wage goods for different periods of time. The surplus is the result of the whole productive process, which requires intermediate stages (the production of capital goods). The rate of profit can be calculated only by considering the intermediate stages. Yet 'the profit of the wage

capital contains the reason and the measure of the profit of all the other capitals, and thus of materials and tools',¹²⁰

It is worth noting that from this analysis Ricca-Salerno derives his opinions on the role of the trade unions. With the adoption of more roundabout processes the workers are no longer able to know the final result of their labour, i.e. the real terms of their relationship with the capitalists. Thus the task of the trade unions consists in rendering the terms of the exchange in the labour market less remote, making the most complex processes of production intelligible and claiming appropriate rewards.¹²¹

Leone, Arturo Labriola and the marginalist approach to socialism

We have so far discussed the attempts to solve Marxian issues, such as the determination of the profit rate and the distributive conflicts in capitalist society, partly following 'marginalist' lines of thought. Nevertheless, the authors considered above did not aim to demonstrate that marginalism could also provide a model of a socialist economy, alternative to the Marxian (or rather Engelsian¹²²) doctrine. This can also be explained by the fact that, apart from some exceptions, they were not socialist at all.

After 1900, however, there was a new wave of younger scholars who aimed at giving a 'scientific' sense to socialism without committing Marx's errors. The revolutionary syndicalist Enrico Leone (1875–1940)¹²³ tried to build up a socialist theory entirely based on neoclassical economics, and particularly on hedonistic and utilitarian economics. His attempt shows some evident limitations, but is interesting simply because he wanted to transpose some of Marx's conclusions to a marginalistic context. Thus Leone can be considered the most 'neoclassical' among Italian socialist economists.

According to Leone, pure economics was no longer conditioned by class interests, i.e. it was no longer based on bourgeois ideology. Although pure economics studies the natural laws of economic behaviour independently from the social and institutional framework, it does not deny the existence of historically determined laws, which have a great influence in determining the historical form of the economic system. Thus pure economics does not provide an *apologia* for capitalism, neither does it consider the mechanism of economic laws in a capitalistic society as the only possible way in which natural laws emerge.

However, there are fundamental differences in the methodology of economics and in the methodology of Marxism. Pure economics studies the economic behaviour of individuals based on the hedonistic principle of maximum welfare or minimum effort. It starts by analysing the behaviour of individuals and *then* analyses the society that is the outcome of the relationship between individuals. In other words, it is based on

method-ological individualism. So it is a study of human nature and of people's practical activity.

In contrast, sociological methodology—which is, according to Leone, the methodology accepted by Marx—starts from the study of the 'objectified collective manifestations' of society. So *Das Kapital* is not a book of pure science, but a monograph devoted to the social and historical description of the capitalist system.¹²⁴

Leone identifies pure economic science with the study of the hedonistic behaviour of individuals. However Marx, who does not take into account people's economic choices and preferences in his analysis, is somehow justified by the peculiarities of mercantile and capitalistic societies. In these societies relationships between producers take the form of relationships between products, which become commodities. The machinery of exchange appears to be guided by automatic and objective laws, while man's subjective judgements take a back seat. So Marx's theory of the fetishism of commodities justifies his sociological approach to capitalistic economics, based on the objective laws of production and not on the subjective laws of exchange.

Yet, according to Leone, these considerations do not exclude the need for pure economics. Economic laws refer to a hypothetical society in which only individuals are the economic agents. These laws have an explanatory power for every society, although their effects are modified by extra-economic factors. Besides, only by comparing the mechanism of economic laws in a hypothetical hedonistic society and their mechanism in historically determined societies, is it possible to reach scientific conclusions.

Hedonistic economics can reach similar, but more scientific, conclusions like those reached by Marx. In this way it is possible to show in particular that: economic systems have an immanent tendency to develop into socialism; a scientific theory of social classes can be worked out; and a scientific economic theory of exploitation can be worked out.

Leone stated:

Man—the economist supposes—is induced to operate only by his wish to reach the greatest possible satisfaction of his wants. This is the well-known hedonistic postulate. This principle, applied to all aspects of economic reality, must lead society towards the most rigorous equality, as a body left in the vacuum is compelled to fall.¹²⁵

In fact, pure economics is based on the assumption that man is the free agent of his economic behaviour. According to Leone, Marx and Engels thought that this condition could only be achieved in a socialist society. In fact, because man is endowed with hedonistic power, he will obtain—if he is not hindered by extra-economic factors—the greatest reward for any given cost. In conditions of perfect economic freedom everyone will reach his optimum, which should be compatible with the optimum of other

people. Each individual is assumed to be a rational being who maximizes utility.

Thus, in a free society, which, according to Leone, is a society with equally distributed wealth and no class divisions, the equality of the optimum for everyone must persist, owing to the mechanism of natural laws. This equality must not be understood as equality of total utility attained and of total efforts suffered, but as equality in the ratio of utility/efforts necessary to obtain this utility.¹²⁶ It is clear that Leone considers efforts as negative utility, so that utility and cost (effort) have the same dimension. According to Leone, if one individual thinks that another individual obtains more utility in relation to the efforts made in production 'before long he will be competing with the other individual' and will transfer his activity to the field that assures higher profits. In this context, profit means the difference between the utility of a commodity and the subjective cost of its production.

Thus in a pure economy all individuals obtain an equal profit.¹²⁷ On the other hand, if profit is understood as something earned without a cost, in a pure economy this profit cannot exist, because in such a society there are no impediments to competition, and thus no monopolistic positions. Leone deals with an issue which is present throughout contemporary marginalist economy. For example, he quotes Wicksteed's statement that 'the conformity of the net result [of the machinery of exchange] to any principle of justice or of public good *would depend entirely on initial conditions* prior to all exchange'.¹²⁸ Moreover, Pareto and Pantaleoni were separating economic from extra-economic or sociological actions and relationships.¹²⁹

Leone's approach is characterized by the statement that pure economic relationships can be observed only when the starting positions are the same for all the economic agents, as the differences in these positions spring from extra-economic factors. In a system without such differences, according to Leone, free competition tends to maintain equality in the ratio of utility/efforts for all individuals.

There are some interpretative problems with Leone's approach: on the one hand, he quotes Wicksteed who stated that desires that exist in different minds cannot be measured against one another.¹³⁰ On the other hand he maintains that it is possible to compare personal utility, at least with a collective average.¹³¹ In fact, he takes issue with Edgeworth, who stated that ethics is involved in maximizing the sum of total utilities of different persons.¹³² It is worth noting that to say that each economic actor compares the ratio of utility to efforts for all the economic activities and chooses the most convenient one does not necessarily involve inter-personal utility comparison. But to say that in equilibrium the ratio of utility to efforts is the same for all the individuals is to say, as Adam Smith did, that an hour of labour represents the same 'toil and trouble', i.e. the same negative utility, for all individuals, or that they estimate in the same manner

efforts in relation to utility. In other words, although the ratio of utility to efforts is a pure number, if inter-personal utility comparison is not allowed, an individual cannot know how other individuals estimate utility and efforts. Everyone maximizes his own ratio of utility to efforts, and there is no reason why the ratio must be the same for all the individuals. In this case, there are no observable magnitudes such as relative prices that lead to equality in the ratios between the marginal utilities for all the individuals.

Anyway, according to Leone, in capitalistic economies, as well as in all the other historical economies, the condition of equality is necessarily not achieved because of the extra-economic distribution of wealth. The possession by capitalists of the means of production is regarded as a class monopoly on ownership which prevents the workers from fulfilling their utility maximization. Workers cannot compete with capitalists in economic activity¹³³ and thus they have a smaller utility/effort ratio.¹³⁴

Leone calls 'equilibrium of absolute utility maximization' the situation in which each economic agent 'feels' that all the economic activities warrant the same relationship between utility and efforts and 'equilibrium of relative utility maximization' all the other situations, which are realized in historically determined societies. Leone regarded the first equilibrium as the real economic one because it is not affected by extra-economic factors such as the appropriation of the means of production by a particular class. When an exogenous shock alters the situation of equilibrium, the perfect competition of the 'free economy' tends to restore the condition of equality, as stated above. But in capitalistic economies, where wealth is distributed according to extra-economic criteria, there is no competition between social classes, but only within each class.

The result of competition in an exchange economy is synthesized by the Jevonian law of indifference: all units of a commodity must exchange for the same price and all the coefficients of production are the same for all the entrepreneurs, who gain the same rate of profit. Here commodities compete with one another in the market and so they rule over their producers. (Leone thus translates Marx's fetishism of commodities into the marginalist language.)

In a free economy competition is much more effective: here, when an 'economic unity', not very clearly defined as 'the elemental core of the economic organization, which constitutes the cellular basis of the free economy', distributes a higher stock of goods and values than another, competition induces economic subjects to move toward this 'economic unity'. Individuals compete with one another and they rule over their products.

In an exchange economy the distribution of the national dividend is an initial condition for private economies and is the result of extra-economic and historical factors, while in the free economy it is the result of competition between free hedonistic individuals.

Leone develops his argument by following Fisher's representation of the economic system by means of a system of communicating vessels. According to Leone, while the distance of the water level from the top of the vessels represents, as Fisher showed, the equilibrium condition of the equality of marginal utility measured in money, the volume of each vessel, and thus total water (utility) contained is determined by the extra-economic distribution of wealth (see Figure 5.3).

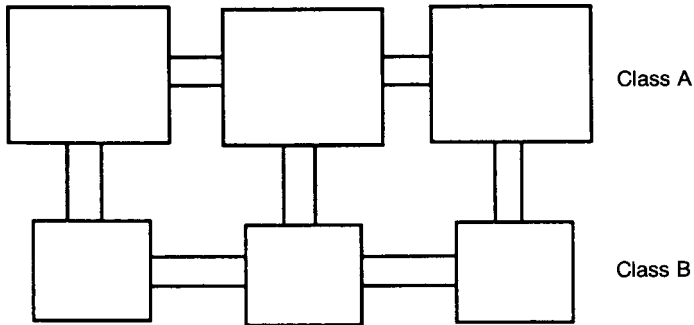


Figure 5.3

Thus there is no complete competition in such a situation, but only a competition inside each class. Class A (the capitalists) will get the same profit rate, while class B (the workers) will get the same wage rate.

If we suppose (as Fisher did¹³⁵) that the walls of the tanks are elastic, the pressure of the water (the competitive forces) will tend to equalize the volume of each tank, whatever the initial distribution of water (utility). Thus a situation of permanent difference in the volume of the water (utility) contained in the different tanks can be explained only by the impediments that clog up the tubes connecting the upper tanks to the lower ones, or in other words by the impediments to the operating of competition between classes (see Figure 5.4).

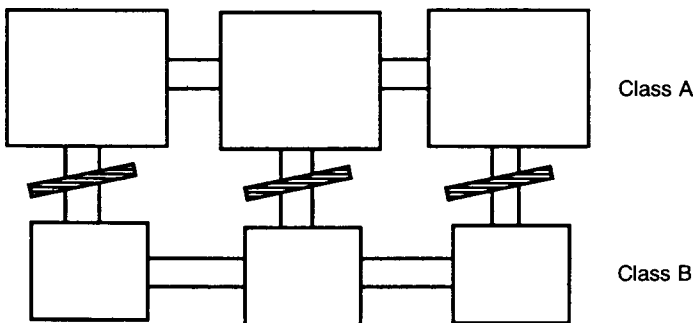


Figure 5.4

Leone's illustration is intriguing, but now, it will be noted, the comparison is no longer between the utility/effort ratios, but between total utility derived by different individuals, at least if one defines, as Leone did, the water contained in each vessel as total utility enjoyed by each individual. The example of the elastic walls of the vessels shows that each 'economic unity' should distribute the same quantity of utility, and not that the utility/effort ratio for each individual should be the same.

Leone in this way held that it is possible to develop a general economic theory of social classes. In all historical societies, given the disposable resources, there is a class of persons who have a utility/effort ratio higher than the one that prevails in a pure economy, and another class of people who have a lower ratio. The differences between these societies, i.e. between the various extra-economic impediments to the competition, are sociological and historical matters, but pure economics is able to emphasize the economic aspects (namely, those related to utility maximization) of the class division.

However, the forces of competition tend, in historical societies, to eliminate the impediments to competition. Thus there is an economic tendency towards socialism (i.e. perfect competition in the meaning stated above), which can only be obstructed by extra-economic factors.

Eventually, according to Leone, 'the mainstream pure economy' is not completely pure, as it studies the 'relative equilibrium' of the historically determined capitalistic societies, where the distribution of property is determined by historical and extra-economic factors. In this way Leone transfers to a marginalistic framework another Marxian topic: criticism of the ideologically vitiated bourgeois political economy.

In this framework Leone tries to explain the exploitation of workers in the capitalistic economy as the result of the passage from the 'absolute equilibrium' to the 'relative equilibrium'. Workers cannot maximize their utility, i.e. they do not have 'the option' to direct their economic activity according to the laws of utility maximization, owing to the 'constraint' of capital, which is owned by a particular social class.¹³⁶

In fact, in Leone's opinion, labourers are compelled to produce 'beyond the bound (*economic moment*) in which the painful intensity of the work suffered to produce the last dose equals the pleasant satisfaction that the producer gains from it'.¹³⁷

In other words, workers cannot equate the marginal utility of their income to the marginal disutility of their productive efforts: they are compelled to work longer,¹³⁸ owing to the peculiarity of the labour market in a capitalist society.

As shown in Figure 5.5 labourers cannot stop working at point E, which is the point in which they maximize their utility, but must continue to work until point D.

Thus labourers are compelled to give away 'extra-marginal' doses of

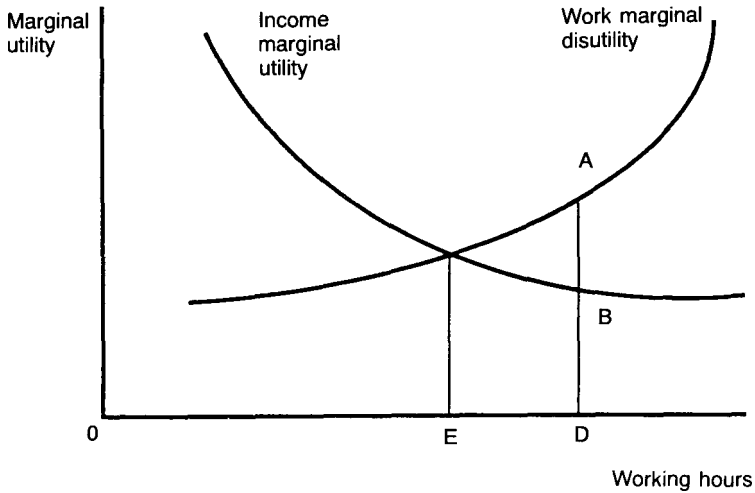


Figure 5.5

work (ED in Figure 5.5). On the other hand capitalists choose the length of the labourers' working day with the goal of maximizing their profits. Thus they can maximize their utility by reducing the labourers' utility, owing to their 'monopolistic' possession of capital as a social class.¹³⁹

Leone attempted to measure exploitation in terms of utility and pain, but his view of exploitation springs from his own 'economic theory' of social classes. In this framework, the existence of different social classes depends on extra-economic factors: economic analysis can only record that the 'absolute equilibrium' is disturbed by the private ownership of capital.

Arturo Labriola (1873–1959)¹⁴⁰ devoted several works to Marxist criticism as well as to its relation to marginalism. They are of interest mainly because of their intuitive insights rather than their consistency or rigour.¹⁴¹

In one of his first works, *La teoria del valore di Carlo Marx. Studio sul terzo libro del Capitale* (1899), Labriola develops, like Leone, the idea that the theory of value must explain the social and qualitative relationships which are hidden in the 'commodity-form'. Only later must the theory of value explain the quantitative exchange relationships. In this context Marxism and marginalism are not contradictory.

The hedonistic theory, the theory of capital cost and the labour theory do not exclude one another, but are three distinct ideas in a sequential order of facts: the objective reality of production (labour), the social form under which it is produced (slavery, feudalism, capitalism) and the directive principle of consumption.¹⁴²

According to Labriola, Marx showed the relationship between the theory of

labour value and the theory of the cost of production by means of the process of transformation of value into prices. Thus Labriola thinks that these two theories could be reconciled with the hedonistic theory. Labriola does not indicate how this would be possible, at least in this work. As far as the theory of the falling rate of profit is concerned, Labriola seeks to demonstrate that Marx erroneously based this theory on the labour theory of value, instead of basing it on the analysis of the circulation process. Labriola thus contributed to the flourishing literature on underconsumption within Marxism, and stressed that profits fall because of disproportions among sectors.¹⁴³

In 1898, however, Labriola went beyond his position on the relationship between Marxism and hedonistic economics, in that he observed that socialism also sets itself the same aim as pure economics: the aim of maximizing production and its distribution among people, so as to maximize collective satisfaction.¹⁴⁴ Labriola's attempt to move his position in line with Pareto is clear.¹⁴⁵

The argument in the 1899 essay is taken up again in 1908 with the volume *Marx nell'economia e come teorico del socialismo*. Here Labriola emphasizes the qualitative aspect of value, which in Marx coincides with the 'fetishism of commodities'. Pure economics has as its object the rational conduct of mankind—with which Marx was never concerned. Thus, Marx and pure economics are on different levels of inquiry.

Nevertheless, neoclassical economy too—Labriola argues—cannot provide answers to the question of which social order maximizes social welfare. According to Labriola, economic science cannot study what Leone calls 'equilibrium of absolute utility maximization'. It can only study the 'equilibrium of relative utility maximization' because economic actions tend to reach an equilibrium in a given institutional framework. Extra-economic actions change this institutional framework and thereby give rise to a new economic equilibrium.¹⁴⁶

Pareto's methodology, especially his criticism of the hedonistic theory,¹⁴⁷ had a greater influence on Labriola than on Leone.

In a subsequent book, *Il valore della scienza economica* (1912), Labriola distinguishes classical and Marxian from neoclassical economics. The goal of classical economists, from the physiocrats to Marx, was the study of surplus and social wealth. Only with the rise of neoclassical economics was attention given to the study of the *homo œconomicus*. The classical economists wanted to understand the problem of 'the cause and the source of the net product'. 'The problem of value is placed in Classical economy as a means of resolving the problem of the net product.'¹⁴⁸ According to Labriola, in this framework classical economists wanted to determine the value of the whole social product rather than to determine the exchange value of each commodity. 'Ricardo wants to photograph all the commodities, to sum up their values, to subtract the costs in value of all the

commodities, and to settle the surplus as a free (gratuitous) gain.¹⁴⁹ Marx added to classical theories 'the qualitative analysis of commodities and thus, independently from quantitative relationships, each commodity is only abstract labour'.¹⁵⁰

Labriola's conclusions are thus very different from Leone's. Leone thinks that economic science has a single object of research, based on methodological individualism, whereas Labriola thinks that the object of research of classical economy markedly differs from that of neoclassical economy, which limits itself to the analysis of exchange relationships.

A marginal theory of exploitation: Montemartini

Another socialist, Giovanni Montemartini (1868–1913),¹⁵¹ tried to analyse class conflict and exploitation of a productive factor by another factor, through appeal to the marginalistic theory. In his *Introduzione allo studio della distribuzione delle ricchezze* (1899), he maintains that only the marginal productivity theory completely analyses the exchange between a productive service and the revenue of a productive factor. Thus he focuses on the interdependence of all economic variables.¹⁵²

The distribution of income is the distribution of the surplus arising from the production process. According to Montemartini, however, this is a subjective surplus, i.e. the surplus utility that is generated in production, as compared to the utilities sacrificed as inputs.

The distribution of this surplus is not harmonious: the owners of each productive factor attempt to take possession of the largest quantity of the social product, at the expense of the other factors, and aim to become 'non-competing groups'. According to Montemartini, 'the ultimate intent of the economic science is to discover these antagonisms', and Marxism is of importance because it shows 'that the class struggle is the basis of the whole economic life'.¹⁵³

Following Marshall, Montemartini notices that rent can be regarded from different points of view. From a subjective point of view rent is the difference between total positive utility gained and total negative utility sustained in the production process. From an objective point of view rent is the effective difference between gross revenues and costs.

As far as the class-struggle is concerned, Montemartini defines 'specific rents' as 'the relative rents of each factor, compared to all the other factors'.¹⁵⁴ Each factor tries to raise its specific rent, causing a decrease in the specific rent of some other factor.

The productive service price of a factor is proportional to its marginal productivity, and thus an increase in the marginal productivity causes an increase in the price of the service. The aim of a producer is to increase his factor's marginal productivity without variation in the negative utility sustained in supplying the service, thereby increasing his subjective rent.

Thus

it is in the interest of each producer to modify the proportion of the different factors entering into the combination, and to continue with the alteration until he reaches the maximum of ophelimity.¹⁵⁵

Those factors that are able to modify the external conditions will gain higher returns in relation to the other factors, and in this manner, according to Montemartini, will 'exploit' the latter.

In this framework Montemartini brings into the picture another category of rent. 'Free rents' result 'from the external conditions and not from conditions involving producers, i.e. they result from the objective alteration of the objective value of the productive factors'.¹⁵⁶ Although the definition is not very clear, it is possible to say that according to Montemartini 'free rents' arise every time that a production factor succeeds in gaining a higher revenue without suffering a higher subjective cost. Moreover, not all services of the productive factors involve a cost. Thus free rents as shares in the social product spring up, especially when the supply of the service of a productive factor does not involve a cost.

The only factor that always involves a cost is labour. *Vice versa*, for example, abstinence from consumption is not always related to negative utility.¹⁵⁷

It is therefore not painful for the economy if consumption of a commodity that is ready for consumption is postponed to a future time, when higher satisfaction is expected from the future consumption, for the very reason that it is not painful for an economy to seek the most profitable application of a commodity that has alternative uses.¹⁵⁸

Furthermore, the existing capital has no cost. Only the new capital itself, when it comes from saving, given that saving has a subjective cost, truly has a cost. 'When capital is already constituted, it is all supplied in the market, at any price, because its owner can no longer change it into consumer goods.'¹⁵⁹

According to Montemartini the 'free rents' arise every time that a factor obtains a reward without involving a cost in its supply, or obtains a reward not proportional to its costs. The over-estimation of a factor can be due either to a limitation in its supply or to an increase in its demand. Both the limitation and the increase can be brought about by affecting the substitution relationships between factors. This means that all the producers will try to avert the eventuality of other factors substituting their own factors, and to ensure that their factors are capable of substituting a higher number of other factors.

Exploitation, according to Montemartini, consists in the appropriation of free rents, and increase in 'specific rents' at the expense of other factors. The owners of the exploiting factors are able to increase their quota of the social product, by decreasing that of other factors.

In this framework, each factor can, in different circumstances, be either exploiter or exploited. Thus labour itself can be the exploiter, as in the case of the medieval guilds that were able to obtain free rents, thereby setting a limit to the labour supply.

Thus, Marx's theory of surplus-value can be criticized as lacking in generality. However, Marx's theory does grasp the essential elements of the capitalistic economy, where capitalists gain free rents at the expense of labour. 'Marx was studying solely the capitalistic society, and his doctrine of exploitation is valid inasmuch as it is related to that organization.'¹⁶⁰ In another passage labour exploitation is defined as a mere fact.¹⁶¹

Montemartini, however, does not investigate the capitalistic economy, and thus does not explain how capital exploits labour, obtaining free rents. Moreover, free rents can hardly be compared to Marx's surplus value. According to Montemartini the value of the social product is not caused by labour alone, but by all the production factors. Thus exploitation, in this context, does not mean that the product of labour is appropriated by the capitalists. In other words, there is no particular social class that gains the surplus value produced by another class. In this perspective, exploitation is simply a synonym of 'distributive unfairness'.

Pareto, Barone and the neoclassical theory of socialism

As already stated, some Italian 'socialist' economists tried to use elements of neoclassical economics to analyse the historically determined relationship between social classes in a capitalist economy. On the other hand, Pareto and Barone formulated the problem of a socialist economy, using the analytical tools and theories of pure economics. They wanted to show how the problem of the allocation of scarce means that have alternative uses was a general problem which remains the same both in a competitive economy and in a planned one.

As is well known, Pareto and Barone demonstrated that, from a theoretical point of view, socialist economy is possible and rational, when 'the Minister of Production' follows the rules deduced from general equilibrium theory. They also made a decisive step towards that branch of welfare economics based on the denial of the possibility of making scientific interpersonal utility comparisons.

Pareto in his *Cours* (§ 721) maintained that the Minister of Production in this socialist state would have to determine the production coefficients with the aim of maximizing the welfare of his fellow countrymen. To do this, 'he will obtain exactly the same coefficients that a competitive

economy will determine'.¹⁶² He will have to fulfil the same conditions as a competitive economy, minimizing the costs of production and making them equal to the prices of goods and services.

When writing his *Cours*, Pareto continued to seek a single optimum, but he still refused to make inter-personal utility comparisons. Where a change in the allocation of the resources made some people better off and some worse off, according to Pareto it was necessary to separate the questions of production and distribution. The optimum was thus an allocation of resources such that 'the sum of goods obtained, if they were distributed in a suitable manner, would maximize each individual's utility'.¹⁶³ According to some scholars, Pareto's criterion was the compensation principle, subsequently developed by Barone and by Kaldor and Hicks. Society as a whole gains if the gainers from a change are able to compensate the losers and still remain better off.

As the conditions of maximization of welfare are the same in a competitive and in a socialist economy, the Minister of Production of a collectivist society cannot do anything other than determine, by means of his calculations and statistics, the same coefficients of production that are spontaneously determined in a competitive market. The working of Smith's invisible hand in the market was confirmed.

Pareto's argument had some interesting consequences. First, from a theoretical point of view, it was possible to organize rationally a collectivist economy. This system had to be analysed by means of the usual tools of economic science, and in particular the theory of general equilibrium. Economics was not a 'bourgeois' or 'capitalist' science, but rather a general science.

Pareto also stressed that the Minister of Production will not determine 'the same coefficients that are used in our societies, because, in most of our societies the coefficients are determined only in part by free competition and are often largely determined with the aim of favouring particular individuals to the detriment of others'.¹⁶⁴ From this point of view, given the restrictions to competition in capitalist economies, socialism could be an alternative that would increase well-being. This point was later stressed by such socialist economists as Enrico Leone and Arturo Labriola. As already seen, according to Leone the very existence of capitalists and workers is sufficient to limit competition, while Labriola argued that a developing capitalist economy increasingly departs from competition.¹⁶⁵

However, this kind of market socialism, although feasible from a theoretical point of view, was virtually unattainable in the real world. As von Hayek later emphasized, the mathematical solution to the equations necessary to planning would have required more than a lifetime.¹⁶⁶

Enrico Barone developed Pareto's analysis in his well-known essay *Il ministro della produzione nello stato collettivista* (1908).¹⁶⁷ On the one hand Barone reasoned in terms of 'Pareto optimality', a concept which

Pareto had presented in his 1906 *Manual*. The Minister of Production would have determined different values for his economic variables, because the distribution of income is different in a socialist society and there exists an infinite number of *optima*. On the other hand, he examined in detail the rules that the Minister of Production would have to follow with the aim of maximizing the well-being of citizens.

According to Barone, socialism cannot be confuted by criticizing Marx's theory: 'without falling into...errors and contradictions, one can very well imagine an economic system which would realize the spirit of the Marxist system',¹⁶⁸ i.e. a collectivist economic system. The problem of socialism can be faced by means of a truly scientific economic theory.¹⁶⁹

A competitive economy tends to reach the *optimum*, because, as Pareto showed, prices are equal to production costs and production costs are minimized. However, Barone was no longer seeking a single *optimum*. The principle of compensation, that was implicit in Pareto's *Cours*, is now clearly developed in terms of Pareto's optimality. An optimum is a situation in which any change makes some people worse off and some better off and the gainers are not able to compensate the losers and still remain better off.

As far as socialism is concerned, Barone showed why the Minister of Production, during planning, must use all categories, such as the prices of goods and services (including the services of capital) and the rate of interest, considered typical of the capitalist economy by the socialists.

As Barone noted, 'all the economic categories of the old regime must reappear, though maybe with other names', even in the socialist regime.¹⁷⁰ In other words, the Minister of Production cannot do without 'ratios of equivalence' (relative prices) between goods and services, if he wants to maximize the welfare of citizens.

In a socialist economy, the production capitals are nationalized. However, their services would continue to have a price, because Barone demonstrated that the best choice for the Minister is to distribute directly the value of those services which become an income of the state, among the citizens, according to a given principle of equity. It is not economically viable to make the price of their services equal to zero¹⁷¹ and so to distribute their value indirectly among the citizens. In this last case, in fact, the Minister would introduce into his equation system a number of new equations equal to the number of services of capital. But his system thus becomes over-determined.¹⁷² In other words positive prices for the services of capital are necessary to determine the production costs of commodities and to decide how to allocate the factors of production.

There is a perfect analogy between the equation system of the general equilibrium theory, which describes the running of a competitive economy, and the equation system that is used by the Minister of Production. However, the two different systems do not reach the same values for all the

economic variables, even when the initial resources are the same. In fact the collectivist economy is characterized by the redistribution among the citizens of the value of public capital services.

Thus the Pareto optimum reached by the socialist economy is different from the Pareto optimum reached by a competitive economy, because of the different income distribution. Moreover, the socialist economy would reach different Pareto optima, in conformity with the rules adopted in distributing income. Pareto optima are not comparable and income would be redistributed according to a given ethical, rather than economic, principle.

As far as the production of new capitals is concerned, the Minister of Production decides whether it is better to collect the necessary resources directly or indirectly. In the first case, he will not distribute all the revenues of the public capitals among his citizens, but only that part which exceeds the necessity of capital accumulation. In the second case he will resort to his citizens' savings, and will pay interest to compensate for deferred consumption.

According to Barone the best solution is, again, the same as that of a market economy. In fact, in the opposite case, it is always possible that, 'each individual, even without the promise of a premium for deferred consumption, and simply for the provision of future needs, might for his own advantage decide not to consume all his *earnings*, but to save a certain amount'.¹⁷³ But now this individual saving, although it reduces the current consumption, cannot be used by the Minister of Production for the accumulation of capital. Thus the system does not reach an optimum, because the consumption or the accumulation of capital could be increased. In the end Barone stresses that the very difficulty of the Minister of Production consists in determining the variable coefficients of production:

The determination of the coefficients which are economically most advantageous can only be done in an *experimental* way: and not on a *small scale*, as could be done in a laboratory: but with experiments on a very *large scale*, because often the advantage of the variation has its origin precisely in a new and greater dimension of the undertaking.¹⁷⁴

For this reason the Minister of Production cannot know *a priori* the equations that lead to the maximum well-being, but must experiment in the real economy with different combinations of the factors of production.

These experiments, as in the competitive economy, can prove to be unsuccessful, leading to the destruction of resources, and to an economic crisis. According to Barone it is evident 'how fantastic those doctrines are which imagine that production in the collectivist regime would be ordered in a manner substantially different from that of "anarchist" production'.¹⁷⁵

The working of the market is completely reconstructed in the equations of the Minister of Production. The universality of the economic laws is reaffirmed, while the 'critique of political economy' (i.e. of capitalistic society) is redirected into the theory of socialist economy as a joint product 'of each attempt meant to develop a general logic of the economic behaviour'.¹⁷⁶

Moreover, it seems that the problem stressed by subsequent critics of general equilibrium theory are not so conclusive when one considers Barone's theory of socialist economy. As is well known, the condition that the rate of return on each capital must be equal to the general rate of interest causes the solution of the equations to be meaningless generally speaking, because some variables may assume negative values. On the other hand, if one replaces Walras's equations with disequations, the solution is meaningful, but the values of prices will continue to vary for endogenous reasons in each period of production, because the relative scarcity of capital goods changes with the production of new capitals.¹⁷⁷ The difficulty of Walrasian analysis lies in the attempt to examine completely in one period alone an equilibrium that changes in a sequence of periods.¹⁷⁸ In other words, as Joan Robinson put it, 'it seems impossible to reconcile the contradiction between the assumption of correct foresight for each individual over an indefinite future and the daily higgling of a Walrasian market'.¹⁷⁹

Barone introduces the condition of equality between the rate of return on capital when studying the conditions of welfare maximization. Let E be the aggregate savings, Λ_h and Λ_k the equivalences (prices) of the services of two capitals H and K . The number of produced capitals is n . Λ_h and Λ_k are the costs of production (equal to the prices) of the two capitals. R_h and R_k are the quantities produced. The first condition is the equivalence between total saving and the value of the capitals produced.

$$E = \Lambda_h R_h + \Lambda_k R_k + \dots \quad (3)$$

According to Barone, the condition for welfare maximization as regards the quantity of single new capitals produced, is given by the maximization of the sum

$$\Lambda_h R_h + \Lambda_k R_k + \dots \quad (4)$$

Now let us suppose that the quantity of H increases, thereby decreasing the quantity of K , according to condition (3) we have $\Lambda_h \Delta R_h = \Lambda_k \Delta R_k$. When welfare is increased we have $\lambda_h \Delta R_h > \lambda_k \Delta R_k$ and thus $\lambda_h / \Lambda_h > \lambda_k / \Lambda_k$.

Therefore, when the rate of return on capital H is higher than the rate of return on capital K , it is preferable to 'transform' capital K into capital H . Only when the rates of return on the two capitals are equal is welfare

maximized. The Minister of Production is only interested in maximizing welfare, not in describing the path followed by a competitive economy towards equilibrium. If the rate of return on capital H is always higher than the rate of return on capital K he will decide to produce only capital H or, in other words, only those capitals that give the *maximum* rate of return will be produced. According to some scholars, this is also the solution followed by the competitive market.¹⁸⁰ However, the difference is that in the socialist economy we have a *normative* rule that allows the Minister to decide which capitals to produce, while in the competitive market we have a *descriptive* law of equilibrium.¹⁸¹ But in this last case there are problems resulting from the nature and meaning of the equilibrium. These problems do not arise in the theory of socialism. In fact although it springs from the theory of equilibrium, it is a theory of welfare maximization, and does not have to explain how a market economy reaches equilibrium values that must persist over time. Walras's theory seems to meet with more problems as a description of the working of the capitalistic economy, than as a theory of socialism.¹⁸²

CONCLUDING REMARKS

After 1910, interest in the economic theory of socialism as expressed in the language of general economic equilibrium rapidly waned. It is not easy to explain the reason behind this sudden decline in interest, unless it is seen as part of a shift in 'vision' in a conservative direction, by Italian economists. The struggle against the Socialist Party, a party which obtained considerable success in the general elections of 1913 and, above all, in the 1919 elections, must certainly have contributed to this change in attitude. Maffeo Pantaleoni, the Italian economist enjoying the greatest prestige at the time, had earlier shown some sympathy for the Socialist Party at the end of the nineteenth century¹⁸³ (although not for Marx's theory). Now he pronounced out-and-out condemnation of all the 'elements of socialism' in capitalist economy, such as cooperation or the action of the trades unions.¹⁸⁴ It was his belief that the modern economy was evolving towards increasing rigidity of structure, as a result of growth in 'overhead expenditure' and in the size of firms. The market was moving further and further away from pure competition. But it was to socialism, rather than capitalism, that he attributed the major responsibility for this process. In particular, one of his real obsessions was the notion that the new economic structure was unable to select the ruling elites. Precisely because fascism seemed to him to be expressing new elites, he became its enthusiastic supporter.

In the inter-war years, the political climate was hardly suitable for objective or scientific treatment of the question as to how the collectivist economy functions. Aside from the fascist economists, engaged in corporatism (both an experiment in mixed economy, and an attempt to

‘reform’ economic ideas), economists belonging to the Paretian school were too conservative to develop a programme of this kind, despite possessing the tools of analysis that would enable them to continue the investigations launched by Barone. Luigi Amoroso, the greatest follower of Pareto in the inter-war years, wrote in praise of the political values of the Middle Ages, accusing the Protestant reformation of all the evils of modern society.¹⁸⁵ He could thus scarcely be expected to produce a reflection on the rules of functioning of a socialist economy.

In 1940 Attilio Cabiati wrote a review article of some recent international contributions to the pure theory of socialism (Hall, Dickinson, Marschak, Heimann, Taylor, Lange, Dobb, etc.).¹⁸⁶ But Einaudi rhetorically raised the question of whether such reflections might not be construed as neglecting the ‘realism of hypotheses’.¹⁸⁷ It was a waste of time, he argued, to centre discussion on a socialist economy that was so abstract and so distant from the historical reality. For the latter was the Russia of Stalin: the best confutation of any claim to be able to reconcile socialism and the market, or socialism and marginalism. Einaudi thus elected to follow the road mapped out by Wilhelm Röpke, embodying the anti-totalitarian ‘third way’. In so doing, he took up a position totally outside the framework of economic analysis, developing his thought within the sphere of philosophical and moral reflection.

NOTES

- * This research is the result of joint work. The introduction, the concluding remarks and the first six sections were written by Riccardo Faucci; the remaining paragraphs were written by Stefano Perri. We would like to express our gratitude to Ian Steedman and John King for helpful comments on a previous version. Thanks are also due to Riccardo Realfonzo for checking some quotations from Croce (1914).
- 1 See the literature collected in Bertolini (1891–96). The review article by Rabbeno (1891, pp. 439–73) devotes only a few pages to Pantaleoni’s *Principii di economia pura* (1889), and the remainder of the text to a commentary on empirical, sociological or historical works. It is worth noting that the overwhelming majority of economic articles published in the ‘Economic Journal’ between 1891 and 1915 concerned applied economics, such as labour problems, industrial relations and public finance. See Jha (1973, pp. 7–14). This seems to bring the ‘Economic Journal’ closer to the ‘Riforma sociale’, the journal founded by F. S. Nitti and subsequently edited by L. Einaudi, devoted mainly to current economic affairs, than to the ‘Giornale degli economisti’, which in the same period published articles by Pareto, Pantaleoni, Barone, Edgeworth and Slutsky.
- 2 Ferrara (1875, p. 319).
- 3 Boccardo’s complete lack of understanding of the importance of these authors emerges from his preface, in which he made bizarre statements, such as: ‘Rigorously speaking, there is no shortage of material instruments of measurement in economics. In fact, money is a true instrument of measure of values.... To the same category of economic instruments belong the meters,

- weighing machines and all mechanical and automatic gauges and, generally, all the tools and industrial machines which...are true economic instruments': Boccardo (1878, p. xiii).
- 4 Boccardo (1882).
 - 5 His main sources were the Greek and Latin comedies. He was also a fine translator of Plautus.
 - 6 See his introduction to the Italian translation of Henry George's *Progress and Poverty*: Cognetti de Martiis (1891).
 - 7 Loria (1927, pp. 20–1).
 - 8 Loria (1880, p. 2).
 - 9 E.g. an egalitarian distribution of the produce in barbarian Germany, a fixed lease to proprietors in the Middle Ages, a land tax upon proprietors in the Modern era, and so on. Even in a capitalist system, if there are no large landed properties, the manufacturing sector can 'elide' (i.e. absorb) the rent of land by exchanging manufactured goods, at monopoly prices, with agricultural goods, at competitive prices. See Loria (1880, pp. 358, 451 ff.).
 - 10 See Loria (1880, p. 510).
 - 11 See Rabbeno (1892, p. 267).
 - 12 Ibid., p. 283.
 - 13 See Loria (1880, p. 466).
 - 14 Ibid, p. 474.
 - 15 See Loria (1891), in Loria (1897, pp. 219–20 ff.).
 - 16 The abundance of 'factors'—demographic, institutional, technological—in Loria's theory of economic evolution lends a characteristic flavour of vagueness to his model, as noted by Croce (1896), repr. in Croce (1973, pp. 40, 42 ff.). It is worth noting, however, that the English translation of Croce's book did not contain this article. See Croce (1914). This may be explained by the high esteem which Loria enjoyed abroad.
 - 17 The story is told in Loria (1889). See Rabbeno (1892, pp. 269–93). Ugo Rabbeno (1863–97) expanded Loria's views in his posthumous book, Rabbeno (1898), concerning British colonization in Australia and New Zealand between 1788 and 1896.
 - 18 See Loria (1886); Loria (1893) (enlarged French version); Loria (1902) (Italian edition of the latter).
 - 19 Loria solemnly writes: 'In all times the constitution of the State is that which is most suitable to guarantee the maintenance of the economic system which generated it.... Adam Smith is the only great economist, who studied the State taking into account the particular class interests which animate its action.' Curiously enough, Loria quotes several economists and political scientists who shared Smith's ideas on the state, but not Marx: see Loria (1882), in Loria (1897a, pp. 120–34).
 - 20 Loria had considerable success in the USA. The Columbia University journal, 'Political Science Quarterly', edited by E.R.A.Seligman, published the following reviews: E.B.Andrews, *Analisi della proprietà capitalista*, V, 1890, pp. 717–19 ('the book reminds one in many ways of Marx's *Kapital*...he... betrays the same keen analysis, a more consistent logic and an even more astonishing mastery of economic literature, whether standard or recondite, old or recent', p. 717); F.W.Taussig, *Problemi sociali contemporanei*, Vol. X, 1895, pp. 537–8 (Taussig objects to the 'free land' theory, but he pays tribute to the author's scholarship); E.B.Andrews, *La costituzione economica odierna*, Vol. XIV, 1899 ('the greater value of Loria's contribution to economic science is the demonstration of the vital part played in human history by men's relation to

the land', p. 719); T.N.Carver, *The Economic Foundation of Society*, Vol. XV, 1900, pp. 143–7 ('the strength of the work is found, not in the author's position, but in the array of evidence which he has gathered to its support and the skill with which he has presented it...', p. 143). Apart from Seligman, who appreciated Loria but criticized his ideas, Loria influenced at least two important American scholars, the economic historian Richard Ely and the 'frontier' historian Frederick Turner. See Benson (1953, pp. 182–99); and more recently, Ottaviano (1981, pp. 281–321).

In Russia the spread of Loria's thought was achieved thanks to the sociologist and anthropologist Maxsim Kowalewsky, who knew Italian, as we learn from his correspondence. Two books by Loria ((1901) and (1903)) were translated into Russian. Other translations of Loria's books and articles in French, German, Spanish and Hungarian, are listed in Einaudi (1932).

The Loria Papers in Turin reveal an intense correspondence with foreign scholars. For instance, we find among his correspondents in France and Belgium René Worms, Charles Gide, Emile de Laveleye; in Germany and Austria, Wilhelm Roscher, Werner Sombart, Eugen Böhm-Bawerk and Carl Menger; and in Britain and America, James Bonar, R.H.Inglis Palgrave (to whose *Dictionary* he contributed an entry on *The Italian School of Economics*), Herbert Spencer and Frank W.Taussig.

- 21 He became the Italian correspondent to the 'Economic Journal'. Here James Bonar reviewed *Les bases économiques...* (1894, pp. 76–82), and *La costituzione economica odierna* (1899, pp. 243–6). However, one notes a shift in tone, from a sympathetic one in the former review ('he has the merit of fairness and good temper in controversy, and he really tries to show us the case against himself as well as furnish his defences', p. 81), to a more critical attitude in the latter ('he holds the risk of positing as a historical fact what was only assumed as an abstract result of logical analysis and the first step in the subsequent logical synthesis', p. 246).
- 22 'His system stemmed from numerous diverse sources, from all of which he borrowed but with all of which he disagreed': Benson, p. 183. For instance, Loria criticized Henry George, accusing him of being a spokesman for industrial interests (see Loria 1897b, in Loria 1904, p. 161). He also attacked social Darwinism, legal socialism, the German historical school, and other heterodox currents of thought, often with a remarkable harshness of tone.
- 23 'In front of his opponents, Loria is devoid of that pride, which is a common feature of strong-minded men. He bows to everybody, he acknowledges everybody's statements, he gives weight to everybody's opinion': Croce (1896, p. 49).
- 24 See Loria (1880, p. 451). Subsequently, he came into contact with the French economist who was interested in introducing his works in Italy. Walras wrote to Loria in order to recommend to him his *Théorie mathématique de la richesse sociale* (letter n. 571, 4 July 1883, in Jaffé (1965), Vol. I, pp. 775–6). Loria replied: 'Je me suis rangé complètement parmi les économistes de l'école mathématique, dont vous, Monsieur, êtes le chef et le théoréticien. J'ai parlé beaucoup de vous avec feu M.Jevons, mon eminent maître et ami toujours regretté, l'année dernière, à Londres...' (letter n. 584, 12 August 1883, Vol. I, p. 784). In fact, Loria reviewed Walras's work somewhat critically (in 'Rivista critica delle scienze giuridiche e sociali', October 1883, pp. 311–13). Walras wrote again: 'Vous vous dites l'élève de Jevons et vous vous référez, pour vos conclusions, à des théories (notamment à celle du coût de production) que ce grand esprit pensait d'avoir ruinées du fond en comble, comme effectivement,

- à mon sens, il l'avait fait' (letter n. 585, 27 September 1883, p. 785). It was a substantial remark, which led to a definitive break in the correspondence. Many years later, writing to his friend A. Graziani in 1929, Loria accused Walras of having derived the so-called Walras' Law from the classical economists: see Allocati, ed. (1990, p. 126).
- 25 See the criticism, *inter alia*, by E. Nazzari, in Loria Papers, Turin. His treatment of the labour market may be considered an exception. See pp. 132–4.
- 26 Allocati, p. 248.
- 27 Pareto referred to Loria with respect in his *Cours*, when he stressed that Loria and Marx had the merit of attaching importance to the class struggle: Pareto (1896, Vol. II, p. 429). Privately, however, he derided him. When Croce attacked him in 1896, Pareto mentioned this article favourably to his friend Carlo Placci. See Pareto (1974, Vol. I, p. 318). In 1905 he wrote to his pupil Guido Sensini: 'I am glad that Loria criticizes my *Manual*. If he had praised it, I would be certain to have written nonsense': Pareto (1974, p. 558; see also pp. 581–2 and *passim*).
- 28 There is a negative hint at Pareto in Loria's posthumously edited private diary. 'Pareto, the mathematical marquis, who reduced political economy to an algebra of commonplace.... Instead of deducing the consumer's choice from utility, he deduces utility from choice, that is, he bases reasoning upon the brute fact of choice, which he declines to explain, and he reduces utility to a secondary derivation from the basic fact of choice. But the fatal flaw of the argument is that it is constructed upon the unknown': Loria (1947, pp. 62–3).
- 29 In spite of all his criticisms of Marx's theories, he respected Marx as a historian of economic thought. Reviewing the *Theories of Surplus Value* edited by Kautsky, he concluded: 'All that Marx says about "vulgar economics", which describes the surface of phenomena without going into their depth, can be extended also *totidem verbis* to utilitarian, psychological, hedonist, pseudo-mathematical economics, and to its sterile lucubrations on productive services of labour, of capital, of land...': Loria (1912), Italian transl., in Loria (1915, Vol. II, p. 93).
- 30 See Loria (1890), reprinted in Loria (1904, p. 174). In a subsequent note, however, Loria admits that the determination of interest in Böhm-Bawerk's theory may be accepted, though it cannot be considered an appropriate reply to the question: 'what is the cause of profit?' See Loria (1891–92, pp. 108–11).
- 31 Loria (1920, p. 9).
- 32 'What Marshall says in a clear and immediately intelligible form, his pupils [E. Chamberlin and J. Robinson] confound by using impenetrable formulae, concave and convex curves, elasticities, etc.... The time of Ricardo's, Stuart Mill's, Cairnes's crystalline prose is past for ever!' (letter of 25 October 1934, in Allocati (1990, p. 174)). 'Marshall himself, undoubtedly the greatest contemporary economist, if put beside Stuart Mill, appears very small!' (undated letter of 1940, *ibid.*, p. 282).
- 33 See Allocati, pp. 257, 305, 309 ff.
- 34 His university fellows and friends included Filippo Turati, who was to become the leader of the Italian Socialist Party; Enrico Ferri, a lawyer who was to lead the left wing ('integralista') of the party; and Leonida Bissolati, a future leader of the right wing ('riformista').
- 35 Letter of 23 November 1879, in Marx-Engels (1964, p. 288). The letter's tone was very flattering ('ich verehere in Sie den grössten Denker der heutigen Menschheit'), but *Rendita fondiaria* contained some severe criticisms, charging Marx with undervaluing the role of nature in the economic process, according to his Hegelian way of thinking. See Loria (1880, pp. 685–6).

- 36 Letter of 14 September 1880, in Marx-Engels (1964, p. 291).
- 37 See Loria (1902, pp. 264–5). Evidently Engels informed Marx of Loria's criticisms; Marx answered giving a rather sarcastic, but not entirely negative judgement on Loria and recommending an 'attitude of ironic detachment' towards him. See Marx-Engels (1972, pp. 374–5).
- 38 *Sic* for chapter IX.
- 39 A.Loria (1883), reprinted in Loria (1902, pp. 47–8).
- 40 See the text in Marx-Engels (1964, pp. 296–7). The original (written by Engels in good Italian) is kept in the Loria Papers, Turin.
- 41 Marx-Engels (1964, pp. xvi–xvii). The same considerations are put forward in Loria (1884, pp. 137–9). Here and elsewhere, however, Loria neglects Marx's distinction between absolute and relative surplus value.
- 42 See Loria (1889, Vol. I, pp. 156–7).
- 43 Up to 1894, Loria feigned scepticism about its very existence. In 1888 he wrote to Engels in his characteristically unctuous manner: 'Eminent Monsieur, si vous me permettez de frapper à la porte de votre charmante politesse, dont je retiens des si agréables souvenirs depuis mon séjour à Londres, je viens vous prier de—me dire à quelle époque paraîtra le troisième volume du *Capital*. J'attends avec la plus vive impatience ce livre, qui doit sauver le système du grand penseur que je vénère et anéantir sans ménagements mes objections...'. Marx-Engels (1964, pp. 331–2). Engels told the story of Loria's attitude toward Marxian theory in his *Preface* to the third book of *Capital*: Marx (1894, pp. 17–19).
- 44 Loria (1894, repr. in Loria (1902, p. 108). The same comments are developed in Loria (1924, II edn., pp. 52–3). This led Engels to a definitive attack on Loria in his *Supplementary Considerations* to the third volume of *Capital*: Marx (1894, pp. 25–7; English transl., pp. 891–2).
- 45 Loria (1894), repr. in Loria (1902, p. 156).
- 46 Marx (1894, English trans., p. 900).
- 47 See for instance the following statement: '[Marx] argues that human society is governed by a law of necessary evolution.... The driving force of this evolution is the technical instrument, whose endless transformation determines social metamorphoses.... But this impressive historical view, which has introduced for the first time the idea of evolution in economics, does not necessarily lead to the Socialist conclusion which Marx wishes to attain': Loria (1895, p. 73). This small book was translated into French, Spanish and English.
- 48 Croce (1896) in Croce (1973, p. 39).
- 49 Einaudi (1930, pp. 99–103).
- 50 See Gramsci (1975, Vol. II, p. 864).
- 51 See Croce (1938), repr. in Croce (1973, pp. 253–94). At the end of this essay, Croce complained that 'some English professors' had recently shown interest in Marxism and noted that this was probably due to the fact that 'political and economic science in England had never considered Marxism before, with the same serious attention which we devoted to it and which vaccinated us against the reproduction of that infection' (p. 294). He alluded to Harold Laski's *The Rise of European Liberalism*, which he reviewed severely in 'La critica', 1936, XXXIV, pp. 458–60.
- 52 They are now available in a new edition: Labriola (1973).
- 53 Consequently, he did not appreciate the movement of ideas derived from Marxian revisionism, which he denounced—shockingly foreshadowing the language of the Third International—as opportunism. For instance, in a letter to Filippo Turati of 26 June 1899 he ironically praised 'the so-called crisis of

- Marxism, which sets aside from socialism all those who confounded their own personal illusions of an easy road to socialism with the catastrophic theory of Marx': Labriola (1906, p. 398).
- 54 On Spinoza, see Labriola (1973, pp. 236–7); on Vico, see p. 46; on Herbart, see p. 242.
- 55 According to him, 'the issue is not to extend the so-called economic factor, abstractly isolated, to all the rest, as the critics rave; but is above all to conceive historically the economy...*Capital* was not the first example of critical communism, but the last book on bourgeois economics': Labriola (1895), in Labriola (1973, p. 52).
- 56 Croce (1938), in Croce (1973, p. 254).
- 57 Croce (1897), in Croce (1973, p. 67). See also Croce (1914, p. 68).
- 58 Croce (1914, p. 75).
- 59 Croce (1914, p. 76). Croce quotes two passages from Pantaleoni and Pareto in which they acknowledge that pure economics is unable to explain the source of profits.
- 60 According to Labriola, it was not possible to conceive of a 'pure economics, which alone enlightens and provides a general interpretation of all these instances...[it would be the same as conceiving of] the essence of an animal, separate from all visible and ostensible animals'. He recalls that, according to Engels, there is no contrast between *historical* economics ('the opposite of what is natural in the sense of what is fixed and immutable') and *theoretical* economics ('in opposition to roughly descriptive and empirical knowledge'). See Labriola (1898), in Labriola (1973, especially pp. 293–6).
- 61 In Labriola's work we can find little economic reasoning, partly drawn from Engels's *Antidühring*, which he described as 'the book, which more than any other should be given international circulation': Labriola (1897), in Labriola (1973, p. 211). For instance he stated that: 'Only in a communist society can work be rationally measured as well as not being exploitable. Only in a communist society can the hedonistic calculus, unhindered by the private exploitation of social forces, be accurately measured' (p. 252). Besides, he dismisses pure economics, e.g. when he comments ironically on the lender and borrower, who, according to Pantaleoni's pure economics, behave as if they had 'Gossen's diagrams printed on their brain' (p. 298). Moreover, he never refers to Marshall, barely mentions Walras and Pareto, and talks rather disparagingly about Barone who, 'it is said', contributed to the theory of distribution (see p. 293).
- 62 Croce (1899b), in Croce (1973, pp. 139–50).
- 63 For a review on the debate, particularly in the light of modern capital theory, see Hodgson (1974) (he does not quote Croce, but he follows Blaug's interpretation, which coincides with that of Croce).
- 64 Leone also asks what would make a capitalist introduce technical progress, if this made the profit rate fall, but he explains this by the search for short-term extra profits. For Leone, this would confirm the importance of the subjective element in Marxist analysis as well. See Leone (1909, p. 118).
- 65 It is a very short text indeed. It was published by Gallegati (1983, pp. 147–64).
- 66 See chapter 6.
- 67 Graziadei (1899b, p. 956). The article is a reply to the critics of Graziadei (1899a). For instance, Croce had objected to Graziadei that value is the key concept in economics, where it occupies the same position as the concept of obligation in morals. See Croce (1899a), in Croce (1973, p. 135). This position, however, was not shared by Pareto, who discussed the foundations of the 'economic act' with Croce in the 'Giornale degli economisti'. See Faucci (1981, pp. 95–101).

- 68 Graziadei (1899b, p. 962).
- 69 Ibid., p. 963.
- 70 'There are two ways of fighting against Marxian theories. One is to eliminate their erroneous sides, in order to consolidate their true sides. Another is to use the erroneous sides in order to conceal the right ones. My opinion is that Marginalism has been used to contrast Marxism in this second way': Graziadei (1943), repr. in Graziadei (1969, p. 150).
- 71 See Graziadei (1900, p. 868).
- 72 The commodity studied by Graziadei is the Chilean nitrate. See Graziadei (1909) and (1913). 'The Marshallian theory of equilibrium between demand and supply did not contrast with the aggregate analysis, carried on by Graziadei, concerning the determination of the capitalist income and allowed him to determine the relative prices as function of the (physical) quantities': Gallegati (1982), in Faucci, ed. (1982, Vol. II, p. 227).
- 73 An account of this correspondence is in Favilli (1980, pp. 125–7). In his autobiography, Graziadei writes: 'Marx, Pareto (especially the Pareto of the *Manual*) and the Marshall of the *Principles* have been, each of them in his particular field, my favourite authors': Graziadei (1950), quoted by Favilli, p. 128.
- 74 With one important exception: Einaudi, who was a close friend of Graziadei and sympathetically reviewed *La produzione capitalistica* in 'Riforma sociale' and in 'Revue socialiste'. See Faucci (1986, pp. 15–18).
- 75 See Spriano (1969, p. 185). He was readmitted in 1945.
- 76 Garegnani (1981, p. 33).
- 77 On Nazzari see Loria (1905) and Graziani (1905).
- 78 It is worth noting that, although Loria's criticism of Marx's theory of value is widely known, Loria's contribution to the theory of prices has not yet received the attention it deserves.
- 79 Loria (1889, p. 75).
- 80 Loria (1889, p. 79). The 'complex' quantity of labour is equal to commanded labour. However Loria does not explicitly refer to commanded labour.
- 81 It is worth noting that Bortkiewicz himself divides his prices by w and states that wages are not immediate determinants of the exchange relationships between commodities. The wage rate affects these relationships only indirectly, because its level determines the level of the rate of profit. See Bortkiewicz (1906–07, p. 65).
- 82 Loria (1889, p. 79). For this reason Loria's theory of 'complex labour' was thought by some to lead to a vicious circle. See Graziani (1891, p. 48) and Alessio (1890, pp. 25–6) and Loria's reply (1901, p. 141).
- 83 It is worth noting that the equation can be written in the following way: $L - (L_{a1} + L_{b1}) = r[L_{a1} + L_{a2} (1 + r) + L_{b1} + L_{b2} (1 + r)]$. This equation is very similar to Garegnani's surplus equation. The only significant difference is that Garegnani supposes that technical-capital is a circulating one. See Garegnani (1981, pp. 39–48).
- 84 Loria (1901, p. 138). Dmitriev knew Loria (1889), and particularly appreciated these passages. See Dmitriev (1904, p. 73, n 2).
- 85 See Loria (1901, p. 138).
- 86 In this framework Loria criticizes the 'optimistic' theories of profit like those of Senior (abstinence), Stuart Mill and Marshall (waiting), Böhm-Bawerk (temporal preference) and Clark (marginal productivity). All these theories, according to Loria, try to refer the origin of profit to the productivity of capital. See Loria (1901, pp. 1–24).
- 87 Loria (1889, p. 92).

- 88 A socialist (and a supporter of Zionism), Conigliani (1868–1901) was both an advocate in favour of reform in taxation and a theoretical economist, influenced by the Austrian school. See *inter alia* the recent book by Bellanca (1993), pp. 179–213.
- 89 Actually, as Conigliani stresses, Cherbuliez’s problem was different from Marx’s. Following Ricardo, he wanted to determine the rate of profit after a change in the wage rate. However, Cherbuliez’s and Marx’s analyses are very similar. The correspondence had been emphasized by Loria (1895, p. 114). Marx acknowledged that Cherbuliez ‘speaks about the equalization of the general rate of profit in a very suitable way’. Marx (1910, Italian trans., p. 400).
- 90 It is worth noting that Conigliani discriminates between the money in which the wages are paid, and the wage goods. See Conigliani (1900, p. 144).
- 91 Marx would have said that the wage rate is given in terms of some ‘general equivalent’.
- 92 Obviously Conigliani does not use this expression.
- 93 Conigliani (1900, p. 124).
- 94 Conigliani (1900, p. 125).
- 95 Substantially, Conigliani uses the dated quantities of labour, although he analyses only the case in which the technical capital is obtained only by direct labour. See Conigliani (1900, pp. 126–8).
- 96 Conigliani (1899, p. 50).
- 97 Conigliani (1899, pp. 52–3).
- 98 Conigliani (1899, p. 82).
- 99 In Loria (1889) he had maintained a subsistence theory of wages, based on the lack of free land and on the consequent inability of the workers to earn an income in a self-sufficient way.
- 100 See Loria (1899, p. 40).
- 101 As w rises, nr decreases while Δw and $\Delta \pi$ increase. The point at which $nr < \Delta \pi$ for every Δw the labourers’ request is soon reached.
- 102 See Loria (1899, p. 41).
- 103 See Loria (1899, pp. 44–5).
- 104 See Loria (1899, p. 47). So Loria translates into his own analysis Marx’s theory of the ‘industrial reserve army’.
- 105 In a later work Loria discusses the case in which an increase in the wage rate is coupled with an increase in the productivity of labour, due to the improvement of the physical and psychic condition of the labourers. See Loria (1909, pp. 245–6).
- 106 It follows that $w = \frac{1}{2}p_m$. This result originates from Loria’s simple assumptions about the performance of the variables.
- 107 See, for example, Pigou (1920), Robinson (1933). Also Backhouse (1985, p. 140).
- 108 See Loria (1900, p. 15).
- 109 His name is sometimes written without the hyphen. He taught economics and public finance in Pavia, Modena and Palermo. He was an eclectic scholar, who alternated historical studies, such as his erudite *Storia delle dottrine finanziarie in Italia* (1881), with more theoretical studies, such as his *Scienza delle finanze* (1888), in which he pioneered Emil Sax in Italy.
- 110 See Ricca-Salerno (1900, p. 10).
- 111 Ricca-Salerno (1900, p. 9).
- 112 Ricca-Salerno (1900, p. 37). Marx’s influence is very clear in this passage. Ricca-Salerno acknowledges that Marx’s distinction between constant and

- variable capital is similar to his distinction between absolute and relative capital.
- 113 Ricca-Salerno (1900, p. 37).
- 114 According to Ricca-Salerno, it is not the difference in individual time preferences that causes the birth of social classes (as, for example, in Samuelson, 1991, pp. 163–4), but the unequal ownership of the means of production that causes the difference in the time preferences. However, it is worth noting that Ricca-Salerno uses in his analysis of capitalism some of the analytical tools (the difference in time preferences, the theory of comparative advantage) used by Samuelson in his analysis of simple commodity production.
- 115 Böhm-Bawerk too states that in the labour market there is a ‘margin by which the price of labour is exceeded by the amount of the product of that labour and by which room is obtained for growth of the product to dimensions that provide a surplus value’. Böhm-Bawerk (1889, p. 323).
- 116 Ricca-Salerno quotes Wicksell, who stressed the similarity between Böhm-Bawerk’s and von Thünen’s analysis of capital. See Wicksell (1893, p. 111).
- 117 As Schumpeter noted ‘imagine Böhm-Bawerk in Marx’s skin, what could have been easier for him than to pour out the vials of his wrath on the infernal practice of robbing labor by means of deducting from its product a time discount’: Schumpeter (1949, p. 355).
- 118 See Ricca-Salerno (1894, p. 89) and Loria (1895).
- 119 Ricca-Salerno (1900, p. 33).
- 120 Ricca-Salerno (1900, p. 27).
- 121 See Ricca-Salerno (1900, p. 99).
- 122 Friedrich Engels’s *Antidühring* (1878) was translated into Italian in 1901 (see Bravo, 1962, p. 112). It would be interesting to explore its impact on socialist economists. The first study on Engels which appeared in Italy was made by a philosopher, R. Mondolfo, *Il materialismo storico di F. Engels*, 1912 (see the review article by Loria in ‘Archiv für Sozialwissenschaft und Sozialpolitik’, 1913, XXXVI, pp. 916–19).
- 123 He was temporary professor of economics in Bologna. An anti-Fascist, he was shut up in a mental hospital and died in mysterious circumstances.
- 124 On Leone’s methodological position, see Gioia (1982).
- 125 Leone (1909, pp. 160–1).
- 126 ‘Individual A produces wealth 20 with effort 5, because this value relationship satisfies better his welfare. This does not rule out that individual B decides to produce wealth 20 with effort 10, without the hedonistic equality in their relationships being changed’. Leone (1909, p. 167).
- 127 See Leone (1909, p. 169).
- 128 Wicksteed (1970, p. 82).
- 129 See, for example, Pantaleoni (1898) and Pareto (1906).
- 130 See Wicksteed (1970, p. 68).
- 131 Leone (1909, p. 247).
- 132 F.Y. Edgeworth (1881, p. 7).
- 133 As Leone stated in another book, ‘ownership, property, power, strength and command’ are different extra-economic means which allow individuals to possess matter. The relationship between the owner and this matter (which cannot be properly considered as economic wealth) is no longer a relationship based merely on economic utility. Leone quoted Cournot, see Leone (1916, p. 8).

- 134 It is possible to draw some parallels between Leone and Roemer on the theory of exploitation. Roemer assumes 'a utility maximization program' for each agent 'who receives utility from goods consumed and disutility from labor performed' (Roemer, 1986, pp. 40–1) and maintains that 'if one had to locate one cause of exploitation' it would be 'the existence of private ownership of the means of production' (p. 44). Thus in an exchange economy without labour market and without private ownership of the means of production exploitation is absent. However, unlike Leone, Roemer defines the exploitation as the positive difference between 'the labor expended by [a] producer at equilibrium' and 'the amount of labor embodied in the goods he consumes' (p. 38).
- 135 See I.Fisher (1892, p. 40).
- 136 Leone quotes Loria, who emphasized the lack of 'the option on free land' as the cause of the birth of capitalist economy.
- 137 Leone (1909, p. 121).
- 138 Leone is very obscure in this passage. He identifies the situation in which the labourer stops working when the marginal disutility of his efforts is higher than the marginal utility of his revenue, and the situation in which he must stop working when the marginal utility of his income is higher than the marginal disutility of his efforts (see pp. 121–2).
- 139 For a wider discussion of Leone's theory of 'extra-marginality', see E.Santarelli (1982, pp. 84–8). Santarelli shows the analogies between Leone's analysis and Pigou's theory of monopsony in the labour market.
- 140 He was professor of economics in Naples. An anti-Fascist exile, he supported the conquest of Ethiopia, and went back to Italy in 1936.
- 141 This can be partly explained by the fact that Labriola not only divided his time between politics and economic research, but frequently changed his mind on the central issues in economics, according to his changes of position within the various wings of Italian socialism. He was first an orthodox Marxist, then a revolutionary syndicalist, and finally a reformist leader (he was Labour Minister in 1920–21).
- 142 Labriola (1899a, p. 106).
- 143 See Perri (1982, p. 237). It would be interesting to know whether Labriola was aware of Tugan-Baranowski's theory of crises as disproportions, presented for the first time in Russian in 1894 (the French translation appeared in only 1913, but Labriola may have been acquainted with this theory through a version in another language circulated in European socialist circles). Also in his *Manuale di economia politica* (1918), he insists on the lack of equilibrium between savings and investment as a feature of capitalism. See Perri (1982, pp. 241–2).
- 144 Perri (1982, p. 239).
- 145 It would be interesting to explore Labriola's complex attitude towards Pareto, both praised and attacked in his works. See Perri (1982, pp. 244–5).
- 146 Labriola (1908b, pp. 1360–9). See also Labriola (1906).
- 147 Labriola (1899b).
- 148 Labriola (1912, p. 195).
- 149 Labriola (1912, p. 215).
- 150 Labriola (1912, p. 219).
- 151 An active socialist, he held the post of Head of the Labour Office in the Ministry of Labour. He is best known for his studies on municipalized enterprises. See Musgrave and Peacock, eds (1958) and da Empoli (1984).
- 152 Montemartini clearly states that the 'physical marginal productivity of a given

- quantity of a factor is a function not only of the quantity of this factor, but also of the quantity of all the other factors that enter into the production combination': Montemartini (1899, p. 141). Thus, he criticizes the distribution theories considering the 'absolute' productivity of a single factor, such as Say's theory.
- 153 Montemartini (1899, p. 153).
- 154 Montemartini (1899, p. 145).
- 155 Montemartini (1899, p. 146).
- 156 Montemartini (1899, p. 148). Montemartini gives a very ample definition of productive factors, including 'all those instrumental-complementary goods or those external conditions that can bring forth goods, or rather, ophelimity, and, at the same time, a differential rent'.
- 157 In Montemartini (1896), prefaced by Menger, the author shows that saving is profitable every time that a given quantity of wealth can be used to satisfy higher marginal intensities of needs in future. In this framework, Senior's theory of abstinence is criticized, because marginal saving often involves no pain and thus interest is not the reward of a subjective cost.
- 158 Montemartini (1899, pp. 125–6).
- 159 Montemartini (1899, p. 150). Montemartini quotes Marshall's quasi-rents.
- 160 Montemartini (1899, pp. 166–7).
- 161 Montemartini (1899, p. 129).
- 162 Pareto (1896, Vol. II, p. 99).
- 163 Pareto (1896, p. 100).
- 164 Pareto (1896, pp. 101–2).
- 165 See Labriola (1908, p. 324) and (1910).
- 166 See von Hayek (1935, p. 212).
- 167 It is worth noting that in the English translation of Barone's essay *Il ministro* (minister) becomes 'The Ministry'.
- 168 Barone (1908, p. 245).
- 169 As Barone stressed, 'there is no need to have recourse to the concepts of *utility*, of the *final degree of utility* and the like; and neither is it necessary to have recourse to Pareto's concept of the *Indifference Curve*, although it represents a notable step in freeing the Mathematical School from all that seems metaphysical. The old and simple ideas of demand, supply and cost of production suffice...to construct into a system of equations the most important interrelations of economic quantities': Barone (1908, p. 246).
- 170 Barone (1908, p. 289).
- 171 According to Barone, Marx, with his theory of labour value, puts the relative prices of the services of capital equal to zero (Barone, 1908, p. 275). However it is worth noting that the labour theory of value is not extended by Marx as a normative theory valid for a socialist society, but as a theory which explains the exchange of commodities in market economies.
- 172 It is worth noting that according to some scholars, Walras's system of general equilibrium is already overdetermined by the condition that the rate of return of each capital must be equal to the rate of interest. See Garegnani (1960, p. 100).
- 173 Barone (1908, p. 279).
- 174 Barone (1908, p. 288).
- 175 Barone (1908, p. 289).
- 176 Schumpeter (1954, p. 507).
- 177 See Zaghini (1968) and De Vecchi (1982, pp. 47–52).
- 178 See Napoleoni (1965, p. 114).

- 179 See Robinson (1971, p. 27).
- 180 Zaghini (1968, p. 383).
- 181 As Jaffé noticed, 'Walras's aim, even in his "pure economics" was prescriptive or normative rather than positive or descriptive': Jaffé (1977, p. 379). However, the problem concerns the working of the laws that describe the economic equilibrium in a system subject to some constraints, even if such constraints are chosen to assure the principle of 'justice and exchange'.
- 182 As Joan Robinson stated, 'Walras had the ingenious idea of making the inhabitants of his market "shout" their offers until the equilibrium has been found, and then start actual trading at equilibrium. It is pure effrontery to extend this kind of equilibrium conception to investment; an equilibrium pattern of investment worked out on this system is possible only in a fully planned economy (if there)': (Robinson, 1962, pp. 135–6).
- 183 During the period of political reaction in Italy (1898–1900), he welcomed numerous exiled socialist intellectuals in Geneva, where he was teaching.
- 184 Pantaleoni (1900), (1909), (1924), in Pantaleoni (1925).
- 185 Amoroso-de'Stefani (1933), in Mancini, Perillo, Zagari, eds (1982).
- 186 Cabiati (1940).
- 187 Einaudi (1940).

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SOCIALIST DEBATE ON THE THEORY OF VALUE AND DISTRIBUTION

La Critica Sociale, 1891–1901*

Ian Steedman

The 1890s were a period of notable social and intellectual turbulence in Italy. Here, as background to our main concern, it is only possible to recall a handful of examples. Thus our period saw a state of siege in Sicily and Lunigiana in 1894, ‘exceptional laws’ against socialist and anarchist activity, the banning of socialist and workers’ conferences and the founding and temporary disbanding of the Italian Socialist Party. May 1898 brought serious disturbances in Milan, while in 1900 King Umberto I was assassinated. Within the fluid world of ideas, socialist, anarchist, liberal, ‘social’ Catholic and other streams of thought jostled with both a growing attention to Marxism and the development of sophisticated—and relatively formal, mathematical—Italian presentations of marginalist economics. (With respect to this last, one need only recall such names as Pantaleoni, Barone and Pareto.) In 1895 Antonio Labriola complained of the ‘immaturity’ of Italian Marxism (*Leipziger Zeitung*, 4 May 1895; see Macchioro, 1989, p. 11) but, whether because of any such immaturity or despite it, the ‘crisi del marxismo’ was already much talked of in our period, not least with respect to value theory.¹

Throughout the 1890s (and beyond) *La Critica Sociale* was a—perhaps the—leading Italian journal of ‘social reform’. Founded in 1891 by Filippo Turati,² one year before the Italian Socialist Party to which he was so strongly linked, *La Critica Sociale* suffered its share of the ‘troubles’ of the time. It was subjected to repeated police interference and sequestration (the issue of 16 January 1894 being the first to be sequestered) and the Milan events of May 1898 led to a ‘forzata sospensione’ of *La Critica Sociale* from May 1898 to June 1899. Turati himself was condemned to twelve years in prison, though he was in fact released in June 1899. (Turati had been elected to the Chamber of Deputies in June 1896.) We must now turn

away from these ‘external’ matters, however, towards our central theme. (But see chapter 5, pp. 118–26, for further background material.)

The first issue of *La Critica Sociale* was sub-titled ‘(Cuore e Critica). Rivista di Studi Politica e Letterari’ and it was noted that the first volume of *La Critica Sociale* constituted Volume V of *Cuore e Critica*. From 1892 onwards, however, the charming ‘cuore e critica’ disappeared. In 1892 the sub-title became ‘Rivista de studi sociali, politici, filosofici e letterari’, while from 1893 onwards *Critica Sociale* announced itself uncompromisingly as the ‘Rivista quindicinale [fortnightly, I.S.] del socialismo scientifico’. Indeed already in the first volume of 1891 (I, no. 10), in his editorial introduction to Engels’s 1891 *Preface* to Marx’s *Wage Labour and Capital*, Turati had referred to Engels as ‘the collaborator and scientific inheritor of Marx’ and to Marx himself as the ‘learned founder of German scientific socialism’ (p. 148). And Volume II (1892) contained several contributions by Engels. Notwithstanding its self-proclaimed ‘scientific socialism’, however, *La Critica Sociale* of the 1890s was certainly not a periodical devoted to expounding and defending the ideas of Marx, Engels and their disciples. *Critica Sociale* in this period often made common cause with Italian liberals over ‘anti-protectionism’, for example, and Turati enjoyed good relations with Pareto (see Macchioro, 1989, pp. 11–12). Indeed Antonio Labriola, in the article cited above, wrote that, ‘This immaturity can also excuse the partiality shown up to now by the socialist press, headed by the *Critica Sociale*...for the theories of Professor Loria, the well-known annihilator of Marx’. (And, taking ‘immaturity’ more literally, we may note that many of the contributors to our debate were indeed very young at the time.)

One should not be greatly surprised, then, to find that *La Critica Sociale*, during its first decade, carried much discussion of the theories of value and distribution, or to discover within these debates both criticism and defence of Marx’s theory and of marginalist ideas. Even in its first year (I, no. 14), *Critica Sociale* carried a short review, by ‘Dott.D.R.’, of Ghino Valenti’s *La teoria del valore*, in which ‘D.R.’ suggested that the workers are systematically the victims of the private appropriation of the difference between cost and price (p. 224). But it was only in 1892 that the discussion really got under way in *La Critica Sociale*.

THE EARLY STAGES OF THE DEBATE, 1892–93

Issues 10 and 11 of Volume II both carried articles by G.Stern, entitled ‘La teoria del valore di Carlo Marx’. The first instalment was preceded by an editorial note informing readers that Marx’s theory of value ‘is regarded by most socialists as the keystone of theoretical socialism’ (p. 149). In keeping with this, Stern begins by announcing that ‘economic materialism’ and the ‘theory of surplus value’ are amongst the greatest truths of modern science, showing Marx to be ‘one of the greatest thinkers of all times’ and providing

both a key to the past and guidance towards a glorious future. 'The theory of value', Stern declares, 'gives a firm scientific foundation to the emancipation of labour' (p. 149).

According to Stern, Marx wishes to show that—and why—the labour of the worker is paid for at below its value: why is 'this commodity, labour-power' an exception to the rule that one buys at value? (Marx, of course, insisted that *the commodity labour-power* is paid for at its value, and Stern himself states on p. 150 that the value of labour-power equals the value of the worker's means of subsistence and reproduction: we leave it open whether Stern was confused here or merely careless in his formulation.) For goods more generally, Stern recalls, one must distinguish between use-value and exchange-value. Air has no (exchange-) value because it is not purchased and we may compare this with the case of water 'in water-rich districts [and in] mountainous districts in which water is scarce' (p. 149). 'The exchange value of commodities is determined by the quantity of *labour-time* needed to produce them', the reference being to 'past, solidified' labour-time (p. 150; Stern makes it clear that it is not only direct labour-time that counts and that 'normal', not individual, labour-time is taken into account). Thus air has no value because it is not a product of human labour—unfortunately Stern does not comment at this point on his own example of water in districts where it is scarce! It is then pointed out that technical progress reduces value—newspapers, journals and books being cited as examples—and, after the value of labour-power has been said to equal that of subsistence, etc. (as noted above), Stern draws the conclusion that technical progress also reduces the value of labour-power (p. 151).

Stern opens his second instalment (II, no. 11) by considering Tizio who inherits a violin and Caio who wins a hunting rifle in a lottery; or, alternatively, two peasants who have a surplus cow and some surplus wine, respectively. If Tizio and Caio, or the two peasants, engage in direct barter (or even exchange via money) with no eye to exchange-value, their exchange will be based on use-value alone and neither party will lose (p. 170). However, in familiar English notation, the $M-C-M'$ process is quite different from that of $C-M-C'$, the objective in the former being *surplus-value*, with $M' > M$. Interestingly, Stern says of this process that it requires one 'to put his money into circulation (which is always risky)' (p. 171), but he appears not to consider this riskiness relevant to his subsequent discussion. What then is the source of the surplus-value? '*Surplus-value consists of unpaid labour-time*', Stern affirms, explaining that 'the capitalist has paid the *labour-power* at its full value as a commodity, but has paid the *labour* at below its value' (p. 171; cf. our above remarks *re* the first instalment). After insisting that 'wages always tend towards the lowest level at which life can be sustained', Stern asks why it is that workers must sell their labour-power as a commodity? He answers that it is because of

private property in both the natural and the produced means of production (p. 172).

Volume III, no. 18 contains an editorial note entitled 'A knight of unbridled capitalism who swallows up Marx in a single mouthful'. It quickly emerges that this wonderful title refers to 'Vilfredo Pareto, our great personal friend' and to his 'teorie anarchico-borghesi' (p. 285). The recent Italian edition of *Capital* as abridged by Déville, it is pointed out, is supplemented by a critique of Pareto's introduction to a French edition of certain parts of *Capital*, which has been much praised. And *La Critica Sociale* is now happy to present the section of that critique which deals with the theory of surplus-value (which follows from Marx's theory of value, according to Turati) (pp. 285–6).

The article thus introduced is 'The sophism of surplus-value, according to an Italian liberal economist', by Ettore Guindani and Leonida Bissolati. 'Signore Pareto has discovered', they write, 'that commodities exchange, not, as Marx claims, in proportion to the labour necessarily contained in them, but rather in a ratio depending on the "estimate which the parties to the exchange make of the use-values of the commodities exchanged"' (p. 286). Guindani and Bissolati object that use-value concerns only the final consumers, whilst exchange-values result from a series of intermediaries, each adding his margin; the 90 per cent of the population (final consumers) who are wage-earners can have no influence on this process. Dismissing examples of the exchange of water for a watch as irrelevant to the $M-C-M'$ process (pp. 286–7), our authors then cite Pareto as stating that subjective costs are non-comparable as between individuals but that, if such costs are proportional to necessary simple labour-time, then Marx's proportionality between prices and labour quantities would hold good, *if* jobs could be freely exchanged. They cannot be, however, because capital-labour ratios differ as between industries. At this point Guindani and Bissolati appear to accuse Pareto of attributing to Marx the idea that 'constant capital' is not part of 'variable capital' (p. 287)—a strange accusation indeed, which is not explained away when they seem to add that Pareto even makes this attribution explicit! Pareto is then said to have changed the question, away from the existence of a surplus of *exchange*-value to that of the existence of a surplus of use-value. But what can a surplus of the latter kind mean, our authors ask, when use-values are qualitatively different and non-comparable (p. 287)? Since the distribution of surplus involves exchange, one is driven back to considering that which commodities do have in common—labour content (p. 288). Guindani and Bissolati conclude their (generally unimpressive) critique of Pareto's arguments by affirming 'the unassailable soundness of the Marxian theory' (p. 188). (The editor of Pareto's letters to Pantaleoni takes Pareto to have referred to this article—and to Turati's introductory note—when, in a letter of 29 October 1893,

he complained of ‘the stupidities written by our [Italian] socialists’: see Pareto (1960), vol. I, p. 395.)

THE HEART OF THE DEBATE OVER MARX, 1894–95

In Volume IV of *La Critica Sociale* the debate over Marx’s theory of value became both more fierce and—a different thing—more interesting, with multiple contributions from Romeo Soldi, Francesco Coletti, Antonio Graziadei and Paul Lafargue, a notable feature of the discussion being the frequent references to Achille Loria and *his* criticisms of Marx’s theory; the fact that our authors were discussing, simultaneously, the writings of Marx, of Loria and of each other naturally opened the way to some rather tangled and convoluted debate. (Moreover, the contributions of Soldi, for example, were not models of clarity.) It is to be hoped that we shall not lose too much of the flavour of the discussion if we de-emphasize, in what follows, the attention paid to Loria. (On whom, see chapter 5).

In opening his ‘La critica di Achille Loria alla teoria del valore di Carlo Marx’ (IV, no. 14), Soldi warns the reader of his own limited expertise (p. 217). This warning appears to be in order when, on the next page, Soldi seems *not* to include raw materials in Marx’s category of ‘constant capital’; this arises in the context of Soldi’s not very clear discussion of the relation of ‘S’ to ‘V’ and to ‘C+V’ (in standard English notation)—see below. Loria is accused of taking ‘labour-time’ to refer only to direct labour and not to total (direct and indirect) labour (p. 218). Soldi then explains that, according to Loria, if ‘organic compositions of capital’ differ between industries, then a change in wages will leave value-ratios unchanged but will change price-ratios. But he seems to miss Loria’s point here and simply observes that things other than a wage change could cause ‘S/V’ to change (pp. 218–19). Soldi concludes, apparently, by *criticizing* Loria for having said that price will be above or below value according as the commodity exhibits an ‘organic composition’ above or below the social average (p. 219)! (There is certainly no reason for supposing that Soldi is here thinking of ‘Sraffa-like’ objections to such a statement.)

The discussion moves onto a higher plane in Francesco Coletti’s ‘La teoria del valore di Carlo Marx e le critiche di A.Loria’ (IV, no. 16). Coletti begins by insisting that Marx’s concept of value is a purely *a priori* one, not only in the form of its presentation but also in substance, and by objecting that Marx does not resolve the contradictions in his theory but merely refers one to unpublished material (p. 248). Engels—when replying to Loria, *Nuova Antologia*, 1 April 1883—had said that Loria’s criticisms would be ‘annihilated’ in the second volume of *Capital* but, Coletti suggests, this volume has now appeared without having any such effect—will the *third* volume perhaps succeed (p. 248)? As for Soldi’s attempted defence of Marx against Loria’s critique, Coletti observes, ‘it occurs to me

that perhaps he has understood deeply neither Marx's theory nor Loria's criticisms' (p. 248). The polemical overture now completed, Coletti turns to the 'central point', which is the interpretation of Marx's theory given by Soldi (p. 249).

Soldi is not consistent, Coletti complains, on whether 'S' is or is not related to 'V' or to 'C+V' (see above). He implies that 'S' is proportional to 'C+V' but this destroys 'all the premisses and all the analyses of *Capital*' (p. 249; Coletti is here more accurate than Soldi in his interpretation of 'constant capital'). While everyone knows that 'S' is proportional to 'V' in Marx, Soldi has confused 'S' with 'S/C+V' (p. 250). Coletti then provides an example of two agricultural capitalists who, with the same 'S/V', obtain different rates of profit 'S/C+V' (p.250). Coletti is unable to refrain from citing Turati (III, no. 1, p. 9) on how much more persuasive scientific socialism would be if it were based on sound doctrines.

Soldi replied just two weeks later (IV, no. 17), opening with the sentence, 'We have touched the pope and it is proper that the curate should squeal' (p. 264)! He suggests that the positivists 'alla Loria' have in reserve, for use against any other theory, the accusation of a *priorism*. But Marx, he argues, derived his laws from a study of his subject matter, although in his *presentation* of them the order was reversed—this has misled Coletti into thinking that Marx's argument is metaphysical and 'eternal' (p. 264). Referring (implicitly) to the example of the two farmers (see above), Soldi complains that Coletti has accused him of just what he was accusing Loria of, but Soldi does not face up properly to the point of the example but merely engages in 'clever' polemic (p. 265). More straightforwardly, he then states that 'profit *for him* [Loria] is synonymous with surplus-value' and denies that he, Soldi, confused profit with the rate of profit. And finally he does come explicitly to the arithmetic example with $V_1=V_2=50$, $S_1=S_2=50$, $C_1=100$ and $C_2=200$ —but only to bandy about clever phrases, asserting (irrelevantly) that an increasing 'C' makes labour more productive, and characterizing the example as simply the 'acrobatismo aritmetico del signor Loria' (p. 265).

Coletti, in turn, needed only two weeks to reply (IV, no. 18) but the two-week period was far more productive in his case. He begins with a very good exposition of the basic Marxist ideas of price being proportional to value, of labour-power being the only possible source of surplus-value, etc., in which 'value is conceived as an *intrinsic* quality of commodities', independent of exchange ratios, with 'labour [being] the very *substance* of value' (p. 282). In Coletti's judgement, however, Marx falls into two very grave errors, one economic, one logical. The former is that of thinking that the value of a product is already determined when it issues from the productive process, quite independently of the capitalist conditions concerning profit (which in fact plays some role in determining relative values). The logical error, Coletti continues, is that of *either* treating the

identity of value and labour-time as a (non-demonstrable) axiom *or* arguing in a circle when asserting that ‘constant capital’ cannot be a source of value (p. 283). After insisting, in a footnote, that Soldi is quite wrong to assert that Loria reduces value to *direct* labour (in fact, Loria allows for ‘constant capital’) (p. 283, n. 1), Coletti asserts that profit ‘is determined by causes extraneous to the *production* of wealth but characteristic of distribution’ (p. 283). From *Capital*, Vol. I one cannot tell, Coletti writes, how a uniform rate of surplus-value, ‘S/V’, can meet the capitalist requirement of a uniform rate of profit; Marx, alas, puts this matter off to Volume III and labour cost alone cannot explain interest, rent, etc.

Coletti now moves three *factual* considerations against Marx’s labour theory of value. If prices were proportional to values, he argues, constant capital would be used only in the industry with the lowest ‘organic composition of capital’. How then can one explain the general and deep-rooted tendency to a rise in the ‘organic composition’ (p. 284)? *Either* one must deny that prices and values are proportional *or* one must deny the existence of capitalist competition and the tendency to a uniform rate of profit; Marx indeed recognizes this but then simply directs his readers to a later volume! (At p. 284, n. 1, Coletti confirms that this was the point of his previous numerical example, ‘which seems not to have been understood by dott. Soldi’.) Coletti’s second factual objection (which he notes to be analogous to the first) is that industries differ with respect to the times taken to bring their commodities to market. In *Capital*, Vol. II Marx shows that ‘S/V’ does not depend on the period of circulation—but no one has ever doubted this, the point being that the rate of profit *does* so depend (p. 285). The third objection relates to monopolized products and to increasing cost (e.g. agricultural) products, Coletti claiming Marx’s support for the view that the former are only exceptional. Socialists often assert that Marx and Ricardo have the same value theory, Coletti claims, but this assertion is fallacious because Ricardo paid attention to agricultural values (for the *highest cost* units produced), recognized that prices and values are non-proportional and that a change in the wage rate changes relative prices, etc. Marx was thus incorrect to claim that Ricardo harmonized the theory of rent and value theory—in fact he made the former an exception to the latter (p. 285; Coletti refers to the last footnote in *Capital*, Vol. I, chapter 15. In the Pelican Library edition, at least, that footnote says merely that ‘in the year 1817’, the Anderson, West, Malthus theory of rent ‘was linked by Ricardo with the general theory of value’ (p. 639).) Unfortunately, however, Ricardo attributed too little importance to the non-proportionality of prices and values, thus allowing such misunderstandings to arise ‘in more or less good faith’ (p. 285).

Coletti concludes by characterizing his various criticisms of Marx’s theory as deriving from the cost of production school. Such criticisms, he insists, are stronger than those coming ‘from the followers of the modern

Austrian school of the *final degree of utility*, which do not always hit the target'. In brief, Marx's theory is correct only if both 'organic compositions' and production periods are the same in all industries (p. 286).

Next to enter the fray was Antonio Graziadei, whose 'La teoria del valore di Carlo Marx. (Intervento nella polemica Soldi-Coletti)' appeared in two parts (IV, no. 19 and no. 20).³ He opens by declaring that he had long wished to see in *La Critica Sociale* some echo of the objections to Marx's labour theory of value which have been accumulating from many sides. It is important to eliminate an incorrect part of socialist theory, even if it is not an important part; this both manifests a scientific spirit of inquiry *and* strengthens socialism. Graziadei agrees with Coletti in his criticisms of Soldi and of Marx but disagrees with him and his 'grande maestro' [Loria] over their treatment of 'technical capital' (p. 295). There is a long discussion of 'eternal' laws and yet another reference to the numerical example with two equal ' S/V ' rates; Graziadei also suggests that there is some minimum ' \bar{C} ' that must be associated with ' V ' and that it is only inter-industry differences in ' $C-\bar{C}$ ' that lead to theoretical difficulties (pp. 295-7). The first instalment ends with fun being made of Soldi's 'acrobatismo aritmetico' and an empirical example, from 1887, concerning the number of horses per worker (p. 297).

Graziadei's second instalment is weightier. He considers two capitalists, one producing maize and the other cloth, who are earning the same rate of profit. The former now introduces more constant capital and can produce more maize; maize enters the real wage and the increased productivity implies an increase in 'relative surplus value'. The maize producer's rate of profit is unchanged, according to the illustrative figures employed by Graziadei, but, since the now cheaper maize also enters real wages in the cloth industry, the cloth producer now has a *higher* rate of profit. The labour theory of value and uniformity of the rate of profit are incompatible. This argument does not depend on a good being a wage good, Graziadei continues, and 'differential technical capital' cannot yield the normal profit to the capitalist introducing it, *even if* 'relative surplus value' is created (p. 318). In any case, no capitalist ever reasons in terms of 'relative surplus value' when deciding whether or not to introduce a new machine; rather, he seeks to cheapen his product as much as possible in order to succeed in the struggle of price competition (pp. 318-19).

The only other possibility of avoiding the collapse of the 'socialist' theory of value is that capitalists with higher ' C ' in fact achieve higher (not equal) ' S/V '. In practice, however, it is well attested by statistics, Graziadei claims, that wages are often higher in capital-intensive industries. (In any case, as Marx recognizes, beyond a certain increase in ' C ' the small number of workers would make lower wages powerless to offset the effect of the

high 'C'.) It has thus been demonstrated 'that the existence of differential technical capital is incompatible with the socialist theory of value' (p. 319).

It is not to be inferred, though, either that Graziadei is simply sweeping Marx aside or that he accepts the theory propounded by Loria. Thus 'a new and truer theory of value, in order to be such, cannot fail to be founded on the rock-solid basis of the many other Marxist discoveries, and in particular of the great law of surplus labour. Is this new and truer theory that of Loria? We do not believe so' (p. 319).

Volume IV, no. 20 also contained a letter from 'Paolo' (Paul) Lafargue, according to whom 'official' economics claims that 'constant capital' is productive of surplus-value. But in this case, Lafargue argues, increasing 'C' should imply increasing surplus-value (or, more exactly, increasing interest) and wages should increase as labour becomes more skilled. *In fact*, however, interest falls as machinery improves (as even Proudhon insisted). He also 'has the pleasure to announce...that Engels is now correcting the proofs of the third volume, in which Marx completes his theory' (all on p. 317).

Coletti's 'Risposta à P.Lafargue circa la teoria del valore di C.Marx', which appeared two weeks later (IV, no. 21), was longer than Lafargue's letter itself. Before criticizing the latter, Coletti tactfully praises Marx, 'the great German economist and socialist for whom (it is helpful to recall) we all profess such great admiration' (p. 333). Admiration is not, however, a prominent feature of Coletti's reply to Lafargue's arguments. Lafargue, we read, appears to think that one can separate profit on 'constant capital' from profit on 'variable capital' but one cannot. *Pace* Lafargue, bourgeois economists have always understood that surplus-value is a quasi-mechanical, physical increase in value measured in labour, while profit depends on the social relations between capital and labour. Lafargue's main point—about the decreasing rate of interest—simply confuses the production of *value* and the production of *wealth*, Coletti insists; in fact rising productivity lowers value but increases wealth (p. 334). The rate of profit, he continues, depends on the cost of labour, not on the productivity of capital, and hence on distribution rather than production. The falling rate of profit proves nothing in Marx's favour, depending principally on the falling productivity of land (or other rising monopoly rents); hence the rising 'C' and falling rate of profit are merely correlated and not cause and effect (p. 335; both Ricardo and Loria's *La rendita fondiaria, ecc.*, 1880, are referred to here). At this point Turati inserted an editorial note, remarking both that Graziadei had also replied to Lafargue but had agreed to make way for Coletti and that the value theory debate had already exceeded in length the original editorial expectations and would soon be brought to a conclusion. This was to prove untrue.

In his reply (IV, no. 22), Lafargue first thanks Coletti for being so kind as to teach him that use-value production grows but that the *value* of output does not—which is just what Marx had said (p. 346). More

seriously, he maintains that the productivity of land is in fact growing, due to both mechanical and scientific progress, and hence that Coletti's explanation of the falling rate of interest cannot hold good. The true explanation lies in the abundance of capital but Coletti cannot admit this, since to do so would dispose of Loria's refutation of Marx; it is capitalist competition which is driving down the rate of interest (p. 346; Loria's letter to the *Journal des Economistes*, 1884, is referred to here).

Although Lafargue's reference to scientific and technical progress was valuable, the more important contribution to Vol. IV, no. 22 was certainly Graziadei's 'Le teorie del valore di Carlo Marx e di Achille Loria'. Whatever may be said of the Marxist theory, the attempt 'of our greatest economist' (Loria) to reconcile differential 'organic compositions' with the explanation of prices in terms of functions of labour quantities is also unacceptable. (See chapter 5, pp. 127–9). Loria accepts that the rate of profit must be uniform, so that capitalists facing a high 'organic composition' must obtain extra surplus-value in order to achieve that uniform rate. But Loria, 'our very great economist' who is 'a very powerful intellect', shares with Marx the premise that 'technical capital does not of itself produce a profit' (p. 347). In criticism of this basic assumption, Graziadei presents numerical examples leading to the conclusion that, given the 'pre-messa marxisto-loriana', any introduction of 'constant capital' will lower the uniform rate of profit (pp. 347–8). But the available statistics show, Graziadei insists, that in both England and the USA machinery has developed prodigiously and so have total profits, even as labour use has been reduced. One is thus led to reject not only Marx's theory but also Loria's (p. 348). It would, unfortunately, take us too far afield to enter into an appraisal of this criticism of Loria.

The approach for which Graziadei became well known now begins to emerge in the *Critica Sociale* debate. If profit is conceived as a *physical* surplus product, why should any qualitative distinction be made between the production roles of worker and machine? When operating within a capitalist system, each can produce more goods than are necessary for 'its' own creation and maintenance. Hence 'constant capital' no less than 'variable capital' produces a profit; it may even produce a greater profit. 'Given this, we can perfectly well conceive of a society in which, not only with no surplus labour but even with no labour, profits exist' (p. 348).⁴ Constant capital is thus the 'stumbling block' for—and in fact destroys—*both* the idea that only labour creates value and the idea that value is conserved in exchange. Socialist economic theorizing must overcome the dualism between the two forms of capital (p. 349).

Notwithstanding Turati's threat (IV, no. 21) to any great prolongation of the debate, it in fact proceeded strongly until the nineteenth issue of Vol. V, with contributions from Coletti, Arturo Labriola and Graziadei.

Coletti began his 'La teoria del valore di Carlo Marx ed il Socialismo Scientifico' (V, no. 2) by asserting that there was now near unanimity on the rejection of the proportionality of prices to labour values—only the scientific socialists (clearly implied to be a small minority) persevered in defending such a thesis. As for Lafargue's reply, it had provided nothing other than Adam Smith's old explanation of the falling rate of profit (p. 26). But why was there this obstinacy in the defence of a false theory? Marx himself—'an intellect of extraordinary power'—saw economic theories as being reflections of social conditions; and *his* theory, Coletti suggests, is the ideological reaction against the optimism of Bastiat, Ferrara, Carey, etc. Marx the man of action affected Marx the scientist, which accounts for his *a priorism*. It is even more likely, Coletti continues, that Marx's followers are being affected in such a way and they fear that the destruction of the labour theory of value will imply the crumbling of the whole edifice of the Marxist critique; but they are wrong about this, Coletti insists (p. 27). Actually, their faith in the labour theory of value just gives rise to suspicion about the 'scientific' nature of socialism and the labour theory of value must not be allowed fatally to corrode 'Marx's wonderful work' (p. 28).

For Marx 'S/V' is more important, for 'us' the rate of profit; we agree that 'S/V' is the cause, Coletti writes, but Marx denies that 'constant capital' yields profit (p. 28). Marx's writings on the 'rising organic composition of capital', on centralization and concentration of capital, on the lengthening of the working day, on the employment of women and children, on the reserve army of unemployed and on crises all remain great achievements, Coletti declares, and it is fortunate that Marx ignored the contradictions between his labour theory of value and reality (p. 28; though Coletti adds that it is actually rising total employment and pressure on land which *cause* 'C/V' to rise).

More generally, Coletti argues that value theory—in any form—is *not* the key to economic and social problems, for institutions, property and classes are far more important. It is true that profits are required for growth but *why* is capitalist property the central institution? Those schools which are the least interested in the main real problems give pride of place to value theory, Coletti claims—citing Ricardo, the 'harmonists' and the modern Austrian school of Böhm-Bawerk, Menger and Wieser as alleged examples—but it is ridiculous for socialists to follow suit (p. 29).

For Coletti, then, 'the positive, inductive and historical character' of Marx's work will be lost if the 'scientific socialists' enclose themselves, like a spider in its web, within *Capital*. And is 'Economia sociale' systematically hostile to socialism? The example of Loria, Coletti affirms, makes it well known that it is not. As for the labour theory of value, it is as damaging to socialism as is the so-called 'iron law of wages', so it too should be abandoned (p. 29).

Vol. V, no. 3 and no. 5 presented contributions to the debate by Arturo Labriola. (Vol. I, no. 12 had carried a letter from Antonio Labriola (pp. 182–3) insisting that he be distinguished clearly from Arturo Labriola, a mere eighteen-year-old, first-year law student! Antonio Labriola's forty-eighth birthday fell in 1891.) In the first one, 'La teoria marxista del valore e il saggio medio [average rate, I.S.] del profitto', Labriola recalls that, in his Preface to *Capital*, Vol. II, Engels had promised a solution to the 'uniform rate of profit with unequal compositions of capital' problem and asks whether it would not have been more responsible scientifically to have awaited this solution? He suggests that neither Marx's critics nor his supporters had done well to engage in premature debate (p. 43). After distinguishing more carefully than had many authors between the value, technical and organic 'compositions of capital', Labriola expresses his fear that it had been unjust of Coletti to criticize Marx for not analysing profit as such—the first part of *Capital*, Vol. III is devoted to this very matter (p. 44). He then proceeds to a simple example with three industries (A, B, C) in which B is an 'average' industry. Prices are not proportional to labour values but the average rate of profit ' $S/C+V$ ' is still based on value magnitudes. Hence, Labriola concludes, the problem set out in the Preface to Volume II has indeed been solved—which draws him into referring to 'Marx's great theory, which alone suffices to resolve all doubts' (p. 45).

This tone is maintained in the opening of Labriola's second contribution, 'La conclusione postume di Marx sulla teoria del valore', when he writes of 'the triumphant solution given by Marx in the third volume of *Capital*'. Any thought that this solution had been foreseen by Loria—in his *Analisi della proprietà capitalista*, I, pp. 146–50—is, Labriola insists, quite mistaken (p. 76). We may pass over his other remarks about Loria (concerning commercial capital, his *Nuova Antologia*, February 1895, piece on Marx's posthumous works and his alleged inconsistency over whether value is a purely relative concept), to note that Labriola sets out clearly enough (p. 77) the idea that 'total price=total value' and that competition merely redistributes surplus-value, leaving 'total profit=total surplus-value'; he offers no criticism of this idea.

(An editorial note is appended to Labriola's second contribution, saying Enough! and announcing that Coletti is to publish a small book on these matters.)

Antonio Graziadei neatly sidestepped Turati's impatience with any further discussion of Marx's value theory by opening his 'Sopralavoro e sopravalore. L'indipendenza della teoria del profitto dalla teoria del valore' (V, no. 19), by saying 'I do not intend to reopen an already closed discussion'. In a sense this remark was not merely tongue-in-cheek, for Graziadei does step outside the confines of the preceding debate—narrowly conceived as one about Marx's value theory, the 'transformation' problem, and so on. Yet he is not really straying beyond the boundaries of a broader

interpretation of that debate. His central claim is that ‘the cause of profit discovered by Marx can be illuminated outside the confines of any law of value’ (p. 296). This is important, Graziadei insists, because Marxists preserve the labour theory of value not for its own sake but because they believe that without it the exploitative nature of profit cannot be seen; once this belief is recognized to be false, the more intelligent Marxists will abandon the labour theory of value as the basis of their political economy.

Graziadei’s own approach starts from the claim that ‘profit obviously consists of the commodities consumed by capitalists’ (although I would query the validity of this in a growing economy). Since these commodities are produced by the workers, there is clearly surplus-labour being performed; one has no need of *any* theory of value whatever in order to understand the existence of surplus-labour. What part of the physical net product (a set of commodities) goes to the workers will depend on the balance of class forces. The labour requirements for the production of various commodities are to be ascertained by simple observation of production processes; together with the ‘physical’ profit they define surplus-labour. Hence labour and surplus-labour are *prior* to value and surplus-value. Marxists thus err in confusing two aspects of labour, that concerning production and that concerning value. Somewhat ironically, Marx in effect saw this himself in the historical sections of *Capital*, for example in relation to the *corvée* (p. 296). (See also chapter 5, pp. 125–7.)

THE LATER DEBATE, 1897–1901

In the remaining years to be considered here, the ‘old’ debate, ostensibly ended by Turati in 1895, did in fact re-emerge, but the ideas of Graziadei came increasingly under discussion and the force of ‘marginalist’ thinking received growing attention. In his ‘Sopralavoro e sovrapprodotta’ (VII, no. 18), Graziadei recalls that one month previously (VII, no. 16) he had argued that the eight-hour-day reform contradicts the Marxist theory of profit. With examples, he makes the point that, while profit *derives from* surplus-labour, it *consists of* surplus product (p. 284). Now in practice, he claims, a shorter working day leads to higher productivity; hence real profits could be increased by such a reform, even while surplus-labour falls (p. 285).

Just before its ‘forzata sospensione’, *La Critica Sociale* published (VIII, no. 9; 1 May 1898) George Sorel’s ‘La crisi del socialismo scientifico’ in which, supporting the ideas of F.S. Merlino, Sorel considered value theory and historical materialism as the bases of *scientific* socialism. And soon after it resumed publication (VIII, no. 19 (1898–99), Luigi Negro was to set forth his views on ‘Antonio Graziadei e la crisi marxista’. After implicating Sorel, Bernstein, Merlino and Arturo Labriola—whose recent book is said to be moving towards the utility theory—Negro writes: ‘Amongst the recent *theoretical crises*, Graziadei has brought out his *Produzione*

capitalistica; a book which should, according to its author, dismantle the Marxist theory of value from its foundations' (pp. 301–2). For Negro, however, Graziadei makes the very mistake for which Engels criticized Loria—that of discussing profit in the context of *Capital*, Vol. I, where it does not appear (only surplus-value is considered). Negro gives a reasonably fair summary of Graziadei's approach—involving surplus labour, surplus product, the factual possibility of rising real wages and a shortened working day, etc.—but he insists that, for Marx, profit does not consist of surplus labour (p. 302).

It would appear that Graziadei was not unduly concerned with Negro's criticisms (but see his later response to Negro in four separate issues of *Critica Sociale*, 1901) but he certainly took seriously those of Jean Jaurès. In his 'Bernstein e l'evoluzione socialista' (X, no. 12; see also the subsequent three issues), 'Giovanni' (Jean) Jaurès had offered a long rejection of Graziadei's attempt to substitute surplus product for surplus labour as a key concept. This was said to be merely infantile; what has use-value to do with M–C–M'? As for the claim that increasing labour productivity allows a simultaneous rise in the surplus and reduction in working hours, Jaurès had 'objected' that this links up with Bernstein's views on the reconciliation of class interests (pp. 191–2; a weighty counter-argument!). Graziadei was provoked into making a two-part reply (X, no. 17 and no. 18), 'Risposta a Jaurès'. He noted immediately that it is irrelevant what leads a scientist to a certain theory, or what the implications of that theory might be; the relevant question is, is the theory a good one? (p. 267; this distinguishes the honest Graziadei from the ideological Jaurès at one stroke). While Jaurès accepts Marx's theory of value, Graziadei does not (pp. 267–8). All cost of production theories of value—and above all the labour theory of value—are open to objection, Graziadei affirms, claiming that 'there is not one economist in the world who accepts Marx's theory of value' (p. 268). Indeed, 'amongst the few young socialists who study political economy in a serious way, there is no longer one—today—who believes in the Marxist theory of value'. Authority cannot stop the current intellectual flowering, Graziadei declares (displaying more optimism than skill in forecasting). While *Capital*, vol. III appeared almost six years ago, there is still no available reconciliation of the labour theory of value with a uniform rate of profit in the presence of non-uniform 'organic compositions'—but this is 'the touchstone for that theory' (p. 268).

Value, for Graziadei, is only an exchange ratio; there is no 'quid'. Production is *prior* to value and it is the productive process which explains profit, not the exchange process (p. 268). First comes labour, including surplus labour; second come products, including surplus products; while exchange and values come only third, value being the most superficial of the three levels. To think that value is essential to the explanation of profit is like a chemist explaining elements in terms of their compounds. Marxists

confuse labour as the cause of products with labour as the supposed cause of value, Graziadei suggests; they defend the labour theory of value *in order to* defend the theory of surplus labour (p. 269).

Graziadei insists that, *pace* Jaurès, he has not attempted to replace Marx's theory of value; rather, he presents a theory of profit whilst avoiding any concept of value. Surplus labour is the cause of profit but the latter actually consists of the products which go 'to satisfy the needs of the capitalists' (p. 269). Thus profit is surplus product. (Do capitalist 'needs' include net investment? On the next page Graziadei actually writes: 'profit consists...of the products consumed by capitalists'. This appears to be a repeated infelicity in Graziadei's writing; see above on V, no. 19. Even if Graziadei were a precursor of the 'Samuelson-Weizsäcker' approach to exploitation, it would still be unhelpful to identify capitalist consumption with *profit*, as is done by Graziadei.) He rejects the claim that 'blind competition' can explain why capitalists go on raising the 'organic composition of capital'; they would not do this if machines did not produce products/profits. Indeed, as Graziadei had already written in a previous contribution (see p. 179), 'we can very well conceive a society in which, not just with no surplus labour but with no labour, profit exists'; this shows perfectly that the substance of profit is products, not labour (p. 271).

In 'Risposta a Jaurès, II' (X, no. 18), Graziadei takes up Jaurès's point about M-C-M' by recalling that he presents profit *not* as the surplus product of the individual production process, but, rather, as that of the system as a whole; moreover, he has insisted on this point. It was in fact 'one of Marx's greatest errors' to have set out his theory of profit in terms of a single capitalist (p. 280). Given the division of labour, 'the productive unit [is] the whole working class' and profit, correspondingly, is 'the surplus product of the working class considered as a whole'. Values simply permit particular workers and capitalists to obtain the specific physical bundles of commodities which they each end up with (p. 281).

In the face of all the criticism to which the labour theory of value has been subjected, 'the myopia of the majority of Marxists has been incredible' (p. 283). The Ricardo-Marx theory of value should be definitively abandoned, thus safeguarding the theory of surplus *and* ending the current fossilization of Marxism in the field of economics and returning it to the maestro's really valuable contributions (p. 284; what *would* Graziadei have thought of the theoretical productions of many 'Marxist economists' in the 1970s?).

The growing importance of marginalist economics in Italy became really explicit in the pages of *La Critica Sociale* with Giovanni Montemartini's 'Alcune critiche erronee all' Economia pura' (IX, no. 3; Montemartini was to be 'redattore capo' (editor) of the *Giornale degli Economisti* from 1904 to 1910. See also chapter 5, pp. 145-7). He did not try too hard to veil his irritation: 'I have had other occasions to observe that to dispute over utility

and over the importance of pure economics is by now a waste of time and breath in Italy.' Those who really study pure economics are fully agreed that it is the proper way forward, he declares, and there is little point in bothering with those who either don't know or don't want to (p. 42).

The substance of Montemartini's contribution lies in his observations on two recent publications. The second one, Eteocle Lorini's *Il profitto, ecc.* (Roma, 1901) hardly seems worthy of contradiction. His first subject, however, is Antonio Graziadei's, *Intorno alla teoria edonistica del valore. Ha la teoria edonistica del valore una base fisiologica o psicologica?* (Torino, 1900), a pamphlet of twenty-nine pages. Contrary to Graziadei, Montemartini claims that the 'utility' theory of value is not based on the law of decreasing marginal utility. In the first place, it is based on full interdependence 'between enjoyments and costs'; second, Pareto begins simply from choice and, while it is consistent with earlier versions of the theory, this current version restricts its field of inquiry (pp. 42–3). He admonishes Graziadei for suggesting that the theorists of pure economics admit neither initial increasing marginal utility nor eventual negative marginal utility, citing Pareto, Wicksteed and Barone as counter-examples. Moreover, again contrary to Graziadei, it is only necessary to study those sensations or impressions which relate to economic action or will; and it is not the pure economists who have failed to understand 'the scale of needs' ('la graduazione dei bisogni') (p. 43).

We conclude with a consideration of Enrico Leone's 'Gli studi economici nel XX secolo [century, I.S.]' (XI, no. 4; in no. 14 and no. 15 Leone discussed Loria's theory. See chapter 5, pp. 137–43). Political economy was riven by dispute in the nineteenth century; in the face of the call for a synthesis, Leone asks, what scientific and doctrinal position will be assumed by socialist theory? The clash of the previous century was between the socialist school of Proudhon, Rodbertus and Marx (Loria is added in a footnote) and the orthodox school of Bastiat, Say, Walker and others (Leone names *no major* 'non-socialist' economist!); these competing schools are defined by their hostility to or support for the prevailing system. The socialist school adopted a 'historical conception of economics' and the orthodox school a 'classical conception' (*sic*). The division was thus one between 'socialism and optimism' (p. 56).

'Since 1867, traditional socialism has made little or no theoretical progress.' In the face of pure economics—from Gossen, Jevons and Menger to Walras and Pareto—socialist theory now appears as the antithesis not of a particular, alternative school but of economic science as such. 'It is the shared conviction of the economists that economic science will end up defeating socialism, which draws its best weapons from an arsenal of errors' (p. 56).

It is true that Proudhon, Marx and others forced the admission of the harm done by monopoly⁵ and that pure economics has had to recognize the

necessary preconditions for the ‘harmonistic’ results claimed by the orthodox school. Gossen has argued for the elimination of ground rent, and Walras has favoured the nationalization of land. Thus, far from being defeated by economics, socialists have really been strengthened by its findings and they should actively make use of it (p. 57). Whilst pure economics takes the distribution of property as given, socialists should use the new theoretical tools provided by economists to demonstrate that the maximization of utility *requires* a different property distribution. The results of such analysis will be egalitarian and will imply the elimination of monopoly, of rent and of profit. This is all to be done ‘within the very framework and with the very method of pure economics itself’ (p. 58).

CONCLUDING REMARKS

One might detect at least four strands within the *Critica Sociale* debate sketched above. One is constituted by those who had only praise and defence to offer for Marx’s value theory. Of these, Arturo Labriola was perhaps the most refined in his approach, although even he sounded a ‘triumphalist’ note at certain points. After Stern’s reasonably careful defence, Guindani and Bissolati, on the one hand, and Soldi, on the other, offered only rather unimpressive defences (provided that one is not over-impressed by Soldi’s clever-clever polemic). Of the defences by Lafargue, Negro and Jaurès, only Lafargue’s insistence on the importance of technical progress would seem to be of great value. A second strand consists of the critique of Marx/defence of Loria presented by Coletti, who gave interesting logical and empirical objections to Marx’s labour theory of value. It is noteworthy that he quite explicitly does not rely on any ‘marginal utility’—based arguments in making his critique of Marx—such arguments, in his view, often fail to hit their target. Like Graziadei, Coletti praises Marx for aspects of his work other than value theory, implies that value theory is not really that important anyway and suggests that the ‘scientific socialists’ hang on to the labour theory only because they think (quite wrongly) that to abandon it would mean abandoning also much else. Unlike Graziadei, who refers to the ‘Ricardo-Marx’ theory of value, however, Coletti argues that Ricardo’s value theory was not only different from but better than Marx’s theory. The third strand is represented by Graziadei, who was untypical in appealing to actual economic statistics, as well as deploying examples and logical arguments. Most distinctive, of course, is Graziadei’s own particular ‘physical’ approach to profit (and thus to surplus labour); it is striking that ‘Marxist economists’ continued to relate profit directly to surplus labour for many decades after Graziadei had pointed out perfectly clearly the possibility of positive profits in a fully-automated economy. (Both Coletti and Graziadei would, presumably, have been profoundly depressed had they been able to read what many ‘Marxist

economists' were still writing eighty years after the debates in *La Critica Sociale*.) The fourth strand (not necessarily inconsistent with Coletti's deliberate neglect of 'marginal' arguments in criticizing Marx) is, of course, constituted by the explicit recommendation that everyone—and therefore socialists—should adopt the marginalist theory, as urged, in effect, by Montemartini and, very openly, by Leone.

NOTES

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- 1 Needless to say, there is a vast literature dealing with relevant aspects of Italian history in the period 1891–1901, and it would be quite impossible to present a full bibliography here (even if the present writer were competent to do so). The interested reader could begin by consulting, e.g., Macchioro (1989), Potier (1986) and Zagari (1975), together with the extensive lists of further reading to be found in them.
- 2 See Bassi (1990, p. 44) for the roles of Anna Kuliscioff, Claudio Treves, Ugo Guido Mondolfo and Giuseppe Rigamonti in the early direction of *La Critica Sociale*.
- 3 For an introduction to the recent extensive—and sometimes polemical or even 'strumentalizzato'—discussion of Graziadei, see, e.g. Finzi (1977), Ridolfi (1977). Ridolfi also provides valuable introductory material to Graziadei (1969).
- 4 Compare Ricardo's observation, in a letter of 30 June 1821 to McCulloch, that 'If machinery could do all the work that labour now does [nobody] would be entitled to consume any thing who was not a capitalist, and who could not buy or hire a machine' (*Works*, Sraffa edition, Vol. VIII, pp. 399–400).
- 5 We recall Coletti's claim (p. 176) that Marx did not take monopoly to be that important.

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FRENCH SOCIALISTS AND THEORIES OF VALUE, 1872–1914*

Richard Arena

In this chapter an attempt will be made to summarize the main reactions of French socialists when the Marxian theory of value began to be seriously threatened by the rise of marginal economic analysis. The date of 1872 was chosen as the starting point, because Jules Roy translated and edited in French the first volume of Marx's *Kapital* between 1872 and 1875. Moreover, this publication date is not far from that of the first edition of Léon Walras's *Eléments d'Economie Pure* in two volumes between 1874 and 1877. We took the year 1914 as the end of our period since the content of French socialism changed sharply after World War 1.

The text is organized into five sections.

The first section describes the state of Marxism in France at the beginning of the 1880s, that is, before the publication of Volumes II and III of *Kapital* and their translation into French. The authors discussed were considered as the 'official' French interpreters of Marx at this period.

The second section refers to the debate between those Marxists and the members of the French liberal school. This school is extremely important for the understanding of the history of economic ideas during the nineteenth century in France. It was indeed predominant from both ideological and institutional points of view.

The third section deals with less orthodox socialists who were related to the main French socialist journal of the epoch, the *Revue Socialiste*.

The fourth section is also concerned with unorthodox socialism. The socialists considered here generally acquired a serious knowledge of Marxism or, at least, of Marx's theory of value and became very sceptical about its potentialities, in comparison with the marginal economics approach.

The final section summarizes the attitude of marginalists towards Marxism. Some of these marginalists considered themselves socialists or were interested in the analysis of ideal socialist economies.

THE ORIGINAL MARXIST 'TRINITY': GUESDE, LAFARGUE AND DEVILLE

The Marxist tradition generally describes three authors as sharing the merit for the introduction of Marxism into France: Jules Guesde, Paul Lafargue and Gabriel Deville. The reality is, however, slightly different. Far from being the pure interpreters of Marx, described by Zevaes (1947), these authors 'represented a doubtful Marxism and had only a rather imprecise notion of the theory they intended to promote. The Marxism of the 1880s, circulated...a kind of confusing, incomplete and deformed Marxism' (MacInnes, 1973, p. 6).

On one side, these authors did not hesitate to use Volume I of *Kapital* as the basis for a comprehensive description of Marxian economic analysis. This tendency is not surprising for Guesde, since he claimed that he had discovered the main ideas of Marxism before reading Marx or being helped by Lafargue in his research (Mermeix, quoted by MacInnes, 1973, p. 13). It is also not surprising for Deville, who did not hesitate to edit a résumé of 'Le Capital'—which was only and obviously a summary of Volume I—in 1884. This year was precisely the one during which Engels was preparing the edition of Volume II of *Kapital* and Deville knew that (Deville, preface, 1884). The tendency to reduce *Kapital* to its first volume is less understandable in the case of Lafargue who, in spite of his regular personal correspondence with Engels, did not hesitate to present his own interpretation of Marx's Volume I theory of value in the *Journal des Economistes*, as the core of Marxian economic analysis. The problem is that this was in 1892 and that Lafargue did not even refer to Volume II, which Engels had published in 1885.

On the other side, serious misunderstandings of Marx's texts led the 'Trinity' to present a 'reductionist' version of the Marxian theory of value and weakened the possible consistency of Marx's argumentation.

Jules Guesde

Contrary to the opinion of many Marxist historiographers (e.g. Zevaes, 1947), it is clear that Guesde's knowledge of Marxism was extremely weak. It is impossible to take Guesde seriously as a contributor to, or, even less, as a satisfactory popularizer of Marx's analysis. It is indeed true that he participated strongly in the process of diffusion of Marxist ideas, especially through the journal he created—*L'Egalité*—which lasted (discontinuously) from November 1877 to December 1882. However, Guesde's contribution to economic analysis is clearly weak.

On one side, he seems to welcome the liberal version of the theory of supply and demand, referring explicitly to P.Leroy-Beaulieu (Guesde, 1878, p. 88). This liberal theory is not self-consistent, being unable to define demands

and supplies as functions. Moreover, Guesde interprets it within an underconsumptionist framework, trying to show that the only sound demand, i.e. the capitalist demand, is the only one which can sustain activity and that it is insufficient, even though, symmetrically, wage-earners, being subject to the law of a minimum wage, would like to consume more.

This law is indeed Lassalle's. Guesde interprets it, writing that it

limits the wage of the worker in proportion to the sum which is necessary to his subsistence and reproduction.

(Guesde, 1878)

In other words, this law implies that the income given to the wage-earners is remarkably stable over time, in real terms.

Guesde, finally, believes in the permanence of a minimum real wage, even though he admits the possible evolution of its composition (Guesde, 27 January 1878). This evolution does not change anything in Guesde's argument according to which, here again, the law of supply and demand leads permanently to an average wage rate which corresponds to the minimum. Obviously, this reference to supply and demand is purely rhetorical and it is probable that Guesde again alludes to Lassalle's conception.

The discussion of Leroy-Beaulieu's critique of collectivism (Leroy-Beaulieu, 1884) provides a final opportunity to evaluate Guesde's poor mastery of economic analysis. In his reply, Guesde indeed refused to enter into the realm of economic arguments, as if they were inaccessible to him (Guesde, 1882).

Paul Lafargue

Because of his family relations with Marx and his friendship with Engels, Lafargue often appeared to be 'the' official French Marxist. He usually took the responsibility to defend Marx's theory against the attacks of French adversaries. For instance, he debated with Maurice Block as well as with Paul Leroy-Beaulieu and Vilfredo Pareto.

However, this prominent position did not prevent Engels from being strongly sceptical about Lafargue's ability to understand the subtleties of political economy and he often helped him to correct errors of the first drafts of his texts (MacInnes, 1973, pp. 23–5). These doubts can be easily understood when Lafargue's contribution to economic theory is taken into account.

Concerning the explanation of economic crises, Lafargue refers, like Guesde, to an underconsumptionist interpretation of the law of supply and demand. The only originality of Lafargue's explanation is that the causes of over-production are not only workers' underconsumption but also their desire to work as much as possible (Lafargue, 1880).

Moreover, the interpretation of Volume I of *Kapital* as the core of Marx's analysis creates new problems. Lafargue indeed realized that the real world was not a world of labour values. However, the author constantly confuses profits and surplus-values and, therefore, monetary prices and values (Lafargue, 1882, p. 4 and 1884a, p. 385). He accepts uncritically the idea that only labour creates value, without convincing the reader that this position is nothing more than an assumption (Lafargue, 1908, p. 4 and 1884a, p. 387). Finally, Lafargue also hesitates over the significance of identifying the individual values of inputs (Lafargue, 1882, p. 4).

Lafargue's debates with Marx's French adversaries are not convincing either. In his discussion of Leroy-Beaulieu's book—*Le Collectivisme*—as in Guesde the distinction between simple, abstract and socially necessary labours is not seriously considered, although Lafargue admits that the first appears in the process of exchange and the second in the sphere of production (Lafargue, 1884a, p. 383). Even if it is weaker than in Guesde, the tendency to refer to Lassalle's law of minimum wages is still present (Lafargue, 1884a, p. 386).

Similarly, when Lafargue tries to reply to Block, he does not give any clear indication about the procedure which permits the transformation of heterogeneous labours into quantitative differences in a single standard of measurement (Lafargue, 1884b, p. 282). His reply to Block concerning the unconvincing introduction of the use value of labour power to explain exploitation is practically negligible (Lafargue, 1884a, p. 285).

Thus it is not surprising to discover a fundamental inequality between Lafargue's and Pareto's arguments when the second is criticizing Marx's theory (Pareto, 1893; Lafargue, 1894).

Gabriel Deville

Deville's celebrity in France came from the summary of Volume I of *Kapital* which he proposed to French readers in 1883. He tries to be as faithful as possible to Marx's contribution and the expository order of the volume is strictly respected. However, Deville's summary exhibited serious shortcomings and provoked a severe criticism from Engels, who strongly opposed its translation into English or German (MacInnes, 1973, pp. 27–8).

On one side, Deville's summary shows a tendency to oversimplification. Some passages are so simplified that they change drastically the substance of Marx's argument, dramatizing conclusions and reinforcing a kind of social determinism. Other developments are eliminated or greatly shortened; they are generally the most difficult ones, the importance of which was underestimated by Deville. This is so, for instance, in the case of the passages related to the forms of value, which tend to disappear.

On the other side, conceptual confusions are often found in the summary. The example of labour is significant. Thus, Deville does not make distinct the

respective notions of simple labour, abstract labour and socially necessary labour, confusing them in a unique technological category which completely eliminates the social and representative dimension of abstract labour.

Finally, Deville's summary was re-edited several times and translated into Spanish, Italian and even English, after Engels's death. Therefore—and unfortunately—it contributed to convincing people that Volume I of *Kapital* was the core of Marxian analysis and that it had to be considered as a self-sufficient book.

LIBERALS AND MARXISTS

As we know, at the end of the nineteenth century, the predominant school in France was the liberal one, which included Say's disciples. This school was not only pre-eminent academically, in the different teaching institutions and in the various scientific journals. It was also pre-eminent in institutional terms, within the political 'Establishment' and at the head of banks and firms.

This school developed Say's ideas and analysis, especially in applied economics. Its theoretical foundations lacked precision. Its theory of prices was founded on a specific interpretation of the law of demand and supply but the notions of demand and supply were not clearly defined. They were not considered as functions of prices and they were not founded on micro-rational behaviour. Utility was not supposed to be directly measurable but liberals were convinced that relative prices revealed levels of total utility. No marginal utility theory was considered before the rise of marginal analysis. Scarcity also played a role but, in the absence of any marginalist concept, it had nothing to do with the Walrasian concept of scarcity, for example.

Liberals therefore differed from both Ricardians and Walrasians. Their originality, however, could not hide their lack of rigour. Hence the debates between Marxists and liberals in France could not always be considered as significant examples of clarity and precision.

Liberals against socialists

After the 1848 Revolution, liberals and socialists became the adversaries they had not been during the first half of the nineteenth century. Anti-socialism then became a permanent aspect of the liberal doctrine. Naturally, anti-socialism implied anti-Marxism. Hence the official journal of the liberal school—the *Journal des Economistes*—included regular attacks from liberal economists against what they called 'socialism' or 'collectivism'.

Taking this perspective into account, some liberal economists, such as Courcelle-Seneuil (1884) or Du Puynode (1894), centred their critique of Marx's theory of value on the question of the productivity of factors. They

denied the interpretation according to which labour would be considered as the sole productive factor. Land and capital had also to be considered on the same level. Therefore, Marx's assertion was interpreted as a theory of the origin of value and contested, referring to other factors. It could hardly be seen here as a theory of the measurement of value, although this would be possible in general. This type of critique is, however, rather weak, because external to the core of the theory which is being criticized. Other liberal economists directed new critiques to the very heart of Marxian analysis.

Villey provided a good example of this generalization. Of course, he also emphasized the necessity of considering the productivity of all the factors. This led him to contest the pure theory of labour and to refer to the notion of scarcity (Villey, 1895, pp. 60–1) in order to complete a partial theory of value founded on labour alone. This notion of scarcity was also used to deal with the passage from complex to simple labour (*ibid.*, p. 62). Finally, Villey also criticized Marx's tendency to define commodities as material goods, ignoring the case of services (*ibid.*, p. 66).

The debates between Block, Leroy-Beaulieu and Lafargue

Villey was not the only author who devoted a book to socialism. Block and Leroy-Beaulieu also wrote contributions, which became more famous. These contributions led Lafargue to answer them in the organ of the liberal school, the *Journal des Economistes*.

With his book *Les théoriciens du socialisme en Allemagne*, Maurice Block was the first French writer who criticized Marx's conceptions, in 1872. But his more famous book is *Le socialisme moderne* (1891). Block developed the same critiques as were raised by Villey. However, he stressed more particularly the problem of labour homogenization and the illegitimacy of referring to the use value of labour power within the context of surplus value theory (*ibid.*, p. 53). Lafargue's answers were rather disappointing, and the rather poor intellectual level of the debate between these authors is regrettable.

The debate between Lafargue and Leroy-Beaulieu is not more satisfactory. The same critiques and the same answers were formulated. However, Leroy-Beaulieu stressed more strongly the thesis of capital productivity and tried to justify profit by attributing it to various causes, although they provided, in general, incompatible explanations of this form of income (Leroy-Beaulieu, 1884, pp. 247–8). Moreover, he pointed out the kind of statistics used by *L'Egalité* to try to measure surplus-value in the different industries, which manifested the confusion introduced by Guesde and his followers between values and empirical prices.

THE *REVUE SOCIALISTE* INFLUENCE

The *Revue Socialiste* was founded by Benoît Malon in 1885 with the help of two friends, Eugène Fournière and Gustave Rouanet. Malon considered it a real research laboratory for socialist thinkers. In other words, he decided that no specific interpretation of socialist doctrine would be privileged by the *Revue*. This conception was applied in practice and the *Revue* welcomed 'orthodox' Marxists such as Lafargue, 'possibilists' such as Paul Brousse, anarchists such as Reclus or Cornelissen (see chapter 8), marginalists such as Walras himself, defenders of Malon's 'Socialisme Intégral', etc. It is therefore difficult to consider the *Revue* as embodying a specific approach to socialism. However, the editorial committee of the *Revue* gathered people like Malon, Fournière, Rouanet and Renard who, in spite of their differences, shared a kind of socialist free-thinking and were thus open to the scientific advances of the epoch. The sociologist Alfred Fouillée did not participate in the committee of the *Revue* but he exerted a fundamental influence on such writers as Fournière and Rouanet, so we will consider his intellectual contribution here.

Benoît Malon and the 'integral socialism'

Benoît Malon is one of the most original characters of the French socialist movement. He was an autodidact who first sympathized with 'possibilists' and then became independent, creating the *Revue Socialiste*. Malon opposed Marx for philosophical reasons. He considered that Marxism was based on a form of vulgar materialism to which he preferred the more idealistic theory of 'idéés forces' developed by A. Fouillée. Malon did not believe that economic factors could play the main role in social evolution.

'It is not true to say that political society is the reflection of economic society; religious, political and economic phenomena interact and intersect themselves, in order to determine the movement of nations; however, economic phenomena are still considered as pre-eminent; they were at the origin of civilizations; they appeared as unique propulsors, the importance of which was, however, decreasing' (Malon, 1890, p. 212).

This rejection of Marxism for a more 'integral socialism' was more ethical than analytical. It is easy to check this, seeing how limited was Malon's comprehension of Marx's economic analysis. Thus, in his presentation of the Marxist conceptions (Malon, 1890 and 1892), Malon very seldom refers to political economy and, when he decides to do so, he generally commits mistakes or makes confusions between authors (Marx, Lassalle and Rodbertus, for instance). Malon, therefore, appears to be more important as the editor of the *Revue Socialiste* than as an original thinker.

Alfred Fouillée: from Marx's critique to Effertz's theory?

Fouillée criticizes Marx from three points of view.

The first critique is familiar and concerns the productivity of labour. Like Block, Leroy-Beaulieu or Pareto, Fouillée also contests the way in which Marx tries to show that labour is the only source of value.

The second critique corresponds to a more specific observation. Fouillée is indeed sceptical concerning Marx's process of labour homogenization, especially through the wage process. He presents his doubts concerning the process of transformation of a 'complex', 'intellectual' type of labour into a 'simple' type through a process of multiplication (Fouillée, 1930, pp. 234–5).

Moreover, Fouillée is convinced that value does not only depend on embodied labour but also on demand and social needs. Therefore, he proposes a 'symmetric' theory of value combining the respective influences of labour and scarcity. However, he does not seem to accept or even to know of marginalism. On one side, no marginal concept is ever used by Fouillée. On the other side, he seems very sceptical about the ability of economists to grasp the behavioural complexity of interdependent agents within an economic system. Effertz's theory is the only one Fouillée describes as a step in the right direction but even it appears to be insufficient and a new theory of value is still to be built.

Georges Renard: from Marx's critique to Walras's theory?

Like Fouillée, Renard criticizes Marx's theory of value because it appears to be one-sided. According to Renard, labour is not the only source of value and utility has also to be considered, especially under its marginalist form (marginal utility) (Renard, 1930, p. 158). Labour and utility both contribute to explaining the magnitude of value but their respective importance depends on the type of goods considered (p. 159). The value of reproducible goods is essentially dependent on labour, while the value of goods of the scarcity type turns essentially on marginal utility (p. 159). This conception is, however, different from the marginalist one, since it does not require any microfoundations. In spite of these differences, it is interesting to note the strong sympathy the *Revue Socialiste* always demonstrated towards Walras.

Thus in 1897 the famous French literary writer, Charles Péguy, dedicated a tribute to Walras, considering him as 'a socialist economist' even if his method sometimes appeared to be too abstract. In the same way, in 1910, after Walras's death, Georges Renard himself, who was then the editor of the *Revue*, made a speech at his friend's graveside and published it in the *Revue Socialiste*, stressing, as Péguy had done, that Walras was a 'socialiste de la chaire' (Renard, 1910, p. 115).

It is thus interesting to note that non-orthodox French socialists often agreed to replace Marx's theory, of value by the usual supply and demand approach. It is now time to consider whether this choice is more general than it might seem to be *a priori*.

THE 'DECOMPOSITION' OF MARXISM

This expression was used by C.Andler, G.Sorel, C.de Keelis-Krenz and others to characterize the international intellectual tendencies which affected Marxism at the end of the 1880s and were described as the foundations of a process of 'revision' of Marxism. This process occurred after the publication of Volumes 2 and 3 of *Kapital* in German.

This process took various, very different forms. Some socialists tried to conserve a part of Marx's heritage, changing the interpretation of the theory of value. This is, in particular, the position of Jean Jaurès who proposed a very precise and faithful presentation of this theory, giving it, however, a different meaning (Jaurès, 1892, pp. 281–283). This position was not however predominant.

Generally, the revisions were far more drastic. They were accepted by independent socialists who knew Marxism, sometimes better than others, and paid attention to the advances of economic analysis in general. Three authors provide meaningful examples: Georges Sorel, Charles Andler and Adolphe Landry.

Georges Sorel

Sorel clearly realized that his writings would conflict with those of the 'Trinity'; but, far from regretting this situation, he found necessary to investigate more thoroughly Marx's economic analysis. He wrote:

Four years ago, Mr P.Lafargue, answering to the objections of Mr V.Pareto, wrote:

'Marx proves that the quantity of labour embodied in a given commodity forms its value and that it is around this value that prices gravitate'.

Nobody would dare today to make such an assertion, which was previously considered as certain among socialists.

(Sorel, 1897, p. 222)

What is striking in Sorel's new interpretation of Marx and differs from the developments offered by orthodox Marxists, is the fact that he considered all three volumes of *Capital* before proposing his own conception of Marx's theory of value. From this viewpoint, Sorel's contribution cannot be analysed without reference to Bernstein, Kautsky and Labriola and to the debate which occurred after the publication of *Kapital*, Volume III.

Therefore, on one side, Sorel tried to correct wrong interpretations given by 'orthodox' Marxists. Thus he denied that, in Marx, commodities were exchanged in practice according to the quantities of necessary labour they embodied (Sorel, 1897, p. 223). In the same spirit, he strongly disputed the abusive confusion introduced between Lassalle's and Marx's conceptions of the formation of wages (pp. 223–4) and ruled out the first of those two conceptions.

On the other hand, Sorel stressed the new problems implied by the necessity of finding some general consistency between the different volumes of *Kapital*. He opposed, in this context, a 'hidden' sphere (the world of values in Volume I) and a more superficial one (the world of prices in Volume III). This interpretation did not solve the main problems which Sorel clearly identified: first, the problem of the transformation of values into prices, located by Sorel in the assumption of equality between the sums of values and prices; then the problem of the equalization of profit rates, related to the hypothesis of the equality of surplus-value rates; and, finally, the problem of the law of the falling rate of profit, which Sorel discussed considering the assumption of a constant general rate of surplus-value. Sorel's aim was not fundamentally, however, to criticize Marx's theory in order to improve it. His preface to Labriola's *Karl Marx* (Sorel, 1910) clearly meant that he definitively chose the realm of 'économie pure'.

Charles Andler

Andler wrote a remarkable book on the origins of state socialism in Germany, dedicated to Von Thünen, Rodbertus and Lassalle, which prepared him to have a rather critical view of Marx's theory of labour values. He developed two types of critique.

The first is familiar. Andler denied that labour was the only source of value and welcomed Effertz's theory which also took land into account and, therefore, proposed a 'ponophysiocentric' theory of value. This acceptance of Effertz's theory is somewhat strange, if we bear in mind the numerous errors made by Effertz and, especially, the criticisms which Pareto very correctly addressed to him.

The second type of critique is bolder and was presented in a conference of the École Socialiste. Andler criticized not only the labour theory of value but the very idea of a 'material' or 'physical' theory of value. It is indeed clear for Andler that 'Values are immaterial objects; they are located in the public opinion' (Andler, 1911, p. 50).

In other words, Andler suggests replacing a physical theory of value by a representative one, in which abstract labour (and not technologically simple labour) would play the essential part. Andler, however, did not develop this view sufficiently and therefore could hardly suggest a new way of considering the problem of value.

Adolphe Landry

Like Alfred Fouillée and Charles Andler, Landry also found his theoretical inspiration in Otto Effertz's book. Interpreting this contribution rather freely, Landry wrote a thesis in 1901 in which he tried to show that socialism was economically more efficient than capitalism. Contrary to the liberal tradition, Landry tried to point out an antinomy between the existence of private property and the attainment of the social interest.

In the sphere of production, he insisted upon the conflict between 'productivity' and 'profitability', the search for maximal profits being contradictory to the social interest. In the sphere of consumption, budget constraints are more restrictive than preference sets and they prevent consumers from realizing their optimal plans. However, Landry's approach did not assume that capitalists did not pay workers at their just levels of wages. In fact, Landry accepts the law of supply and demand and more generally the thesis of the productivity of productive factors. He advocates therefore a combination of Walras's and Effertz's theories able to replace the labour theory of value.

MARGINALISTS AND SOCIALISTS

We shall now consider the critiques formulated by three marginalists against Marx's theory of value. Georges Sorel's critiques aside, these are certainly the sharpest and the deepest. We refer to Walras, Pareto and Winiarski.

Léon Walras

Walras only referred to Marx in the second part of an article written in 1896 and called 'Theory of property', which he published in the *Revue Socialiste*.

On one hand, he criticized what he considered to be the three basic false assumptions of Marx's theory of value. The first claimed that the only source of value is labour. According to the second, the normal value of commodities is supposed to be measured by the quantity of labour they embody. Finally, all kinds of labour are considered as reducible to one simple kind, which would be used as the standard unit of measurement.

On the other side, using his own theoretical framework, Walras imagines the substitution of one single entrepreneur, the socialist state, for the multiplicity of the market economy's entrepreneurs. He also assumes that the only services used in production do come from labour power. Lands and physical capitals belong to the state which can therefore use their services freely. The disappearance of the market system prevents the working of the *tâtonnement* process of equalization of supplies and demands: equilibration

is much more difficult. Walras concludes in favour of a socialist solution based on cooperative firms and asserts the failure of Marxian socialism, from both theoretical and practical viewpoints.

Vilfredo Pareto

Pareto made substantial comments on the Marxian theory of value, both in a book dedicated to the analysis of socialist systems and in specific articles he wrote for the publication of Volumes I and III of *Kapital* in French translation.

Pareto naturally criticized Marx on the usual problem of the productivity of capital. His argument is, however, more original than the standard one. He accepted, as an assumption, the idea that, *a priori*, 'simple' labour could be considered as the common factor of two exchangeable commodities. However, even in this case, the fact of taking into account the 'normal external circumstances' of the exchange implies the mention of capital as a part of those circumstances. Therefore, unless we beg the question, the productiveness of capital must also be considered when we evaluate the exchange ratio of two commodities (Pareto, 1893, pp. 44–7).

Pareto also criticized the existence of a specific good (labour power) the use value of which is to create abstract value, when the beginning of *Kapital* explicitly excluded the concept of use value from the scene (Pareto, 1893, p. 57).

He also pointed out the difficulties related to the process of transformation of complex into simple labour. Either this process was not different from the market, i.e. from the intervention of wage rates, and there was then no possibility of explaining the differences in wages or in equalities of labour. Or, the process did not use the market and it was then not at all clear what kind of transformation Marx had in mind (Pareto, 1893, pp. 53, 61, 62 and 1902–03, p. 368).

Pareto also contested the use of average magnitudes by Marx, especially to solve the problems of equality between values and prices, of the various compositions of capital, etc. (see, for instance, Pareto, 1902–03, p. 357).

Finally, Pareto also discussed the problems raised by the necessity of relating Volumes I and III of *Kapital*: the degree of consistency between the definitions of value (in Volume I) and price (in Volume III); the compatibility between *absolute* values and *relative* prices (Pareto, 1902–03, p. 357); the process of determination of surplus-values, profits and production prices—and so on.

Léon Winiarski

Pareto was never a socialist, while Walras claimed to be a 'scientific' one. Winiarski was a former Marxist who gradually accepted Walras's theory.

Like Sorel and Pareto, Winiarski considered Marx's economic works as a whole, having read Volumes I, II and III of *Kapital* (Winiarski, 1897). He too proposed a systematic critique of the Marxian theory of value.

We find in Winiarski the usual critique of the productiveness of capital and he contested what he considered to be the three main Marxian assumptions. He first denied that abstract or simple labour could be considered as a common ingredient of all goods. Thus, non-reproducible goods were made with specific human resources and it was difficult to use them to begin a new process of production for the following period. Therefore, that type of commodity could not include simple labour, as reproducible commodities do (Winiarski, 1896, p. 85).

Winiarski then discussed the elimination of use value as a common quality of exchangeable goods. He showed that some natural resources were, above all, useful and did not differ economically according to the quantity of labour they embodied (*ibid.*, p. 85). Value theory had to make room for utility. Without any reference to subjective consumers' desires, 'value became a metaphysical entity' (*ibid.*, p. 85).

Finally, like Pareto and Sorel, Winiarski pointed out some of the problems related to Volume III of *Kapital*, for instance, the self-consistency of the process of profit rates equalization (Winiarski, 1897, p. 109) or of the fall in the average rate of profit (*ibid.*, pp. 107–8).

CONCLUSION

Three main remarks provide a provisional conclusion.

First, the conditions for the introduction of Marxian economic analysis into France were far from being ideal. The first Marxists were not original thinkers and it is even doubtful that they understood correctly Marx's theoretical messages. The consequences were crucial: Marxism developed in France without any serious theoretical foundation.

Second, some non-orthodox socialists understood Marx better but most of them renounced Marx's theory of value and adopted alternative conceptions.

Finally, little room was left for economists who could have used Marxian theory as a possible component of the economist's tool box. This situation led theoreticians to face another choice: either to join the rising marginalist economics, or to invent a completely new approach.

NOTE

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PRESERVING DUTCH MARXISM FROM RIGIDITY?

Marxism and marginalism in the Netherlands before World War 1

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INTRODUCTION

Dutch Marxist economics had already been dead a few years when someone finally delivered a funeral oration. In a lengthy polemic following the publication of Sam de Wolff's 1929 *Het Economische Getij* (The economic tide), Van Gelderen, who had been a Marxist before World War 1 publishing under the pseudonym J. Fedder, mentioned the fine qualities the deceased once had, but insisted that the dead should be left to rest in peace. He wrote:

Retaining [Marxism] impedes the view on social phenomena even on questions which concern the economic struggle of the labouring class in a direct way.

(Van Gelderen, 1930, p. 875)

With one or two exceptions, all socialist economists agreed and thirty-eight years passed before Van Santen ushered in the resurrection with his *De Marxistische Accumulatietheorie* (1968).

The socialist economists standing around the grave of Marxism were looking down at their own victim: instead of reshaping Marxism to fit the post-World War 1 needs, they had focused on using and supplementing 'modern subjectivist economics'. They considered themselves socialist but not Marxist economists (Kalshoven 1993, 1994).

In this chapter I discuss Dutch Marxist theory before 1916, briefly introducing Dutch School Marxism and looking at the mixture of marginalist and Marxist economics of two odd men out, adversaries of Dutch School Marxism. I intend to show that the prewar developments explain the rise of neoclassical at the expense of Marxist economics in the interwar years. I focus on developments in theory; political and 'real' developments will be

mentioned only in passing. This is not to say that the other developments are unimportant for the historical question under consideration. But theoretical developments deserve a discussion of their own.

The thesis I want to put forward about prewar theory is twofold. First, in the 1900–16 period there was a Dutch Marxist School, that is to be distinguished from both ‘Second International’ Marxism and the Austrian School of Marxism. However, the individuals constituting this Dutch School were not very conscious of their own ideas and as a consequence failed to present their ideas as a distinct position. When the majority of important individual theorists sought other pleasures than writing on Marxist theory around 1916, Dutch School Marxism disappeared. They had not prepared a new generation to continue their work. The second part of my thesis concerns marginalism. In the first decade of this century two major studies appeared in which the authors tried to combine marginalism and Marxism. It would be safe to say that they were ignored in the Netherlands at the time. But unlike most of the Dutch School theorists these authors persevered. One of them, Christiaan Cornelissen, made a name for himself in France where he published a respectable oeuvre and found readers for it too. Rudolf Kuyper, the other author, was successful in the Netherlands: he became ‘privaat-docent’ (‘university teacher’) at the University of Amsterdam in 1920 and Professor of Sociology at the University of Utrecht in 1931. As if to symbolize the turn of the tide, his study on the relation between marginalism and Marxism was reprinted in 1920 together with the rest of his early work. If not the content, at least the spirit of his early work influenced the new generation of socialist economists which came to the fore in the interwar years. As far as prewar theoretical developments are concerned, I would want to explain the decline of Marxism in the interwar years in terms of the abrupt withdrawal of the most important theoretical leaders of Dutch School Marxism and the perseverance of those who focused on marginalism or sought to combine it with Marxism.

Next I summarize the theoretical work of the Dutch School and try to indicate its success and limitations. Given the aim of this volume I discuss Dutch School Marxism only briefly. The following section is devoted to a more elaborate account of the theoretical work of the outliers of the prewar period, Christiaan Cornelissen and Rudolf Kuyper.

THE DUTCH SCHOOL

By 1900 the Sociaal-Democratische Arbeiders Partij (SDAP), founded in 1894 after the German model, had won the battle from the older Socialistische Bond which had become more and more anarchic in the 1890s: the remains of the Bond merged with the SDAP which would remain the most important socialist party in the Netherlands up until World War 2. In 1896 a journal was founded called *De Nieuwe Tijd* (DNT). This both

financially and politically independent journal would remain the platform for theoretical discussion up until 1916. Even after the party split in 1909 both members of the SDAP and the newly founded Sociaal Democratische Partij (SDP) continued publishing their theoretical work in this journal.¹ Urged to do so on a number of occasions by Rudolf Kuyper (who became one of the editors), the SDAP founded its own journal in 1916, the *Socialistische Gids* (SG); this journal took over as the leading theoretical journal from *DNT* and would serve as the platform for the marginalist socialists in the interwar years. After 1917 *DNT* came under the influence of the Third International through the Dutch Communist Party, and the journal was discontinued in 1921.

DNT was the journal in which Dutch School Marxism developed. Its story may be told best with reference to the first all-embracing Marx-critique by Treub (1902/03). This will have to be a brief version; see Kalshoven (1993a) for the complete story. Treub had begun criticizing Marxism and socialism in the early 1890s in a sympathetic way—he was not a neoclassical economist² but was influenced by the Historical School (Vermaat (1987) on Treub).³ His 1902/03 critique traced the background of Marxism and discussed Marxism systematically: from philosophical foundations, methodology and historical materialism through the theory of value down to tendencies of accumulation. The second part of his critique sought to refute the ‘derived laws of motion’ empirically. His literature was up to date and covered the international, i.e. mostly German-speaking, discussions. The critique made an impact. The editors of *DNT* responded in a unique way. They wrote (and had others write) anti-critiques on every subject: the total number of pages of these anti-critiques easily outnumbered Treub’s 800-page critique. Treub’s critique was up to date, internationally oriented and clever, yet it hardly applied to the work done by Dutch Marxists. They pointed this out in their anti-critiques, which all began by saying that Treub did not understand Marxism. In fact, his criticism applied very well to Second International Marxism.

Analysing the contributions of Dutch Marxists to the different fields in the 1900–16 period, it becomes clear that they constructed their own version of Marxism.⁴ The astronomer Anton Pannekoek (1901, 1909, 1913, 1938) combined the views of Joseph Dietzgen and Ernst Mach to formulate a philosophical foundation of Marxism which I have tentatively called ‘phenomenological monism’. This philosophy had its repercussions on the way Dutch Marxists understood historical materialism. J.Saks (1905/07) refuted the Böhm-Bawerk version of the ‘transformation problem’,⁵ and formulated his own interpretation of the structure and primary goals of Marx’s analysis of value in the three volumes of *Capital*. Saks’s interpretation is not unlike those of later writers such as Franz Petry (1916), Alfred Lowe (1938) and Paul Sweezy (1942). Saks further analysed the tendencies of accumulation: first, Saks (1910) theorized about a new

form of the pulling together of capitals which he called ‘combination’ (to be distinguished from both centralization and concentration) and, second, Saks (1908) made the first step towards a theory of the business cycle (rather than a stagnation or crisis theory). J.Fedder (1913) and Sam de Wolff (1915) elaborated upon this latter work. Fedder developed it into the first theory of the long wave; de Wolff derived his business cycle theory from Marx’s reproduction schemes and refuted, or at least tried to refute, Hilferding’s and Luxemburg’s criticism of the schemes. The combination of their philosophical position, the value-theoretical position and the work done on the tendencies of accumulation (including the writings on business cycles and the long wave) were a distinct Dutch contribution, possibly unique and certainly different from the theories defended and positions held in other countries.⁶

The explanation of the decline of Dutch School Marxism involves several layers. Around 1916 the vast majority of the people constituting the Dutch School turned away from theory. Saks broke down physically and mentally in 1912 and left the editorial board of *DNT* of which he had been a most important member. Thereafter he concentrated on writing (historical materialist) biographies of Dutch nineteenth-century novelists. Pannekoek accepted a position at the University of Amsterdam in 1919 and concentrated on astronomy (although he remained active in the labour movement and summarized his philosophical views in his 1938 book against Lenin’s (1908)). Pannekoek’s astronomy made him famous all over the world (van den Heuvel 1992). Van Gelderen left for Indonesia where he became the director of the Bureau of Statistics; after his return he delivered the funeral oration mentioned above in the introduction. Only de Wolff continued his theoretical work. Influenced by a series of methodological articles by his life-long friend Jacob van der Wijk (1921), de Wolff (1925, 1929) tried to give Marxism individualistic foundations (see Kalshoven, 1994; Plasmeijer, 1988).

This exodus meant the end of the Dutch School. As long as all of them were involved, *DNT* served as the platform and hence the connecting institution of Marxist theorists. With their departure some ‘strategic defects’ came to the surface. For one thing, their theoretical work was not easily accessible. They had never bothered, or taken time, to write books, although some of the articles published in *DNT*, such as Saks’s 200-page series (1905/07) on the theory of value, could easily have been rewritten and published as such. Furthermore, a large part of their theoretical work was written in the course of passionate debates and therefore was both scattered and integrated with highly polemical passages. In short their theoretical work was buried in over two hundred issues of *DNT*. Young postwar socialists interested in theory neither had the personal guidance nor (accessible) literature to continue the work of the Dutch School.⁷

Instead young socialists founded a new party journal, the *SG*, edited by

heavy-weight theorists such as Bonger, an internationally respected criminologist who considered the group around *DNT* to be a 'bunch of radicals', and Kuyper, who had a grudge against (the editors of) *DNT*. Although his articles on the theory of value appeared in *DNT*, Kuyper had been ignored completely. In a retrospective article Hilda Verwey Jonker (1938, pp. 332–3), one of Kuyper's pupils when he was professor in the interwar years, accurately describes the tense relationship between the editors of the newly founded *SG* and the group around *DNT* when she argues that Kuyper was the theorist who 'preserved Dutch Marxism from rigidity', whereas the work of 'orthodox Marxists' such as Pannekoek and Saks, 'turned out to have been fruitless'. In short, and to put it mildly, the *SG* did not encourage the further elaboration of the work of the Dutch School.

The decline of Dutch School Marxism therefore must be explained in terms of a number of interrelated reasons, the most important of which are the withdrawal of the theoretical leaders from Marxist theory, the relatively poor accessibility of the writings of the theorists of the Dutch School, and the negative attitude to their work of the editors of the new journal *SG*.

THE OUTLIERS: KUYPER AND CORNELISSEN

While the Dutch School theorists enjoyed their years of glory, Marxists with dissenting theoretical views did not find an audience. Both Rudolf Kuyper and Christiaan Cornelissen were odd men out, but for completely different reasons. In the 1890s Cornelissen had been the right-hand man of P.J. Troelstra, the leader of the Socialist League. Like Troelstra, Cornelissen did not approve of the ideas put forward by the SDAP and together they had lost the political battle. Cornelissen (1891, 1898/99, 1899/1900) had also tried to fight a theoretical one but his critical pamphlet and articles had been neither convincing nor successful. Cornelissen's (1898/99) article on the influence of Hegelian dialectics on Marx had been ridiculed by Saks (1898/99). Cornelissen made a new start in France where both his anarchistic political ideas and his economics were received enthusiastically. By 1903 he had not written off the Netherlands completely. His first book was written in French, but a Dutch edition appeared simultaneously with the French one. The Dutch edition was ignored completely and Cornelissen's later works were not translated into Dutch.⁸

Kuyper on the other hand was a well-respected member of the SDAP.⁹ The lack of recognition for his work amongst fellow theorists before World War 1 seems to have been caused only by the work itself. It is not hard to understand why this would be the case: he described the Austrian theory of value as 'logically incontestable' and this was 'not done'.

Both Kuyper and Cornelissen tried to combine elements of Marxism and marginalism in order to overcome the shortcomings of both approaches to

the theory of value. Given the aim of this book I look into their attempts in some detail. The next section contains an analysis of Kuyper's 1902/03 series of articles *Over Waarde*, and the following section is devoted to Cornelissen's *Theorie der waarde. Kritiek op de theorieën van Rodbertus, Karl Marx, Stanley Jevons en Von Böhm-Bawerk* from 1903 in which he tries to synthesize the Austrian theory of value and the Ricardian/Marxian theory of value in a historical approach to the theory of value.

Kuyper's preference for Austrian theory

Kuyper was the first to try to maintain Marxist 'macro-theory' on the foundation of the Austrian theory of value. He tries to show that the Austrian results are identical with those of a labour-embodied theory of value, provided that certain assumptions are made. Austrian theory is supposed to explain relative prices causally from individual preferences and endowments (given technique), while the parallel conclusions of the labour theory of value maintain the Marxist conclusions concerning surplus value, its accumulation etc. Kuyper wanted to preserve not only 'macro-theory' but also the Marxist theory of historical development, historical materialism, which, in his view, was the most valuable theory of Marxism.

Kuyper himself formulates his aim thus:

[While] admitting the untenability of Marx's value-theory *qua* theory of value, I want to prove that commodity-exchange according to quantities of labour agrees sufficiently with reality to keep this theory of value as the basis of the Marxist system.

(Kuyper, 1902/03, p. 177)

The idea that a theory of value can serve different purposes is important for Kuyper's discussion. He follows von Struve in making a distinction between Marx's theory of value as a theory of exploitation and a theory of value proper.

The first problem relates to Marxist value, the second to exchange-value in the conception of bourgeois economists.

(Kuyper, 1902/03, p. 203)¹⁰

As a theory of exploitation, the theory of value is an important part of historical materialism. According to Kuyper, this theory does not ask

how the *real exchange-value* of the social product is divided among the *real exchange-values* representing wages, profits etc., but how the socially produced *quantity of labour* is broken up.

(Kuyper, 1902/03, p. 206; cf. pp. 177, 189)

In the three volumes of *Capital* Marx meant to concretize historical materialism for the capitalist epoch. Therefore, his theory of value is not, or

at least not primarily, a theory of value and price in the narrow sense. Nevertheless, if Marx's theory of value is judged as a theory of value, the Austrian criticism is justified.¹¹

The above implies that Marxism lacks a theory of 'real value'. Austrian theory fills this gap. Kuyper (1902/03, pp. 155–72) discusses the Austrian view on value, price, rent, interest etc. in detail, amending the theory only on minor points.¹² Kuyper accepts the Austrian theory as a theory of 'real value', but he stresses the point that it does not penetrate to 'the essence of social phenomena'. Austrian theory

portrays economic life from the outside, with more detail but not more deeply than do businessman A, banker B or grocer C.... In opposition to this stands Marxism, the economic part of which is wholly an appendix and result of 'historical materialism'.

(Kuyper, 1902/03, pp. 174–5)

Kuyper tries to prove that labour-embodied value is equal to 'real value' under certain assumptions.

After establishing that in production without capital exchange is guided by labour-value because labour is the only production-factor (neglecting land), Kuyper deals with capitalism.

The working class gains only part of the quantity of labour performed by it. As capital-owners, land-owners and businessmen claim part of the social product via the real exchange-value, these categories also get the quantity of labour embodied therein.

(Kuyper, 1902/03, p. 208)

The 'real value' of the services of businessman, capital owners and land-owners is their value as derived in Austrian theory.¹³

Kuyper now analyses the relation between labour-value and 'real value'. He defines *direct* labour-value as the quantity of labour embodied in commodities (and excludes the commodity labour-power from this) and *indirect* labour-value as the quantity of labour embodied in the rewards for production factors (wages, profits, rent). In Kuyper's terminology Marx assumes in the first two volumes of *Capital* that real exchange-value coincides with direct labour-value. If real exchange-value really coincides with direct labour-value, the sum of the real rewards for labour, capital etc. have to coincide with indirect labour-value. Unfortunately he takes the argument one step further and asserts that it follows that the real value of profits equals surplus-value. This is not implied in his analysis.

If the real value of commodities coincides with their direct labour value, Kuyper continues, Marx's analysis in *Capital* I and *Capital* II is not affected by the criticism levelled against his labour-value theory. According to Kuyper the logical consequence of

the fact that real exchange-value and direct labour-value coincide is all that is required to maintain Marx's theories on surplus value, the capitalist's aim to enlarge it, the rate of surplus-value, capital formation, accumulation and circulation.

(Kuyper, 1902/03, p. 209)

But,

Dissection of production-costs immediately shows that in the real capitalist mode of production these values do not correspond.

(Kuyper, 1902/03, p. 209)

Yet, according to Kuyper, something can be said about the relation between real value and labour-value. In the exchange of two commodities produced in sectors wherein the real value of capital is proportional to the real value of wages—i.e. the organic composition of capital measured in units of real value is equal for both commodities—production costs are proportional to wages, and therefore proportional to labour-embodied value. If this assumption holds for all commodities in a society, then Marx's theory of value has absolute validity.

This implies that Marx's analysis in the first two volumes of *Capital* is to be understood as an analysis of an abstract, 'Gedankliche', capitalist society. Yet, according to Kuyper the conclusions derived from this analysis

can be applied to real capitalist society without reservation, since the assumption 'proportionality of real exchange-values to the component parts of production costs' has nothing to do with the essence of the tendencies of development of capitalism.

(Kuyper, 1902/03, p. 210)

Kuyper's view on the implications of his analysis for volume III of *Capital* is a bit strange. He deals with this volume only briefly, writing that volume III shows that

the law of value [i.e. exchange at labour-values] holds for a society in which capitals have the same organic composition of capital measured in Marxist value, and have the same turn-over time and where the risk-premium is absent.

(Kuyper, 1902/03, p. 211)

This is a strange emphasis on the contents of volume III because, as we know, the consequences of the inequality of capital compositions and the inequality of turn-over time are analysed in that volume. Because Kuyper does not discuss these consequences he can argue that the proportionality of real exchange-value to labour-embodied value analysed above does hold. He concludes:

This proves the validity of the view formulated in *Capital* III, i.e.,

that the law of value has absolute validity in a society [where capital compositions are equal etc.], independently of the Marxist reasoning which is rejected in this article. And this also establishes the conclusion about Marxist value. It is not real exchange-value, but it corresponds to it under certain assumptions; therefore it is a 'Thatsache der Wirklichkeit' under these assumptions. And this...value is used, because it gives an objective measure of value and because it illuminates the relationships which remain in the dark or are at least vague in theoretical operations based on the absolutely empirical exchange-value of bourgeois economics.

(Kuyper, 1902/03, p. 211)

Kuyper's reaction to Austrian criticism is opportunist: if you can't beat them, join them. He tried to save historical materialism and the labour theory of value *qua* theory of exploitation by sacrificing Marx's theory of value as a theory of value in the narrower sense. But by accepting the Austrian theory of value, he gave Marxism the kiss of death—even though the kiss would only do its destructive work after World War 1. Kuyper failed in his, in itself courageous, attempt to give Marxist theory an Austrian basis. This not only because the coinciding of 'real value' and 'labour-value' is an exceptional case as in *Capital* III, i.e. holds only under the assumption of equal capital compositions; and not only because his reassuring remark that this assumption 'has nothing to do with the essence of the tendencies of development of capitalism' is a weak, demagogic answer to a sharp theoretical question. This attempt failed mainly because he proved unable to show how the Marxist theory of 'capital in general' is related to Austrian theory of relative prices. Kuyper accepts the Austrian theory of value, which is the most extreme consumer-oriented economic theory, but he does not raise the question how consumption-led production is related to profit-led production (not in the Austrian, but in the Marxist sense).

Yet, Kuyper's value-theoretical work is important for the development of the theory of value in the Netherlands. The opposition of Austrian theory and Marxism is translated into a number of other contrasts by (Dutch School) Marxists. I have already referred to consumption-led versus profit-led production, i.e. the question whether consumers ultimately determine production, as the Austrians would have it, or that the capitalist class has the economic primacy.¹⁴ Other contrasts embedded in the two systems of thought that are formulated by Dutch Marxists are subjectivism versus objectivism and psychological versus social. The former, the opposition between subjectivism and objectivism, relates to the current distinction between micro and macro and refers to the methodological starting-point.¹⁵ The latter concerns the nature of social science. In the Austrian view society is an aggregate of free individuals, each endowed with different psychological dispositions. The Marxist term 'social' stands in opposition

to this conception, meaning that individuals are bound to what is socially possible (unfree) and forced to do what is socially required, Kuyper's value-theoretical study is an attempt to break through the opposition between subjectivism and objectivism, while trying to conserve the opposition psychological versus social (and to repeat an aspect of my critique, Kuyper neglects the opposition between consumption-led and profit-led production).

Critical as he was of him, de Wolff's project in the interwar years was not unlike that of Kuyper. The central theme in de Wolff's work in that period was equally to overcome the distinction between subjectivism and objectivism. As he put it: '*Real* science is "subjective" and "objective" at the same time' (de Wolff, 1925, p. 357).

But in the interwar years, when Kuyper's (1902/03) was reprinted, his reviewers found what they were looking for: a rejection of Marx's theory of value and an appreciation of Austrian theory. As one of them put it:

I would not hesitate to include Mr Kuyper in the marginal-utility school.

(Bordewijk, 1924, p. 47)

Cornelissen's historical approach to the theory of value

Christiaan Cornelissen's attempt to combine Marxist and marginalist insights was worked out better than Kuyper's. Cornelissen's conception of the problem the theory of value faced in his time is the existence of two traditions, both of them analysing value from a certain perspective and both unable to deal with exchange-value. Both traditions posit principles.

These principles are: *satisfaction of human wants* and *production for exchange*. The economists who view the value of human wealth from the standpoint of the first principle start theorizing from the *consumption of commodities*, the others start from the *production of commodities*.

(Cornelissen, 1903, p. 27)

Thus formulated, the solution to this problem follows directly:

As far as the value of commodities is concerned, economic science should dissect value (exchange-value) as it is based both on human wants and on production for the market.

(Cornelissen, 1903, p. 31)

In subsequent chapters Cornelissen analyses use-value, production-value and exchange-value. This division (which will be followed below), as well as Cornelissen's formulation of the problems confronting the theory of

value, would at first sight seem to justify a characterization of Cornelissen as ‘the Dutch Marshall’. I hope to make clear that this would be a mistake.

Use-value

According to Cornelissen, personal use-value as a quantitative pre-market concept is theoretically undeterminable. Qualitatively, he defines it as the

meaning a commodity can have for an individual, varying with the individual needs or desire and the ability of the commodity to satisfy these.

(Cornelissen, 1903, p. 40)

As such, personal use-value varies with the physical, intellectual and moral characteristics of individuals; quantitatively these determinants vary infinitely. This holds for different individuals as well as for the individual’s valuation of a certain commodity. These individual valuations ‘can vary every hour of the day’ (Cornelissen, 1903, p. 41).¹⁶ He criticizes Jevons and Böhm-Bawerk for their ‘naive mathematical representations’, for in his view

there is nothing that proves to us...that, even if the utility of commodities increases or decreases with an increase or decrease in the quantities of commodities, utility follows the schemes drawn by Jevons.

(Cornelissen, 1903, p. 44, n 1)¹⁷

Cornelissen argues that in capitalism the exchange-value (market-price) of commodities influences the personal use-value in a decisive way. In capitalism, exchange-value ‘becomes the natural level towards which the personal economic estimations of commodities turn’ (Cornelissen, 1903, p. 68). The market-price becomes the replacement-value of commodities, the replacement-value the individual valuation of commodities.¹⁸

Production-value

Because of the dependence of personal use-value on market-price, the question arises how the market price is determined. As will become clear below, market price (exchange-value) is determined by the interaction of use-value and production-value. Cornelissen’s analysis of production-value is *historical*, in the sense that he distinguishes epochs by their production- and market-characteristics and he develops different theories of production-value for each one.

He starts with an analysis of production-value in the Middle Ages:

The labour theory of value as a general theory of commodity exchange

presupposes a form of civilization in which the relation between labour and the produce of labour has been established sufficiently to serve as the principle governing transactions, and in which the division of labour has developed itself to the extent that production for exchange has become the general, or at least the principal, form of production. On the other hand it is necessary that costs of production can generally be regarded as simple expenditure of labour and not as expenditure of capital. The rule of the labour theory of value as a general theory of commodity-exchange is therefore restricted to a period of primitive and simple, but constant, relations of exchange, and stationary relations of production, based on craftsmanship.

(Cornelissen, 1903, pp. 156–7)

Yet, labour-value and market price were not identical in the Middle Ages; Cornelissen points to all sorts of state- and city-regulations prohibiting their identity.

In the absence of competition, individual labour-value governed exchange. If there was competition, different individual labour-values levelled towards a more general labour-value ‘more or less according to the social productivity of labour’ (Cornelissen, 1903, p. 163). Perceptively, he points to the fact that exchange at labour-values

implied a social *putting-on-a-par* of two different commodities produced by labour, not an *absolute equality* of two quantities of labour.

(Cornelissen, 1903, p. 165)

From this he develops the concept *social* labour-value. The *productivity* of labour is determined by the intensity of labour, the technical productive force of labour (production-technique), the duration of labour (in time-units) and, in some cases, the use-value of labour (as in the case of a talented artist or scholar). He makes it quite clear that it is impossible to calculate the productivity of labour, and therefore also the social labour-value of a commodity, in the dimensions of its determinants.

Practical life solves the problem of the determination of the quantity of labour by means of a raw and empirical estimation of the commodities—an estimation in which, instead of human labour itself, its result, the produce of labour, is assessed, and in which the duration of labour, its intensity and its technical productive force are taken all together.

(Cornelissen, 1903, p. 177)

Cornelissen develops a stratification model in which an identical commodity is produced by a number of craftsmen using different

production techniques.¹⁹ The *individual* labour-values of the commodity differ as a result of the different techniques. He concludes:

Within a sector of production in which production-value shows itself as plain labour-value, the quantity of labour socially necessary to produce a commodity is the quantity of individual labour necessary to produce that commodity under the most favourable conditions of production, if these conditions can be regarded as obtainable by every producer.

(Cornelissen, 1903, p. 178)²⁰

Contrary to Marx, Cornelissen derives the quantity of socially-necessary labour (social labour-value) from concrete labour. He considers Marx's concepts 'abstract human labour' and 'einfache Durchschnittsarbeit' to be 'metaphysical ghosts'.²¹

In a later chapter Cornelissen reformulates his stratification model to deal with the devaluation of the *production*-value of the existing stock of commodities as a result of the introduction of a new production technique. He introduces the reproduction concept. For *ad-libitum*-reproducible commodities

production-value is estimated by the quantity of labour socially necessary for its production at the moment the production-value has to be realized in the exchange-value and commodity-price.

(Cornelissen, 1903, p. 200)

The capitalist epoch develops from the Middle Ages, first in commerce, later in manufacture as well. The essential difference between capitalist production and production based on craftsmanship is that

for a capitalist businessman the costs of his enterprise do not show themselves as expenditure of labour, but as expenditure of capital. Every cost a businessman incurs for the production of a commodity shows itself to him as a money-cost, the sum total of which he sees as the *cost-price*, which we will hereafter call *costs of production*.

(Cornelissen, 1903, p. 217)

The costs of production include fixed and circulating capital;²² the businessman aims at realizing a profit in exchange.

With the development of capitalist production, production-value takes on the form of: costs of production+profit and therefore expresses itself as the cost-price of the producer plus the profit he wants to realize.

(Cornelissen, 1903, p. 230)²³

In the historical process, the capitalist production- and distribution-relations first expressed a tendency towards the equalization of prices, later

also a tendency towards the equalization of profit. Combined with his stratification model (now, of course, in cost-price money-terms), the first tendency explains the differences in profit-rates between and within sectors of trade and production. Increasing competition of capitals and capital mobility causes a tendency towards equalization of the rate of profit. As a result, *social* production-value emerges, defined as social costs of production and circulation plus average rate of profit within the sector of production.

As can be expected, Cornelissen attacks Marx sharply at this point. Costs of production are, according to Cornelissen, no deviation from the law of value, but a historical transformation of it:

In reality the production-value of commodities went through a historical evolution.

(Cornelissen, 1903, p. 255)

And

[a] deviation of market-prices from the level of actually existing labour-value could have existed rationally only as long as this level was felt in reality, i.e. in the first period of budding capitalism.

(Cornelissen, 1903, p. 256)

Exchange-value

Having left the sphere of production, commodities represent both production-value and use-value. Both still have to be realized. This realization takes place in the exchange-process, a phase that lies in between the phases of production and consumption. The commodity shows itself in this phase as a trading commodity [*handelswaar*].

(Cornelissen, 1903, pp. 257–8)

In capitalism dual coincidence of wants is unnecessary: money provides people with indirect use-value. Producer and consumer become seller and buyer in the capitalist market.²⁴ They trade commodities and money. In this process exchange-value and price emerge.

Exchange value and price are not identical. The former is defined as ‘the proportion in which quantities of commodities are estimated as equals in the market, and in which they are exchanged as equivalents’ (Cornelissen, 1903, p. 291). The price of a commodity ‘is the commodity’s *exchange-value*, expressed in the commodity that functions as the general price-commodity, or, to put it differently, its exchange-value expressed in money. The money itself cannot of course have a price’ (Cornelissen, 1903, p. 262). According to Cornelissen the two concepts complement each other.

The exchange-value of a commodity expresses the capacity of a

commodity to command a certain quantity of commodities (including money: gold or silver) in the market, price is this quantity (including gold and silver) itself.

(Cornelissen, 1903, p. 262)²⁵

Cornelissen uses the metaphor of two confronting powers, production-and use-value, to describe the formation of exchange-value and price. In his view, production-value is the stronger power in most cases, for on the one hand the producers stop production if the market price drops below production costs, while on the other hand consumers have to buy commodities to stay alive, or in modern terms the price-elasticity of demand is low.²⁶ Furthermore, individual consumers choose to buy commodities, given the market prices. In the rest of the chapter on the formation of prices Cornelissen is groping for an understanding of supply and demand, their elasticities, etc., but is unable to reach it.

Finally, Cornelissen describes the latest institutional setting which came about as a result of the emergence of trusts and cartels. In his view, 'monopoly-capitalism' is a new stage of historical development, with specific production and market relations; therefore the theory of value needs to be re-examined. The social tendency towards concentration shows itself to the individual businessman as 'the necessity to pursue a more rational organization of production, and above all to end the cut-throat competition' (Cornelissen, 1903, p. 331).²⁷ Cornelissen distinguishes between the exchange-value of companies and the exchange-value of regular commodities. The exchange-value of the former is determined on the stock exchange; people dealing in stocks are interested only in the use-value of a company, i.e. the company's earning power. Earning power therefore becomes the basis of the exchange-value of companies. Since the earning power of a company can differ substantially from its actual cash value, this development makes the economy crisis prone.

The exchange-value of regular commodities changes as well. Monopolies try to secure their profits by forcing down production costs or by pushing up their prices. According to Cornelissen, the production-value of commodities becomes less important; monopolists set strategic prices.

Insofar as commodity prices remain attached to costs of production under the rule of the modern trusts, these combinations show themselves, firstly, as technical perfectionists of the production and circulation process itself, through economizing and improvements, secondly, as a natural reaction against the primitive and brutal levelling of the rate of profit brought about by competition.

(Cornelissen, 1903, p. 368)

As market-prices become detached from production-value, the

law of the largest net profit rules the behaviour of capitalist monopolists.

(Cornelissen, 1903, p. 371)

Like Kuyper's articles, Cornelissen's study is an example of the way in which creative theorists tried to deal with the challenge created by the existence of two rival schools in economics, neither of which was without its problems. Compared to Kuyper's attempt, Cornelissen's view is better worked out. His central idea, i.e. that the formation of prices differs in successive institutional settings and that the theory of value should take this into account, is defended and illustrated very well. This is not to say that the book is unproblematic. Details and technicalities aside, the major problem, it seems to me, is the determination of individual use-value. Although his argument that personal use-value is influenced, if not determined, by market-prices is a sound one, it also robs him of an independent cause of market-price. If production-value and use-value jointly determine exchange-value (and price), and use-value is determined by price, one either has to conclude that production-value determines exchange-value or one is in need of an independent explanation of use-value.

CONCLUDING REMARKS

Both Rudolf Kuyper (1902/03) and Christiaan Cornelissen (1903) published thought-provoking studies relating Marxist and marginalist theories of value. Cornelissen's ideas were elaborated further than those of Kuyper. Kuyper distinguished between Marx's theory of value as an application of historical materialism to the capitalist epoch, and a theory of value as an instrument to explain relative prices. With respect to the latter Kuyper argued that labour-embodied values equal the 'real value' of commodities, i.e. their value according to the Austrian theory of value, under certain conditions (the most important of which is equality of capital compositions in all sectors).

Cornelissen tried to go beyond such a demonstration; he tried to *integrate* the two theories. In his historical approach he develops different theories of value for different institutional settings, from the Middle Ages up to the stage of monopolistic competition.

Creative as they were, the period and the country in which they looked for an audience, the Netherlands in the period 1900–16, were not ready for the kind of provocation they offered. Dutch Marxists were not at all inclined to consider remodelling Marxism so as to include marginalist arguments. They were drawing up a Marxism of their own: Dutch School Marxism; and had their hands full defending their fresh insights against Treub's (1902/03) Marx critique which was published at the same time. Cornelissen moved to another country to get an audience and found one

in France. Kuyper had to wait for another era. When the Dutch School fell apart around 1916, his time had come. He became one of the editors of the new theoretical journal, the *Socialistische Gids*, and achieved a reprint of his earlier work in four volumes and an appointment at a university. Both Kuyper's lack of success before and his success after World War 1 symbolize the development of Dutch Marxist economics. After 1916 not Kuyper and Cornelissen, but Dutch School Marxists, became the odd men out.

NOTES

- * University of Amsterdam, Department of Macroeconomics, Roetersstraat 11, 1018 WB Amsterdam, The Netherlands. This paper is part of my larger project 'The History of Dutch Marxist Economics, 1883–1939'. Many people have contributed to this project in one form or another. It is impossible to list their names here, but I would like to thank them all. This particular chapter benefited from the comments of Jos de Beus, Mary Morgan, Leo Noordegraaf and Geert Reuten, and from the discussions during the workshop 'Socialism and Marginalism' in Amsterdam, April 1993.
- 1 See Buiting (1989) on the party split; Buiting (1992) gives an overview of the contents of *DNT* (1896–1921).
- 2 The term 'neoclassical' is of course a post-World War 2 invention. Whenever I use the term in this text, it refers to what was known then as 'marginalist', 'subjectivist', 'official' or 'modern' economics.
- 3 De Beus (1984) cleverly named the political position of his group 'Kathederialism'.
- 4 Kalshoven (1993) refutes the thesis, put forward by Howard and King in the introduction to their *History of Marxian Economics* (1989), that important contributions to Marxist economics were made exclusively in German and Russian in this period.
- 5 That is, the criticism that vol. III of *Capital* refutes the first two volumes because (allegedly) Marx assumes exchange at labour-values in the first two volumes, while he shows in the third that this premise is false, implying that the conclusions of the first two volumes must be invalid. Internationally oriented as they may have been, neither Dutch Marxists nor their critics ever got around to the (more penetrating) Bortkiewicz version of the transformation problem.
- 6 The issue of whether these Dutch Marxists constitute a 'school' is open for discussion. They did not consciously try to reshape Marxism along agreed lines. However, they were a group, and were recognized as such. They were called 'De Nieuwe Tijd-group' after the journal. Furthermore, Schumpeter's (1954, p. 223) observation with respect to the physiocrats holds *mutatis mutandis* for Dutch School Marxism: 'They 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'. But unlike the physiocrats, Dutch School Marxism did not have a leader. Marx's work was of course the standard reference, but Marx's work is open to different interpretations, to put it euphemistically. For a more elaborate discussion of this issue, see Kalshoven (1993).
- 7 There are of course further reasons. To name one: the views defended by the Dutch School were not unproblematic. Saks's refutation of Böhm-Bawerk, for

- instance, did not take care of Bortkiewicz's more penetrating critique. Another example is Saks's (1910) work on monopolies. The disappearance of free competition has of course implications for the theory of value but Saks had not even begun to think these through.
- 8 Cornelissen's second major work, *Théorie du salaire et du travail salarié* (Paris: Giard et Brière, 1908), got one review in the Netherlands. See van Blom (1909).
 - 9 See de Jong Edz (1986) for a short overview of Kuyper's life and work.
 - 10 Compare: von Struve (1890). Kuyper (1902/03, p. 189) adds to this: 'With Marx value (exchange-value) is not meant in an absolutely empirical manner... Marx sees in value first and foremost "ein unter dinglicher Hülle verstecktes Verhältnis von Personen" in the analysis of which the link to the real exchange-ratio must partially be sacrificed'.
 - 11 See Kuyper (1902/03, pp. 189–99) for his critique of Marx's value-theory.
 - 12 With regard to the theory of interest for instance, Kuyper (1902/03, pp. 169n2) observes: 'My treatment of interest is identical on the major points to Carl Menger's "Nutzungstheorie", which in my view is not different from... Böhm-Bawerk's "Agiotheorie".' And indeed in Kuyper's treatment of interest we find Böhm-Bawerk's famous *drei Gründe*, with emphasis on the psychological ones, e.g. time-preference (Kuyper, 1902/03, pp. 168–9).
 - 13 See, for the determination of these values (Kuyper, 1902/03, pp. 167–72).
 - 14 Compare Luxemburg's (1913) much discussed metaphor of the 'merry-go-round which revolves around in empty space'; see also pp. 212–18.
 - 15 Another way to describe this contrast is between individual and aggregate analysis. Van der Wijk (1921) is the first to introduce the micro-macro distinction for economics, using a metaphor from thermodynamics (see Kalshoven, 1993b). Hence, Hal Varian's account of the history of the term micro-economics in *The New Palgrave* seems to require correction, since he locates the introduction of the micro-macro distinction in the early 1940s (admittedly, in the Netherlands).
 - 16 Compare Cornelissen (1903, pp.46, 49 and 56) where he speaks of 'capricious, infinitely changeable', 'in their working untraceable', 'expressions of the soul'. He even relates the quantitative side of personal use-value to probability-calculation: 'If probability-calculation could serve economic science, it could surely not help as far as the purely subjective and individual estimations of use-value are concerned' (p. 49).
 - 17 In the same note Cornelissen criticizes Jevons's choice of dimensions. Jevons claims utility can be conceptualized as a quantity with two dimensions, the quantity of the commodity and the intensity of utility. Cornelissen: 'But why should one not distinguish three dimensions, the *duration* being the third? In Jevons's conceptualization it would then become necessary not only that the *quantity* of the commodity be *infinitesimal*, but also that the duration of the utility be infinitely short.'
 - 18 Note that this dependence of individual use-value on market-price makes it impossible to interpret Cornelissen's work on use-value as neoclassical. The *independence* of individual valuation from the market is of key importance to this theory. See Katouzian (1980, pp. 59 ff.). Besides personal use-value Cornelissen develops the concept social use-value.
 - 19 Cornelissen assumes depreciation of fixed capital to be equal for all craftsmen. The value of intermediate commodities, bought in the market at their exchange-value, enters the production-value of the final commodities directly (ibid., pp. 179, 201 ff.).

- 20 Individual advantages should be regarded as constituting a monopoly. Productivity increases resulting from a monopoly do not enter into calculation of the quantity of socially-necessary labour.
- 21 Cornelissen (1903, p. 181); see pp. 181–97 for a critique of Marx’s concept of the value of labour, the distinction between labour and labour-power and the reduction of heterogeneous to homogeneous labour.
- 22 After a sharp attack on Marx, Cornelissen (1903, pp. 235 ff.) includes circulation costs as well. He uses transportation costs to explain the geographical size of the market.
- 23 The businessman calculates his (money-)profit on his whole (money-)capital. Consequently, Cornelissen disagrees both with Marx’s analysis of profit and the Austrian productivity analysis. For a critique of the latter analysis see Cornelissen (1903, pp. 305–15).
- 24 Cornelissen attacks Jevons for his narrow market concept. If perfect competition and small market actors are necessary preconditions for a market, hardly any markets exist. According to Cornelissen (1903, p. 259) ‘any place where buyers and sellers meet and trade’ is a market. He distinguishes markets by numbers of buyers and sellers, geographical territory, etc.
- 25 Cornelissen (1903, p. 264) points to the fact that the exchange-value of money is not constant. Therefore the exchange-value of a commodity can remain constant, while its price varies with the exchange-value of the price-commodity.
- 26 Contrary to Marshall he does not use the concepts long and short term to analyse their strength.
- 27 Cornelissen (1903, part six) argues that monopolies are stable; he develops arguments about blocked market access, strategic pricing, market power on the markets for inputs, and the amount of capital and the time-span necessary to compete with a monopoly.

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VALUE THEORY AND RUSSIAN MARXISM BEFORE THE REVOLUTION*

Michael Howard and John King

TUGAN-BARANOVSKY

Until the 1890s value theory in Russia was completely dominated by Ricardian and Marxian ideas, disseminated most influentially by N.Ziber (Scazzieri, 1987). There was no trace of an Austrian, Jevonian, Marshallian or Walrasian school, and—after an abortive flourish in the early 1860s—no discussion whatever of marginal utility theory in the Russian literature (Dmitriev, 1908, pp. 16–17; Kowal, 1965, p. 144; Shukov, 1988, pp. 9–10). Somewhat paradoxically, the propagation and appraisal of neoclassical economics in Russia was achieved very largely by Marxists of various persuasions. This was part of a broader movement in which liberal ideas gained influence through the intellectual activities of the ‘Legal Marxists’, who attempted to use Marxism as a tool of analysis within the confines of the Tsarist censorship.

Thus it was that the first critical analysis of marginal utility theory came, in 1890, from the pen of a young graduate student, Mikhail I. Tugan-Baranovsky.¹ It is not surprising that he concentrated upon Austrian versions of the new theory; reflecting the dominance of the SPD in the Second International, Russian Marxists turned almost automatically to German-language sources in their search for foreign intellectual stimuli. After summarizing the views of Menger, Wieser and Böhm-Bawerk, Tugan began his own analysis by distinguishing ‘two different types of theory of value: in some theories it is the investigation of subjective elements of value that predominates; in others the study of objective elements’ (Tugan-Baranovsky, 1890, p. 127). Taken in isolation, Tugan maintained, neither is sufficient:

a theory of value restricted to the study of only the subjective causes of value cannot be considered a full and complete theory. It is necessary to go further and consider thoroughly the objective causes

of value. Wieser and Böhm-Bawerk do this, but not sufficiently fully, because they do not distinguish adequately between the subjective and objective view-point in the scientific theory of value.

(Ibid., p. 219)

Significantly, this distinction has remained central to Marxian criticism of neoclassical economics.

Before developing this theme, however, Tugan turns to two subsidiary questions. First, he dismisses Wieser's claim that marginal utility theory is historically specific to an advanced stage of civilization, while the labour theory of value applies (and applies *only*) to primitive societies.² It is mistaken because 'as far as we know, the principles of evaluation are in general the same both in contemporary civilized society and among uncivilized peoples' (ibid., p. 221). This assertion is difficult to reconcile with Tugan's Marxism and he offers no evidence for it; it reflects more closely the universal quality of neoclassical theory. The second minor issue is raised by Wieser's contention that

capital is not materialized human labour because the production of capital requires further capital. In the contemporary economic system capital is essential in all branches of production; therefore in calculating production costs it is impossible to ignore elements of capital. How is it possible to calculate the amount of labour expended on the production of a given economic good from the very beginning of history, when man existed without capital, up to the present day?

(Ibid., p. 223)

Tugan correctly dismisses this problem as irrelevant to any correctly specified labour theory of value. Although it is indeed 'impossible to calculate the labour expended on the production of a given good in the course of the entire historical process', such calculations are unnecessary since labour value is defined as the quantity of labour required to reproduce a commodity today, with the existing technology. Thus 'the labour theory maintains that the value of a product depends on the cost of production under given technical conditions. We must confine ourselves to the calculation of the labour cost of the good under contemporary conditions of production' (ibid., p. 223).

Having disposed of Wieser's critique of the labour theory, Tugan returns to his principal theme, 'the objective causes of natural value' (ibid., p. 224). He makes it clear that his own analysis applies only to 'an ideal state where there is neither compulsion nor deceit and where all producers operate under identically favourable conditions' (ibid., p. 224). Tugan also describes this as 'our ideal *socialist* state' (ibid., p. 225; emphasis added).³ Beginning his analysis of value theory prior to the publication of Volume III of *Kapital*, and thus before Marx's published analysis of the transformation

of values into prices of production, Tugan also sometimes interprets the labour theory of value as a cost of production theory, where 'labour' is regarded not as the only cost but rather as shorthand for 'all costs of production'.⁴ The core of the argument concerns the implications of utility maximization when commodities are produced by labour, overcoming the 'resistance of nature' in each activity at constant average costs, which need not be the same in every line of production:

In our economic activity we strive for the acquisition of maximum utility. If we paid no attention to the element of resistance then our needs would be satisfied approximately in equal measure. However, as the facts of real life show us, our needs are not satisfied equally. In order to explain this we must turn to another element of economic activity—specifically to the resistance overcome in production.

(Ibid., p. 224)

Utility is under the control of the human will, while nature's resistance is not:

There is no doubt that the factor which does depend on us is subject to the influence of the factor which does not. In other words, in our economic activity we will regulate the quantity of goods we produce, and therefore also their marginal utility, in a way corresponding to the resistance which is overcome in their production. The cause of the different marginal utility of goods will be the difficulty of production.

(Ibid., p. 225)

Tugan illustrates his argument by reference to a two-sector socialist economy where society's utility function values each commodity equally,⁵ while their labour costs of production differ. (He does not elaborate on the presumed social welfare function, and there is no indication that he was aware of the difficulties that arise with it.) Following Menger,⁶ Tugan assumes that the first unit of either commodity yields a marginal utility of 10, the second of 9, the third of 8, and so on. One day's labour is needed to produce each unit of A, while two days are required for the production of one unit of B. If society has four days' labour at its disposal, it should produce only A, since the total utility obtained ($10+9+8+7=34$) is greater than that which would result from the production of two units of A plus one unit of B ($10+9+10=29$).⁷ If, however, eight days' labour were available, it would be advantageous to produce both goods. If society were to spend three-quarters of its time on A and one-quarter on B, it would produce six units of A and one unit of B, with a total utility of ($10+9+8+7+6+5+10=55$). This exceeds the total obtainable by producing eight units of A, and no B ($10+9+8+7+6+5+4+3=52$). Tugan shows that any further increase in the output of B at the expense of A will reduce utility.⁸

He concludes by asking 'what would be the marginal utility of articles A and B in the case where we spent eight days on their production? The marginal utility of A=5 and the marginal utility of B=10. Now A requires one working day for its production and B requires two. We see that the ratios of marginal utility and of outlay are the same' (ibid., p. 226). This is true only of goods which are freely reproducible, and not of such items as statues and rare wines. Nor does it apply to cases where competition is restricted and, in consequence, 'value is influenced not only by natural, but also by social obstacles to production' (ibid., p. 228). But these are exceptions to the general rule that

the value of economic goods generally corresponds to their marginal utility. Marginal utility is a derivative factor; the resistance to be overcome is a fundamental factor. The economic principle requires that we establish the marginal utility of articles according to the difficulty of their production.

(Ibid., p. 226)

Thus, Tugan argues, the followers of Menger were wrong to assert that the labour theory of value must be replaced by marginal utility theory:

we have tried to show not only that marginal utility theory does not contradict the views of Ricardo and Marx, but that on the contrary it presents an unexpected confirmation of the teachings of these economists. Menger and his school studied the subjective causes of value; Ricardo and his followers the objective causes. Before Menger it was possible to think that the evaluation of a good by its marginal utility did not correspond to the evaluation of the same good by its labour cost. Marginal utility theory shows that the two principles of evaluation are in agreement with each other and that this agreement is the greater, the more closely the division of national labour follows the economic principle.

(Ibid., p. 228)

As far as the Russian literature is concerned, this was a strikingly original argument. However, broadly similar conclusions had already been reached by Jevons and Wicksteed, and proposals along the same lines were published in the very same year both by Alfred Marshall (in the important Appendix I to his *Principles*), and by Heinrich Dietzel in a long article in the *Jahrbücher für Nationalökonomie und Statistik* (Marshall, 1962, pp. 670–6; Dietzel, 1890).⁹ Tugan-Baranovsky cites no such source. Although Tugan was well versed in English economic history, he does not seem to have taken Marshall (or other English writers) at all seriously as theorists. The general tenor of Dietzel's argument is so similar to Tugan's, however, and the *Jahrbücher* so widely circulated in Russia, that the possibility of plagiarism cannot be ruled out.¹⁰ But, in view of Tugan's subsequent unquestioned

eminence as a theorist, and given the total lack of documentary evidence (for example precise submission and publication dates), it seems reasonable to give him the benefit of the doubt and to regard this as yet another case of the simultaneous discovery of an idea whose time had come.¹¹

BULGAKOV AND FRANK

Tugan's article was initially ignored by Marxists and non-Marxists alike, and there was no serious discussion of the issues that he had raised for another eight years. Conrad Schmidt's early critique of subjective economics (see chapter 2) seems to have gone unnoticed in Russia. The impetus for renewed debate seems eventually to have come from the appearance (in November 1894) of Volume III of *Kapital* and the publication, two years later, of Böhm-Bawerk's famous polemic, *Karl Marx and the Close of His System* (1896).¹² The latter provoked a detailed reply by S.N. Bulgakov (1898),¹³ which anticipated many of the arguments put forward in Rudolf Hilferding's much better known *Antikritik* (1904). In 1895 Bulgakov had published a severely critical review of Volume III (Bulgakov, 1895). Now he rallied to Marx's defence, expressing 'my completely frank amazement at the naivety with which Böhm-Bawerk offers his narrow commercial view of the phenomena of value against the teachings of Marx after, evidently, attentively studying the works of the latter'. In effect, 'Böhm-Bawerk is here simply vulgarizing Marx, lowering his point of view to the level of his own understanding' (Bulgakov, 1898, pp. 346–7).

Böhm-Bawerk had accused Marx (among others) of treating only a special case by confining his analysis of value to the freely reproducible products of human labour. But, Bulgakov maintained, this is a perfectly admissible procedure:

Why, in fact, does Marx take as the subject of his analysis only those goods which are the embodiment of human labour and sweep mercilessly aside those 'rare' objects, 'natural goods' etc. which are so dear to the hearts of theoreticians of marginal utility? Because Marx is not studying market practice *an sich*, but the social interaction determined by economic interaction. The social combination of labour with the production of material goods is an indication of economic interaction, and for an epoch of commodity production this interaction is situated in exchange value (and *eo ipso* also in labour value). Therefore, if not all 'goods' are a direct material expression of this economic interaction, Marx was obliged to isolate a group of goods which do express it directly and to use them in his analysis. The character of certain economic relations is necessarily reflected in the relations of society also to those natural goods which exist in limited quantities and cannot be produced by labour. Together with

commodity value there is a series of 'false' and 'illusory' values. The *form* of exchange values is acquired, on the model of exchange values expressing a social combination of productive labour, by objects which do not in themselves express such a combination: a commodity form is taken by such 'non-material goods' as, for example, conscience, honour, etc., which are inexpressible as money, and by such goods as land, which is also sold as a good. The only possible and correct method of scientific analysis was therefore to separate from the general sum of all types of goods only those in which the basic social relation which conditions the existence of other goods is expressed.

(Ibid., p. 347)¹⁴

Bulgakov continues by offering what he considers to be an indirect verification of the labour theory of value:

Namely, if we compare the value of different goods at the same moment we will see that goods requiring a greater expenditure of labour have also a higher value; or the value of the same goods at different historical moments changes according to the expenditure of labour; it is greater if this expenditure has increased and *vice versa*. Because of the nature of the matter we can go no further than this *approximation* in the factual verification of the labour theory of value.

If by 'value' Bulgakov here means 'labour value', then his claims are true by definition. If he means 'prices of production', then Marx's own transformation of values into prices shows that they are false. In fact Bulgakov has nothing to say about the transformation problem.

But this indirect verification is not the proof of the labour theory, the necessity for which we have agreed upon. And this factual verification does not *logically* confirm in any way its authenticity; it is not even a verification, but an illustration. It is only a more detailed expression of the social relation which is expressed in the labour theory and which does not require proof, because in its direct obviousness it stands *higher than proof*.

(Ibid., p. 348)

For Bulgakov, marginal utility theory represents nothing more than a 'commercial understanding of value which reduces the object of a scientific theory of value to the explanation of exchange ratios, and political economy—roughly to book-keeping' (ibid., p. 349). In its subjectivism, the Austrian school 'stands in sharp opposition to the extreme objectivism of Marx's system' (ibid., p. 349). Bulgakov, elaborating on Tugan-Baranovsky's arguments, maintains that Austrian analysis has two major flaws.

First, it is thoroughly individualistic. Taking as its starting point *individual psychology* and using the simple summation of individual psychologies to explain social life, the Austrian school loses from sight the most fundamental objective of social science—study of social relations and their particular laws.... For sociology the individual simply does not exist. Only by reducing the individual to the social can social science establish any unity and system, concepts which exclude automatically the individual and the accidental.

(Ibid., pp. 349–50)

Second, Bulgakov complains,

the Austrian school also ignores the determinant sign of special economic phenomena: the social conjunction of *labour*. This most important symbol of human economic activity is pushed completely into the background by the analysis of the psychology of the economic subjects; it is their economic *feelings* that are being analysed, not their economic *activity*, their economic life.

(Ibid., p. 350)

Where they do take account of labour, the subjectivists abuse it. Taking over from Adam Smith the concept of labour as ‘a certain sum of unpleasantnesses, difficulties and inconveniences’, writers such as Jevons give ‘a kiss of Judas to the labour theory, attempting to introduce it as a particular case of a more general principle’ (ibid., p. 351). Their error is again methodological, since the theoretical

centre of gravity is thus transferred from the *objective* concept of social labour power to a *subjective*, individual-psychological concept. But this concept must also be sent packing from political economy like its parent—marginal utility. For this concept has also inherited from its parent the original sin of individualism and accident. For one person labour is a burden, for another a joy—and it may even be either for one individual at different moments of his life. But the important thing is that here too there is no echo of the social relation of producers united in the process of joint production, and this thinking belongs not to political economy, but to psychology.

(Ibid., p. 351)

Bulgakov concludes by invoking Sombart’s (1894) discussion of the differences between objective and subjective economic theory, which can be traced back (he believes) to the underlying, and more fundamental, distinction between individual and class analysis:

in Marx (as generally in objective economic systems) the concern is not with *motivation*, but with the *limitation* of the arbitrariness of the economic subjects. Personal motives can be infinitely varied in

any particular case. The question which political economy should ask is not, how does a given individual *want* to act, but how is he *obliged* to act, in what way can he not avoid acting?¹⁵ Moreover, this question must be asked not about individuals, but about whole social groups, united common interests, whole social *classes*. And class psychology is much simpler and wider than individual psychology, for the precise reason that it is class and not individual psychology and represents an abstraction of the latter.

(Ibid., p. 352)

Producers do indeed have an interest in ensuring that they receive for their labour commodities containing an equivalent amount of the labour of others. To this extent, Bulgakov concedes, producers' calculations are correctly characterized by the subjective school.¹⁶ This, however, offers no support for the marginal utility theory of value. He ends his article thus:

But it would be strange to see in this interest a *basis* for the determination of value by labour and to use it to *prove* the latter, as does the subjective labour theory. The very existence of this interest is already conditioned by the existence of commodity production and the presence of certain social relations. It is precisely *this sort of* economic calculation which is a simple psychological superstructure, an inevitable psychological expression of an already existing social fact. It is thus a *result* and not a cause. Therefore the labour theory of value has no need of a psychological foundation. It is a completely objective doctrine, and in developing it not one step need be taken away from strict objectivism.

(Ibid., p. 353)

Writing more from a Ricardian than from a Marxian perspective, Semen Frank (1898)¹⁷ was only a little less uncompromising than Bulgakov in his critique of the Austrian school. Born in Moscow in 1877, the son of a Jewish doctor, Frank was introduced by his stepfather at an early age to populist ideas. Under the influence of Tugan-Baranovsky and (especially) Struve, he became increasingly critical both of the revolutionary milieu of contemporary Marxism and of its theoretical basis (Kindersley, 1962, pp. 67–72). His first article was written at a time (in 1898) when his ideas were still in a state of flux. Apparently the first to acknowledge Tugan-Baranovsky's pioneering work,¹⁸ Frank accepts that, as far as *subjective* value is concerned, the Austrian analysis

is without question correct. There is not the least doubt that Robinson Crusoe, having gathered his harvest, evaluates it in the way that Böhm-Bawerk indicates, or approximately in this way. But for us, as this same author notes, the 'imagined joys and sufferings, thoughts and evaluations of the non-existent Robinson Crusoe' are of no

importance. For us it is important to know how goods are evaluated in our economy, in a social-exchange economy. Therefore the marginal utility theorists need first to prove to us that these joys and sufferings of Robinson Crusoe can serve as a reliable means for us to establish the only thing that interests us: what determines the exchange value of goods in a social economy.

(Frank, 1898, p. 74)

On this question, Frank maintains, they have been much less successful. Drawing on 'a chance remark' (ibid., p. 80) by Adam Smith, the marginal utility theorists claim that the value of freely reproducible goods is determined

not by their own marginal utility, but by this utility insofar as possession of them spares us from the unpleasantness and suffering associated with labour. If a given object has for me a marginal utility of 100, and if I can at any time produce it by means of labour causing a human quantity of suffering the absence of which is equivalent to 10 units of utility, then I will evaluate this object at 10, not 100 units of utility, because in the event that I lose it I will have to expend not 100 but only 10 units. In other words, the value of freely produced goods is proportional to the labour expended on their production. Böhm-Bawerk expresses it thus: 'The product of one day's labour has a value completely equal to another product of one day's labour'.¹⁹ The result is something very similar to the labour theory of value.

(Ibid., p. 78)

But, Frank argues, the apparent agreement between the two theories is 'only superficial' (ibid., p. 79), since

the school of marginal utility theorists does not agree on this point with the classical economists but diverges extremely sharply from them both in its methodology and in its general outlook (something which it itself continually points out). There can be no reconciliation of the two camps.

(Ibid., p. 83)

According to Frank there are several reasons for this. First, it is not true that the same quantity of labour always involves an identical amount of suffering. In fact 'everything depends on the psychological characteristics of the individual' (ibid., p. 79), and for some people work is actually a pleasure. It follows, for Frank, that freely reproducible goods 'are valued according simply to the working time spent on their production, without any reference to whether this labour causes these feelings' (ibid., p. 82). This, of course, is a *non sequitur*. Second, Frank argues, marginal utility theory fails altogether in a barter economy with division of labour:

The whole theory of marginal utility is constructed on this false conception of the value of the product for the producer, which is itself rooted in the no less false, and, in the words of Marx, 'childishly naive', old theory which represents the contemporary exchange economy as the dominion of the 'exchange of surpluses'.

(Ibid., p. 94)

The problem is especially serious in the case of producer goods. 'What', Frank asks rhetorically, 'is the marginal utility of a gun for Krupp...or a pound of kerosene for Mr Nobel?'²⁰ (ibid., p. 94).

The theory of 'imputation' was, of course, designed to answer this question. To the extent that Frank discusses this theory, it is in the context of his third and final argument, concerning the analysis of money. He claims that the Austrian theorists are unable to account for the value of money. They propose two, mutually inconsistent, theories. According to the first, money has value because the precious metals are objects of intrinsic utility as items of personal adornment. But this 'contradicts the best known facts of real life' (ibid., p. 97). The second theory is based—although Frank does not use the term—on the concept of opportunity cost: 'the value of each good is determined by the relative importance of that need the satisfaction of which depends on it. The possession of money affects not simply the satisfaction of requirements for luxury, but also the satisfaction of all other types of need because all other goods can be acquired for money' (ibid., pp. 97–8). Thus the value of money depends on the marginal utility of the goods which must be forgone if it is spent on any particular item. Frank objects:

This answer would be highly satisfactory if it did not conceal a small *petitio principii*. Let us take, for example, a man for whom the value of money is equal to the value of the bread he can buy for it—for example, the value of five copecks equals the value of a French roll. But why are five copecks for him equivalent in value to only one French roll and not two or three, or, for example, to a gold watch? Obviously, only because on the market five copecks buys only one French roll, not two or three, and not a gold watch. If five copecks were to buy two rolls, then the value of this sum of money for our imaginary subject would be equal to two rolls and not one. Thus the value of money is determined by what is obtained for it in the market, but since in the market customers pay only what goods cost we discover that *the value of money is determined by its value*.

(Ibid., p. 98)

Believing that he has disposed of marginal utility theory, Frank defends the classical analysis of value with the aid of a numerical example. Assume that exchange ratios are set arbitrarily at 5 yds of cotton=1 lb of bread =10 lb

of tobacco. Suppose further that 10 hours of labour produce 20 yds of cotton, or 100 lb of bread, or 1 lb of tobacco. Then

it is natural that the production of bread will offer a much greater advantage than the production of cotton and tobacco. Therefore the labour engaged in the production of these two items will switch over to agriculture. This process of transferring the productive forces of the country across different branches of industry will continue until the increased supply of bread lowers the value of this commodity to the point where the following proportions are established: 100 lb bread=20 yds cotton=1 lb tobacco. In this situation all branches of industry will be equally advantageous, because in each of them an identical amount of value can be produced over the same period of time. Therefore the process of transfer of capital and labour from one branch of production to another will cease, and a stable economic equilibrium will be established. Thus the national economic forces of a country strive to enter into a position where goods are exchanged in proportion to the labour expended on their production.

(Ibid., p. 100)

This conclusion, Frank suggests, 'was already a common-place in the teachings of the classical school of political economy' (ibid., p. 100), most especially those of Ricardo, whose analysis 'disposes not only of Say but also the whole of marginal utility theory' (ibid., p. 101n). Like Dietzel (see chapter 2), his basic objection is that Austrian economics has added nothing new.

The classical theory of value is not damaged by differences between the branches of the economy in the proportions of constant to variable capital, Frank argues, even though they cause exchange ratios to deviate from ratios of embodied labour.²¹ This is so because 'we are not interested here in the question of the labour theory of value; what is important is simply that in order to explain the price of goods it is necessary to have recourse to a factor deriving not from the feelings and aspirations of individual personalities, but from the organization of the national economy' (ibid., p. 10). The principal error of the psychological school is, for Frank, methodological. It involves 'a wilful and unjustified transfer of the laws governing subjective value to exchange value' (ibid., p. 101).

In all this the only concession to the subjective theorists comes when Frank considers barriers to the establishment of 'the "normal price" around which all prices met with in the market fluctuate' (ibid., p. 104). These barriers operate generally in the short run, and also, more permanently, under conditions of monopoly; here prices are determined by 'supply and demand'. These, Frank maintains, are 'empty, meaningless words' until the notion of demand is given 'concrete meaning' by marginal utility theory (ibid., p. 106). Although this theory is correct 'only within the limits not

covered by the law of the correspondence of value to labour costs' (ibid., p. 108), these limits are constantly expanding with the growth of syndicates, cartels and trusts, which restrict output and prevent the reproduction of commodities under conditions of free competition. This, Frank explains, is why marginal utility theory has spread so rapidly in the USA, where competition has been most effectively suppressed.²²

Frank's final verdict is staunchly classical:

The conclusion to which we have come regarding marginal utility theory is this: this theory provides a good explanation of value to the extent that the latter falls under the influence of the personal motives of the purchasers, that is, is determined by so-called 'supply and demand'. But since these factors determine not value itself, but only its fluctuations and tendencies in various directions away from the average value, the law discovered by the psychological school governs only these fluctuations. So far as the average value is concerned, this depends not on the marginal utility of goods, but on the law implicit in the very structure of the social economy that value corresponds to the socially-necessary labour expended on the production of economic goods.

(Ibid., p. 110)

This, of course, was a restatement of Marx's position on the causal irrelevance of 'supply and demand' (Marx, 1867, pp. 537–8).

TUGAN-BARANOVSKY AND STRUVE

These major articles by Bulgakov and Frank were published in 1898. In the following year Tugan-Baranovsky returned to the question of value, albeit in a rather oblique fashion. His principal concern was to criticize Marx's theory of the falling rate of profit, which, he correctly claimed, failed to allow for the full effect of mechanization on the productivity of labour and hence on the rate of exploitation. Once this was taken into account, Tugan argued, it was clear that technical change would be consistent with a constant (or even an increasing) profit rate (Tugan-Baranovsky, 1899, pp. 973–82; cf. Howard and King, 1989a, pp. 188–9). Tugan's analysis is very similar to that of Croce (see chapter 5). He illustrated his analysis with two, admittedly extreme, examples; here we focus on their implications for value theory. In the first, the existing labour force of one million workers was reduced by the use of machines to a single man; in the second, all human labour was replaced by animals. In both cases, since products remained scarce, the owners of the means of production would be able to retain their previous incomes.²³

'How is this income to be explained?' Tugan asks.

My explanation is very simple and is *in full agreement with the labour theory of value*. Although in the cases we have looked at the products have value, they have *no labour value*. A machine made by the hands of a worker and replacing him *has a labour cost* of of a worker and reproduce itself then *its labour cost of reproduction* *production*. But if it can work automatically without the assistance *is nil*. In this case the labour value of the means of production=0, the labour value of the surplus accruing to the owner=0, and the labour value of the product=0. [In this sense the machine is rather like land: MH/JK] However, the owner receives the same monetary income as before. But he is no longer a capitalist, his means of production are not capital, and his income is not appropriated surplus labour. The social significance of his income and of his very ownership of the means of production have changed radically, although this is in no way reflected in market relations.

From this flow a whole series of extremely important conclusions. Marx's law of the falling profit rate has proved illusory. Marx's whole abstract theory of capitalism must be correspondingly reworked. Its basis—the labour theory of value—is not only not weakened, it is even strengthened, for the obvious discrepancies with the facts which are unavoidable from the point of view of Marx's theory disappear completely in the light of the new theory.

(Tugan-Baranovsky, 1899, p. 984)

It is impossible to understand why Tugan should regard this as strengthening Marx's theory. 'But at the same time', he continues, 'the labour theory of value acquires another sense and significance. The theory of surplus value requires still deeper changes. Both theories remain in their proper place *as purely sociological theories* having a largely methodological significance for political economy' (ibid., p. 984).

These conclusions were baldly stated. In particular, it is unclear precisely how Tugan's argument could be 'in full agreement with the labour theory of value'; in fact automation has damaging implications for the Marxian theory of value (Howard and King, 1992, pp. 256–7). He himself promised to 'develop the thoughts fleetingly outlined here in detail at a later date' (Tugan-Baranovsky, 1899, pp. 984–5). When he did so, however, he was revealed as a much more severe critic of Marx (Tugan-Baranovsky, 1900; see pp. 242–8 below). At the same time Semen Frank, in his book *Karl Marx's Theory of Value: A Critical Study*, moved much closer to the marginalists. Frank now argued that labour value must be regarded as 'the subjective value of social income' (the title of one of his chapters), and suggested that in practice the labour values and marginal utilities of commodities would converge (Frank, 1900, pp. 219–64). In a further significant shift of ground, Frank now

repudiated his earlier contention that Marx's theory of profit offered a complete explanation of capitalist incomes, maintaining instead that the insights of bourgeois theorists like Thünen, Böhm-Bawerk and Schäffle were also required (*ibid.*, pp. 365–70; cf. Kindersley, 1962, pp. 166–72). Thus Tugan and Frank were moving to a more critical position on Marxian value theory. This reflected a tendency among the Legal Marxists more generally, who were distancing themselves from Russian social democracy in the late 1890s and drifting towards liberalism. In this they resembled the German revisionists more than the Italians, some of whom passed directly from Marxism to nationalism and the Right.²⁴ There was never any danger, however, that the Russian revisionists would become conservatives. They were all unqualified and uncompromising Westernizers, and in the Russian context the only conceivable alternative to revolutionary Marxism was rationalist liberalism (Kindersley, 1962, pp. 218–21).

Meanwhile, another eminent Legal Marxist entered the fray. In 'Against Orthodoxy', the first of two articles on the theory of value, Peter B. Struve²⁵ was primarily concerned with the so-called 'market question' which had hitherto divided the Russian Marxists from the Narodniks: was it possible for extended reproduction to proceed smoothly in a closed capitalist economy, or was consumption expenditure from 'third persons' outside the ranks of capitalists and workers a necessary condition for the profitable accumulation of capital?²⁶ On this issue Struve sided with the Narodniks, attacking Bulgakov, Lenin and Tugan-Baranovsky, and tracing their errors back to Marx and his labour theory of value. Citing Tugan-Baranovsky (1899), Struve acknowledged that, in his critique of the falling rate of profit, Tugan had uncovered one serious error in the Marxian theory of value (Struve, 1899a, p. 178).

Struve himself pointed to another. While he accepts Marx's sociological view of economic life, Struve claims that this perspective is not properly incorporated into the theory of value:

All economic categories, Marx taught, are expressions of relations between people in the process of production. However, the purely mechanical relation which Marx himself claims between value and the expenditure of labour energy is incomprehensible and even mystical from the point of view of the theory asserting that economic categories are expressions of production relations between people. After noting brilliantly the narrowness of vulgar political economy, which did not see the fetishism of commodity production and did not understand the objectification of their own social production relations taking place in the consciousness of the participants in production, Marx himself not only objectivized value in the highest degree but, expressing himself ever more generally and strongly, directly materialized it: from relations between people he turned it into a dot or a crystal of labour. It could be

said that these two ways of understanding value do not contradict each other. But this is not so. And the best proof of this is Marx's system, which has by no means succeeded in reconciling the sociological understanding of economic categories with the naturalistic starting-point of the labour theory of value. By the naturalistic understanding of value I mean that understanding which sees its content and measure in the expenditure of the worker, i.e. in muscular and nervous energy. Although this understanding, as I have said, is essentially only an expression of the objectification of economic relations taken to the point of full theoretical clarity, to the limit, as it were, of mechanical truth, in Marx's economic theory it sits perfectly with the denial of such an objectification. Therefore we have Marx *contra* Marx! Marx's understanding of economic categories as objectified production relations is an excellent weapon to use against the naturalistic understanding of value. It is useless to hide the fact that the whole theory of surplus *value*, as such, and the theory of capital insofar as it follows from the theory of value, depend on a naturalistic understanding of the latter. The view that surplus *value* is created only by living labour is inseparably linked with the naturalistic understanding of value. Discard the latter and this position, which is disproved by experience, and in practice rejected by Marx himself in Vol. III, becomes unnecessary.

(Ibid., pp. 178–9)

Struve concluded that one should, while 'firmly supporting the *sociological* theory of surplus labour, reject the *economic* theory of surplus value and critically review Marx's whole *economic* theory as such' (Struve, 1899a, p. 178). He conceded that 'my view that the labour theory of value—the corner-stone of Marx's economic theory according to both friends and enemies of his teaching—is incompatible with its sociological foundations, with the understanding of all economic categories as expressions of social relations between people in the process of production—this view will, most likely, seem to many a paradox' (ibid., p. 179).

In his second article, published this time in Germany, Struve took the matter further. Struve (1899b) is ostensibly a review of the two central texts in the German revisionist controversy (Bernstein, 1899; Kautsky, 1899). In fact it provides him with the opportunity to set out his own views on Marxian political economy. In the five pages devoted to the theory of value, Struve's critique of Marx, and his own affinity with marginal utility theory, emerge very clearly. Since the publication of the third volume of *Capital*, Struve writes, it has been apparent that

Marx has several concepts of value, without realizing it. This is because he deals with two distinct questions as if they were one and the same, and constituted *the* problem of value. One is the sociological problem of exploitation in general, and capitalist exploitation in

particular; the other is the economic problem of value, and in particular exchange value. In so doing, Marx conflated in his theory of value two different points of view: the sociological, according to which capitalist production is a specific historically-determined form of the exploitation of the producers and the appropriation of the surplus product; and the economic, to which the phenomena of exchange and hence also the real problem of value belong. As we have said, Marx never clearly distinguished these two points of view.

He also used a third approach, which culminated in the *mechanistic-naturalistic* concept of the *substance of value*. This concept gave rise to a supposedly objective foundation of value. But this objectivity defies comprehension, and on closer examination dissolves into subjective impulses. Marx himself emphasized very strongly that the concept of socially necessary labour-time is based on social *needs*. Even more important, the actual valuation of the various types of labour in society is based, not on the objective distinction between the different forms of labour, but on the social valuation of utility. The reduction of skilled to simple labour, which Marx wrote about, is in reality carried out by social judgements of value, which involve qualitative distinctions. In other words, there is no objective *substance of value*, whose *quanta* are fully comparable and measurable. We can speak of objectivity in the context of value only inasmuch as we contrast the objectification of valuation in social judgements of value with the subjective value judgements which appear in price phenomena. But in the last resort the objective emanates from the subjective, and can only be deduced from it.

(Struve, 1899b, p. 727)

Hence ‘the so-called Marxian “law of value” is valid in capitalist society only for the total social product, and only for the total surplus value. This surplus value would still exist even without the values of the individual commodities; it is completely independent of the phenomena of exchange, and presupposes only surplus labour and the appropriation of the product by non-producers (exploiters)’ (ibid., p. 728). And the surplus product is ‘the exclusive product of labour only in the sense that its creation is *socially “attributed”* to labour. The basis for this social “attribution” is that humanity as such, as a physical-spiritual subject, participates in the production of goods only through labour of one kind or another’ (ibid., p. 728).²⁷ The labour of animals also gives rise to a surplus product, but humans do not ‘attribute’ this to animals because they have no moral qualms about exploiting them.

For Struve, the problems of value and distribution are logically separate: ‘the concept of value is unnecessary for the theory of social exploitation’ (ibid., p. 728). It follows from this, he maintains, that ‘the connection

between labour value and the economic problem of value is a much more complicated one than Marx supposed, and this connection leads towards use value, not away from it. Value is bound up with its physical bearer, the product; thus, in the last resort, value is always use value' (ibid., p. 728), so that 'the economic theory of exchange also has no need of the pure concept of labour value. This latter theory emanated from the concept of *subjective* value and can be traced back to its objective creation; it must therefore be a subjective cost-of-production theory. The theory of labour value must be supported by the doctrine of marginal utility, and the two doctrines can be combined into a unified (not eclectic) whole. This is demonstrated by the writings both of the *marginal utility theorists* and of their most prominent opponent, Dietzel, and equally by the economic system of the Englishman Marshall'. This was not entirely accurate as far as Dietzel was concerned; he regarded the 'new' doctrine as little more than the old one in a new skin (see chapter 5). Struve continued:

Thus to the extent that Marx is a cost-of-production theorist—and in volume III he is—his theory of labour value can be reconciled very easily with the marginal utility theory. As for Marx's pure labour theory of value, this is the sociological doctrine of exploitation, which appears in economic clothing and is worked out with economic concepts. Marx's uniting of the sociological and economic points of view was an intrusive conflation [*eine störende Vermengung*]. It resulted from a lack of methodological clarity, which is the price that almost all visionary, *path-breaking* system-builders must pay for their great achievements.

(Ibid., p. 729)

In this way Struve came, in 1899, to the same conclusions which Tugan-Baranovsky had arrived at nine years earlier.²⁸

STRUVE VERSUS TUGAN-BARANOVSKY

Struve was far from recognizing these similarities. Indeed, his final major article on the question, which bore the title 'A Basic Antinomy in the Labour Theory of Value', contains a vigorous attack on Tugan-Baranovsky. Although his critique of Marx's theory of the falling rate of profit was both original and correct, Tugan himself, 'through a strange misunderstanding, considered his exposition to be a correction to the labour theory of *value*, not a contradiction of it' (Struve, 1900, p. 297). Now the rate of profit, Struve explains, is the ratio between the social surplus and the total social capital, while the increasing organic composition of capital expresses a growing productivity of social labour:

The reader, I believe, can now see the nature of this basic antinomy

against which the labour theory of value founders. It can be formulated in the following two propositions:

- 1 The free product or net income of society, measured by the productivity of social labour, progressively falls in relation to aggregate social capital.
- 2 This fall is caused by the progressive growth of constant capital, that is, by a fact at the technical-economic basis of growth of the productivity of social labour.

This antinomy is an evident absurdity, but it is an absurdity following logically from the position that surplus value (surplus product) is created by living labour; it is an absurdity informing the whole mechanical labour theory of value.

The law of falling profit levels is deduced from a purely mechanical correlation between surplus value, constant capital and variable capital. It is the apex of the mechanical-naturalistic understanding of value, the apex of the fetishistic materialization of social relations.

(Ibid., pp. 299–300)

Here, Struve claims, Tugan had entirely missed its significance. In consequence, Struve maintains, surplus value is the product not of living labour alone but of the total social capital, variable and constant alike. Moreover, ‘the growth of surplus value or the surplus product depends much more on the growth of constant capital than on the growth of variable capital’ (ibid., p. 303). If the rate of profit does fall, it will be due not to any growth in constant capital, but rather to a decline in the capitalists’ share of the surplus product, which may result from increased competition or from ‘the economic ascent of the working class’ (ibid., p. 303). As Ricardo had long ago explained to McCulloch, ‘after all the great questions of Rent, Wages and Profits must be explained by the proportions in which the whole produce is divided between landlords, capitalists and labourers, and which are *not necessarily connected with the doctrine of value*’ (Ricardo, 1816–23, p. 72, cited by Struve, 1900, pp. 304–5; emphasis added by Struve). Further progress would be made only by linking the ‘careful realism’ of Ricardo with the important recent discoveries of the marginal utility theorists:

To place this realistic theory of economic phenomena within the wide and grandiose framework of Marx’s sociological generalizations is to set oneself a task which, it seems to me, of itself deserves some attention. Simply to close one’s eyes to the so-called ‘bourgeois’ criticism of Marx and to occupy oneself with repeating and paraphrasing his ideas has been so far not only useless but even harmful.

(Struve, 1900, p. 305)

Struve concludes by asking Lenin how he would resolve the fundamental contradiction in the labour theory of value (*ibid.*, p. 306). The appeal was in vain. By this time relations had deteriorated drastically between the Legal Marxists and the orthodox Social Democrats led by Plekhanov and Lenin. The principal concern of the orthodox movement was to undermine the political influence of the liberals, towards whom the revisionist Legal Marxists were gravitating.

Tugan-Baranovsky, however, did respond to Struve in the course of his long reply to his critics. Tugan noted at the outset that his own attack on the falling rate of profit theory had commenced in 1894, pre-dating the publication of Volume III.²⁹ But, he argued, there was no need to abandon the labour theory of value, which was not logically dependent on the validity of Marx's Volume III analysis (Tugan-Baranovsky, 1900, p. 611). This is asserted rather than argued, and Tugan does not take issue with Struve (1900).³⁰ He reaffirms his belief that, although they are 'clearly at opposite poles of economic thought', the labour and marginal utility theories 'stand firmly on the same foundation' (*ibid.*, pp. 613–14). Marx acknowledges a role for marginal utility in the case of goods which are not freely reproducible, while Böhm-Bawerk admits that, in equilibrium, relative marginal utilities tend towards equality with relative production costs:

How does Marx's understanding of the real factors influencing price differ from that of Böhm-Bawerk? *In no way whatsoever*. Marx accepts the influence of supply and demand on prices to just the same extent as Böhm-Bawerk, and Böhm-Bawerk accepts the influence of production costs on average prices to just the same extent as Marx.

(*Ibid.*, pp. 614–15)³¹

This does not however mean that there is no difference between Marx and the marginalists:

The theories are in a certain sense opposite, although by no means mutually exclusive. Marx and Böhm-Bawerk give their main attention to different sides of the same process. Marx's theory particularly stresses the *objective* determinants of price, marginal utility theory the *subjective* elements. But just as psychological observation, though in a certain sense opposite to physiological observation, by no means contradicts it, so marginal utility theory complements Marx's theory and does not contradict it.

(*Ibid.*, p. 615)

Earlier theories of value had largely ignored the subjective elements in price determination, Tugan notes. 'Marginal utility theory has filled this void—it has shown us the driving belts which link, in the subject, the objective factors governing price and actual prices', and has thus 'brought

great clarity to our understanding of the objective mechanism of price' (ibid., p. 616).

In Volume III, 'Marx's theory of price is the standard theory of classical political economy' (ibid., p. 616), that is, a cost of production theory. His use of the labour theory of value was simply 'a methodological device, a conscious abstraction of a given phenomenon from all complicating elements, and the reduction of that phenomenon, for the simplicity of analysis, to one of these elements' (ibid., p. 617).³² There can be no objection in principle to such a procedure, Tugan agrees:

However, the use of this device is attended by certain dangers. Specifically, it is easy to forget that the reduction of a phenomenon to one of the many factors informing it is only a methodological device, and to take a conventional assumption for a real fact.... Marx only half-avoided this mistake: he introduced the necessary qualifications to the labour theory of value insofar as it is a theory of price. Marx's theory of price, as we have seen, essentially coincides fully with the standard theory; only its structure is different, thanks to the fact that Marx begins from the labour theory of value. In the sphere of market relations Marx's methodological device did not lead to any mistakes.

(Ibid., p. 618)

For Tugan, Marx's errors began when he shifted his ground from individual market phenomena to the analysis of society as a whole. 'But, wishing to save the labour theory as a theory of real relations in the capitalist system, Marx immediately moves with it to another fortified position, which he and the majority of his followers hold to be unassailable. This position is the sphere of capitalist society as a whole—the distribution of the social product among whole classes' (ibid., p. 619). Although 'Marx performs this cunning operation in volume III of *Kapital* with inimitable skill' (ibid., p. 620), he was bound to fail. Labour value is not, Tugan argues, the only factor governing the distribution of the social product among the various classes:

Certainly not—and for the same reason that labour is not the only factor governing price. The whole contemporary system is governed by price. Price (and not labour value) determines not only the share of each individual commodity-producer in the overall national product, but also the shares of each social class. Nothing could be more mistaken than the notion that these shares are outside the influence of price.

(Ibid., p. 620)

Thus 'there is no place for labour value in the market—the market does not recognize the term. But if not in the market, then where does the action of

labour value make itself felt as a factor regulating the distribution of national income? There can only be one answer to this question: nowhere' (ibid., p. 621). The implications of this are far-reaching.

Labour value is the same sort of fiction in the whole capitalist economy as it is in the individual private economy. Marx, wishing to preserve real significance for labour value, transferred it to the class distribution of national economy and was led to a colossal mistake. It led to the sham law that the profit rate tends to fall, which contradicts the known facts and is, theoretically, completely illogical. It led to the astonishing conclusion that the higher labour productivity, the lower the capitalist's profit, from which it could only be concluded that the capitalist has an interest not in increasing labour productivity, but in reducing it to the barest minimum.

(Ibid., p. 621)

This 'law' is so absurd, Tugan continues, that Marx would probably have omitted it altogether had he, and not Engels, prepared Volume III for the press (ibid., pp. 621–2).³³

Tugan now turns his attention to Struve, who wrongly supposes that the labour theory of value logically entails Marx's law of the falling rate of profit. In fact 'responsibility for the illusory law falls on Marx, but not on the labour theory, which, when correctly interpreted, does not lead to any absurdity' (ibid., p. 622n). Thus Struve's criticisms of Tugan are also inaccurate:

Struve says that I did not take things to their conclusion and that instead of rejecting the labour theory of value I proposed some corrections to it. I can easily show that Struve is completely wrong: it is true that I do not at all reject the labour theory of value, but I do not propose any private 'corrections' to this theory. I propose a completely different understanding of the labour theory of value in which this theory loses a significant part of its fascination and meaning, but in which it ceases to be at war with the facts. In my interpretation peace is possible between the two warring sides—the labour theory and the real phenomena of life—a peace for which concessions must of course be made not by real life, but by the theory.

(Ibid., p. 622)

That the differences between Tugan and Struve were less acute than either man believed is apparent from the final section of Tugan's article, in which he suggests that

Marx's strength is not so much in economics as in sociology. As an economist Marx did not possess outstanding originality, and where

he is original (as, for example, in the 'law' of falling profit rates) he is often wrong. Political economy has not undergone any essential changes as a result of Marx's contribution. Marx created nothing similar to Ricardo's theory of rent. Contemporary political economy is largely a repetition of Smith and Ricardo. This is how Marx found it and how it remains today. The sociological significance of Marx's theory of value consists, principally, in that Marx constructed from this theory a theory of profit or, more generally, a theory of unearned income. In presenting any critique of Marx's theory of value, I must indicate what remains of his theory of profit.

(Ibid., p. 625)

This, of course, was precisely what Struve had set out to do, and Tugan's analysis of profit is in similar vein. He begins by observing that

from a purely formal point of view it would be possible to construct a theory of value which proposed any factor of production which took part in the creation of valuable objects as the unique factor determining value. It would be possible, for example, to construct a theory according to which value was created only by male labour, but not by female labour. And this theory could be made to appear just as little in contradiction to the facts as the labour theory.... The objections that profit remains the same when male labour is replaced by female labour can be countered by the assertion that this replacement is accompanied by an increase in the labour productivity of the remaining male workers. Such a theory would be absurd not because it contradicts the facts (for it contradicts them no more and no less than the labour theory). Its absurdity consists in the fact that the assumption of the exclusive productivity of male labour serves no useful purpose, and cannot be justified by any methodological considerations, whereas the equally arbitrary assumption of the exclusive productivity of human labour in general can be useful methodologically.

From this it should be clear why I consider Marx's law of falling profit rates to be illusory. It is because in the creation of valuable objects there exists no difference in principle whatever between a man and a machine. The man and the machine are, in this respect, fully equivalent.

(Ibid., p. 624)

This strikes at the heart of Marx's theory of profit, since 'the means of production play exactly the same role in establishing the profit rate as workers. Workers are exactly equivalent to machines in the contemporary economic order. They create products to an equal extent and are to an equal extent the source of capitalists' profit' (ibid., p. 631), and there is thus

no basis for Marx's distinction between constant and variable capital (*ibid.*, p. 632).

There is an interesting analytical irony here, which Tugan is quick to identify:

Marx starts from the position that the question of profit is the question of value. In this respect Marx concurs with the majority of economists, including his most outstanding academic opponent, Böhm-Bawerk. For Böhm-Bawerk, as for Marx, the question of profit can be reduced to the following: to explain why the price of a product is higher than the cost of its production. [But] neither Marx nor Böhm-Bawerk poses the question correctly. In my opinion the question of profit has nothing in common with the question of value. In constructing his theory of surplus value Marx retreated from the methodological approach to which he owed so many triumphs. This approach consists in looking not at the economy of a separate individual, but at the social economy taken as a whole.

(*Ibid.*, p. 626)

Once this approach is followed consistently, Tugan argues, a correct undertaking of the origins of profit can be derived:

Thus at the basis of profit lies the simple fact that, as a result of the social process of production, there occurs an increase in the *quantity* of products at the disposal of society. Why is the combined social product valued higher than the products expended in its production? Because by expending a given quantity of products society not only reproduces the products expended but also obtains a surplus of products. This surplus is assessed in the same way as the products expended; thus surplus value appears. That profit is based precisely on the increase of the quantity of products at the disposal of society is quite clear if it is remembered that *surplus value* would be unthinkable without *surplus product*. The creation of surplus product, therefore, lies at the basis of profit.

Here Tugan's arguments are similar to those of Graziadei [see this volume, chapters 5 and 6].

Tugan continues:

Thus transferring the question of profit from the sphere of the individual economy to the national economy we have completely changed its appearance.... The question must be formulated thus: why under contemporary conditions of production is the product distributed not only among those individuals who took part through their labour in production, but a certain part of it is placed at the disposal of social classes who do not take part in production, but

own the means of production? Formulated thus, the question can be answered very simply: first, because for technical reasons the social process of production results in a greater quantity of products than is technically necessary for the resumption of production. This free or surplus product falls wholly or partly to the owners of the means of production, because means of production as well as labour are necessary for production. The monopolistic ownership of the means of production gives the owning classes the economic power to guarantee themselves a certain share in the social product.

(Ibid., pp. 628–9)

This analysis of profit contains, Tugan claims, ‘not a grain of ethics.... Does this theory of profit justify profit or prove its illegality? Neither one thing nor the other. It only explains the social facts and gives them a scientific interpretation—that is all. As to who should own the free product, workers or capitalists, this objective theory of profit gives no answer’ (ibid., p. 632). And, although it has been deduced ‘without recourse to the labour theory of value’, it is compatible both with that theory and with marginal utility (ibid., p. 630). Tugan notes that his own analysis is not, however, consistent with a productivity theory of distribution:

But is the level of profit determined by the productivity of capital? Of course not. The productivity of a loom is the same at a factory in Petersburg and in London—but the profit of the London manufacturer is lower. An increase in wages, while other conditions remain the same, reduces profit—but surely a machine remains the same machine whether wages are high or low? And is it not obvious that if the worker received the entire product, with the exception of the costs of restoring the capital, profit must disappear, whatever the productivity of the capital? Such considerations also overturn the theory of Böhm-Bawerk. All these theories are based on an elementary mistake: the identification of capital as an element of production with the capitalist as owner of the capital; the identification of the technical structures with categories of the social system. Profit is a category of the *distribution* of products, not of their production, and therefore any theory which attempts to situate profit outside the area of distribution is condemned in advance to failure.

(Ibid., p. 631)

Tugan’s antipathy towards Austrian economics shines through this passage, and also through the concluding paragraphs in which he declares his socialist humanism.³⁴ It is precisely the reduction of the worker to parity with the instruments of labour which represents ‘the deepest contradiction of capitalism and also the token of its further evaluation. Although capitalism sees man only as a means, man still remains for himself an end.

The human personality protests against a social structure which converts the ends (man) into means, and the means (production) into an end in itself (*ibid.*, pp. 632–3). For Tugan it was mass resistance to this form of fetishism which formed the social basis for hostility to capitalism. Once socialism had been established, the labour theory of value would come into its own.

But does it follow from this that labour value will always remain a fiction? Certainly not. When the interests of labour come to determine the economic system, when the fetishism of the capitalist economy disappears, when man becomes in an economic sense the unique measure of things—then evaluation by labour will acquire real significance. And in this sense Rodbertus was completely correct when he asserted that labour value is the great economic idea of the *future*. (*Ibid.*, p. 633)

On this point, at least, Tugan parted company most decisively with the marginal utility theorists.

DMITRIEV, BUKHARIN AND OTHERS

‘Within this synthesis’ between Marxian and neoclassical ideas, one commentator wrote some twenty-five years later, ‘Tugan-Baranovsky established a school. Since the turn of the century there has scarcely been a theoretician who has not somehow attempted to combine the marginal utility theory with the relative or even the absolute labour theory of value, more or less organically’ (Seraphim, 1925, p. 83). Although this is a little exaggerated, Tugan’s influence was indeed apparent in the eclectic value theories of lesser economists such as Maslov, Stoliarov, Zeleznov and—before 1905—the much more rigorously analytical work of V.K.Dmitriev (*ibid.*, pp. 83–6; Nuti, 1974; Howard and King, 1989a, pp. 57–9). Tugan-Baranovsky also dominated the academic discussion of income distribution and the theory of profit in Russia before 1917 (Seraphim, 1925, p. 185).

After 1900 Tugan himself became more sharply critical of what he termed the Marxian ‘absolute labour theory’, which identified labour as the substance of value, and which he compared unfavourably with the Ricardian ‘relative labour cost theory’ according to which labour was only the principal—and not the exclusive—determinant of value (Tugan-Baranovsky, 1905, pp. 132–53; Kowal, 1965, pp. 150–1). However, his prolific writings on value and exploitation theory added little to his earlier discussion of the relationship between Marxism and marginalism, and he continued to advocate a synthesis between the two theoretical traditions (see e.g. Tugan-Baranovsky, 1905, pp. 155–9; Tugan-Baranovsky, 1906; Dmitriev, 1909). For his part, Peter Struve moved much further away from Marxism in this period, although (like Tugan) this led him to an

idiosyncratic economics of his own construction, not to any straightforward espousal of neoclassical theory (Pipes, 1980, pp. 114–68).

V.K.Dmitriev, the third major Russian economist to turn against Marxism in the first decade of the twentieth century, did however embrace orthodox bourgeois economics. This is evident in his 1908 survey article, which is full of complaints about the neglect of the marginal utility school in the Russian literature. It is explicit in his scathing review of Tugan's *Foundations of Political Economy*, published in the following year, where he repudiates Tugan's synthesis of the labour and marginal utility theories and defends J.B.Clark's marginal productivity theory of distribution (Dmitriev, 1908; Dmitriev, 1909, pp. 112–13). Much earlier, however, in an article published in 1898 but apparently written some years before, Dmitriev had made an important contribution to formulating a theory of value based solely on objective considerations. As his analysis is relatively familiar—though it had no influence whatsoever at the time—it can be summarized briefly here. Dmitriev shows how labour values can be calculated directly from technical data on physical inputs and outputs, and derives prices of production from a 'dated labour' model which is Ricardian rather than Marxian in inspiration. In so doing, he anticipated much of the mid-twentieth-century mathematical literature on non-neoclassical value theory (Dmitriev, 1898; cf. Nuti, 1974; Howard and King, 1989a, pp. 57–9; Howard and King, 1992, part IV).

Among the orthodox Marxists, critics like Finn, Isaev and Filippov claimed that utility was a problem of psychology, not economics, and that any synthesis of Marxian and neoclassical ideas was thus illegitimate (Seraphim, 1925, pp. 85–97). With the possible exception of the populist N.F.Danielson (also known as Nikolai-on), who took a similar line (*ibid.*, pp. 89, 124), these were not theorists of the first rank. The intellectual heavyweights of Russian Social Democracy remained aloof from these controversies, both before and after the schism of 1903. In Lenin's 1898 review of A.Bogdanov's Marxist *Short Course of Economic Science*, there is no suggestion that either man had ever encountered marginalism, let alone attempted to confront it (Lenin, 1960, pp. 46–54). A year later Lenin did devote just over a page to value theory in his enthusiastic review of Kautsky's attack on Bernstein and the German revisionists. Like Kautsky, however, Lenin simply dismissed any notion of a synthesis as futile eclecticism, offering no substantive critique (*ibid.*, pp. 196–7). This, so far as we have been able to discover, was the full extent of the Bolshevik theoretician's engagement in the debates on value theory.

In fact one of the peculiarities of orthodox Marxism in Russia is the lack of any serious attention to value theory and, indeed, to formal economic analysis more generally. The reasons for this neglect are not difficult to identify. With the exception of Trotsky and his followers, revolutionary Marxists in Russia before 1915 were concerned exclusively with hastening

the bourgeois-democratic revolution against Tsarist absolutism, and their interest in political economy was confined to the light that it could shed on the development of Russian capitalism and the appropriate strategy to accelerate it. In such a backward economy and for such purposes the value categories had little political relevance, even for those theorists who saw no logical problems with them (Howard and King, 1989a, part II).

Of the leading Russian Marxists, only Nikolai Bukharin defended Marxian value theory against its critics, and then not until the eve of World War 1. Bukharin attacked Struve's contention that the Marxian theory of value was purely metaphysical (Bukharin, 1913), and quite reasonably dismissed his reduction of value to a statistical average of market prices as 'the annihilation of *all theory*' (Bukharin, 1970, p. 188 n 63; original emphasis). He was equally critical of Tugan's alleged attempt to devise a political economy without any concept of value whatsoever, since a theory of income distribution under capitalism must account for the fact that distribution occurs 'by means of value relations'. Tugan's categories, Bukharin argues, are so general that they have no content, and his analysis serves only to obscure the origins of profit (Bukharin, 1913–14, pp. 810, 858). To his credit, Tugan does emphasize production rather than exchange, and on the logic of his own argument it is labour values which determine marginal utilities, which in turn determine prices, so that 'labour value is the ultimate basis of price' (Bukharin, 1970, pp. 167, 171). However, Tugan must be regarded as 'an apostle of conciliation' between two irreconcilable schools with quite different methodologies. In the last resort, he is merely flirting with Marxism (*ibid.*, pp. 164, 170–1, 190 n 69).

These final criticisms come from an appendix to Bukharin's *Economic Theory of the Leisure Class*, a collection of his articles completed in 1914 and published in book form five years later. In the main body of the book he sketches a sociology of Austrian economics: 'the new theory is the child of the bourgeoisie, *on its last legs*', and reflects the interest of a leisure class of rentiers who are divorced from production and interested only in consumption (*ibid.*, p. 23; original emphasis). This explains the individualism of the marginal utility school, for the rentiers have no contact with the rest of society, neither with the proletariat nor with industrial capitalists. Their fear of the future, Bukharin suggests, and their resistance to change, account for their ahistoricism and their preoccupation with static equilibrium. This intriguing and wholly original interpretation is rather spoiled when Bukharin makes an exception for the 'Anglo-American School', led by J.B.Clark. Austrian economics is nothing more than 'the psychology of the declining bourgeois', while 'the American School is the product of the progressive, and by no means of a declining bourgeoisie' (*ibid.*, p. 31). Disappointingly, Bukharin makes no attempt to resolve this rather obvious contradiction.

In his discussion of the methodological differences between Marxian and

neoclassical theory he draws heavily upon Hilferding (1904) rather than upon Tugan or the other Legal Marxists, asserting the superiority of objectivism over subjectivism and the related virtues of holism as against methodological individualism (*ibid.*, p. 38). Bukharin insists, too, that individual psychologies are historically and socially determined. Owing to their unhistorical and static perspective, the Austrian economists are unable to explain consumption decisions. For this an understanding of the production process is essential, since 'the dynamics of the requirements [of the consumers] are determined by the dynamics of production' (*ibid.*, p. 56; original emphasis deleted).

Turning to the theory of value, Bukharin maintains that marginal utility analysis is circular, since it presupposes the prices which are to be explained (*ibid.*, pp. 67, 77). It is unable to determine quantities, since 'supply' presupposes production and the Austrians, having no theory of production, must therefore take supplies to be given (*ibid.*, pp. 82–3). Neoclassical theory has no units of measurement, and—as von Mises had himself admitted—there was no convincing subjectivist theory of the value of money, the most important of all commodities (*ibid.*, pp. 71, 88–9). Neoclassical writers could not simply retreat to a supply-and-demand theory of price, since 'if price may really be explained satisfactorily by the law of supply and demand, *without further elucidation*, why have a subjective theory of value at all?' (*ibid.*, p. 85; original emphasis).

On the analysis of profit, Bukharin predictably attacks the ahistorical and apologetic nature of the Austrian abstinence theory (*ibid.*, pp. 112–25). Even if time preference were important, he maintains, it would still need to be explained, since subjective evaluations of the future as against the present are both socially determined and class-specific. Workers, who live from hand to mouth, are unable to make any inter-temporal calculations at all, while capitalists systematically underestimate the future only in exceptional cases where they behave as spendthrifts (*ibid.*, pp. 125–35). Bukharin argues, like Thomas Hodgskin almost a century before him, that from the viewpoint of society as a whole 'waiting' is an illusion, 'for the simple reason that the social product, whatever may be the section of production we are considering, is present *simultaneously in all the stages* of its manufacture' (*ibid.*, p. 122; original emphasis; cf. Hunt, 1977).

CONCLUSION

This marked the end of the value controversy in Russia before the Revolution. Bukharin was soon preoccupied with much more pressing questions of war and imperialism. Of the other principal protagonists, Tugan-Baranovsky died in 1919, Struve and Bulgakov renounced Marxism altogether, while Semen Frank (who lived until 1950) seems to have written nothing more on value theory after 1900. Nor was the Soviet Union the

place for a reasoned defence of marginal utility theory, even in the relatively liberal 1920s.³⁵

Before the Revolution, though, and most especially during the 1890s, there was indeed a genuinely fertile debate in which several of the key participants shifted their ground and amended their arguments in response to criticism. As we have seen, methodological issues were heavily emphasized, with such defenders of Marxian orthodoxy as Bulgakov and the early Frank asserting the virtues of objectivism by comparison with subjectivism, the structural determination of human motives, and a social class perspective against the individualistic psychology of the Austrian school. The most important of the Marxian renegades, Peter Struve, turned these methodological considerations against the orthodox Marxists, attacking the labour theory of value on the grounds that its objectivism represented a naturalistic fallacy.³⁶

In terms of substantive theory, none of the Russian Marxists took any great interest in the transformation problem, either as an historical enigma or in its technical and quantitative aspects. The only exceptions were Dmitriev, who was never in any sense a Marxist; Georg von Charasoff, an academic who published in German and had no effect on the Russian debates; and the later Tugan-Baranovsky, whose ideas on the relationship between Marxism and marginalism were fully formed long before his interests turned to the question of transformation.³⁷ For the rest, three broad approaches can be distinguished: uncritical defence of the Marxian labour theory of value (Bulgakov, the early Frank, Lenin, Bukharin), outright hostility to it (Dmitriev, Struve after 1900), and attempts at a synthesis with marginalism (Tugan-Baranovsky, the early Struve, Frank in his 1900 book).

Both Tugan and Struve dealt also with the theory of profit, the latter claiming that Marx's analysis of exploitation reflected the same erroneous naturalism which marred his theory of value. Like Tugan, Struve suggested that the Marxian categories of value and surplus value were meaningful only for the entire economy, and had no relevance to individual enterprises or sectors. Thus both writers pointed clearly towards the so-called Fundamental Marxian Theorem (Morishima, 1973, pp. 53–4; Roemer, 1981, chapter 2). Tugan and Dmitriev went much further, anticipating both the Sraffian contention that a theory of profit can be constructed from the appropriation of the surplus product without any reference to quantities of embodied labour (cf. Hodgson, 1980), and the subsequent demonstration that surplus-creating powers can be attributed to any—animate or inanimate—input to the production process (see, e.g., Roemer, 1988, pp. 52–4).

On the whole the standard of debate in Russia was very high, losing nothing in comparison with the contemporary Austro-German literature and being greatly superior to the British. One intriguing, and perhaps

unanswerable, question concerns the extent and direction of influences between Marxian economists in the various European countries. The Russian theorists all read German, and would have followed the controversies among German social democrats with keen interest. But several of them also published in German, so that theoretical developments in the Russian movement can have been no secret in Vienna or Berlin. Tugan-Baranovsky, at least, was revising Marx well before Bernstein and Conrad Schmidt, and the possibility cannot be excluded that—on questions of value and exploitation—it was the Russian revisionists who had the greater impact on the thinking of their German comrades (Howard and King, 1989b). The law of uneven development, that is, may have applied to the elaboration of theory no less than to the evolution of material reality.

NOTES

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- 1 On Tugan-Baranovsky see Howard and King (1989a, chapters 9–10); Kowal (1965); and Nove (1970).
- 2 Tugan here cites Wieser (1889, pp. 189–91). The underlying argument with respect to the labour theory of value was first advanced by Adam Smith (1776, pp. 53–5).
- 3 In his later writings Tugan, unlike Marx, repeatedly argues that the labour theory of value will come into its own under socialism; for one example see p. 248.
- 4 See also pp. 240–5 below. The inadequacy of any cost of production theory is explained by Sraffa (1960).
- 5 This, he notes, is a simplifying assumption which can be relaxed without significantly affecting the analysis (Tugan-Baranovsky, 1890, p. 227).
- 6 The example is apparently derived from Menger (1871, p. 93); see Tugan-Baranovsky (1890, p. 228 n5).
- 7 Tugan is implicitly assuming here that commodities cannot be produced, or consumed, in fractional units.
- 8 A second unit of B could be produced by forgoing the fifth and sixth units of A. This would increase utility by 9 but also simultaneously reduce it by $6+5=11$.
- 9 In the first edition of the *Principles* this material came as a note at the end of chapter VI of Book VI; in the second, third and fourth editions it appeared at the end of chapter XIV of Book V; only in the fifth and subsequent editions did it feature as Appendix I (Guillebaud, 1961, p. 813, note a). On Dietzel see chapter 2, this volume.
- 10 There were later accusations that Tugan had plagiarized P.B.Struve (Dmitriev, 1909, p. 124). Although endorsed by Pipes (1980, pp. 163–4), these charges appear to be without foundation (Kowal, 1965, pp. 185–6; Seraphim, 1925, p. 139).
- 11 It is, of course, also conceivable that Dietzel borrowed from Tugan without attribution. While Tugan read (and published in) German, Dietzel was no

- linguist, and there is no evidence that he had any knowledge of Russian, nor that *Yuridichesky Vestnik* was readily available in Germany.
- 12 For the critical reception of Volume III of *Kapital*, see Howard and King (1991).
 - 13 On Bulgakov see Kindersley (1962, pp. 59–63).
 - 14 Essentially the same defence of Marx is adopted by Meek (1956).
 - 15 It is precisely this issue which has re-emerged in the debate between the ‘Rational Choice Marxists’ and their critics (Howard and King, 1992, chapter 17).
 - 16 This represents at least an implicit acceptance of Tugan-Baranovsky’s position; significantly, Bulgakov does cite Dietzel (Bulgakov, 1898, p. 352).
 - 17 References to Ricardo and to Ziber are more frequent than those to Marx in Frank’s article.
 - 18 Frank describes Tugan-Baranovsky (1890) as still the only article in Russian hitherto devoted to marginal utility theory; ‘however, we cannot agree with his basic conclusion’ (Frank, 1898, p. 61n). Unfortunately Frank does not elaborate on this.
 - 19 Here Frank is quoting from Böhm-Bawerk (1894, p. 695).
 - 20 This is a citation from Ziber (1885, p. 34), himself paraphrasing an argument of Lassalle (1864).
 - 21 Evidently this is an allusion to the transformation problem. However, Frank does not refer explicitly here either to volume III of *Kapital* or to Marx.
 - 22 Here Frank cites J.A.Hobson (1894) and S.N.Patten, the latter maintaining that ‘Ricardo’s position is correct only for a particular [that is, pre-monopoly] degree of social development’ (Patten, 1891, p. 515, cited by Frank, 1898, p. 109). He was evidently well versed in Hobson’s economics, having edited a Russian translation of his book on unemployment (Kindersley, 1962, p. 71).
 - 23 Here Tugan is implicitly assuming the absence of realization problems associated with these changes.
 - 24 We owe this comparison to Riccardo Faucci.
 - 25 On Struve see Pipes (1970, 1980).
 - 26 On this question see Bleaney (1976); Howard and King (1989a, pp. 109–14, 166–73); and Walicki (1969).
 - 27 Here Struve cites Wieser (1889, pp. 67 ff.). More generally on the question of imputation see chapter 2, this volume.
 - 28 In none of his papers in 1899–1900 does Struve refer to Tugan-Baranovsky (1890).
 - 29 Tugan-Baranovsky (1900, p. 609n), referring to Tugan-Baranovsky (1894, p. 423).
 - 30 See however Pipes (1980, pp. 163–6) for Tugan’s final confrontation with Struve.
 - 31 Here Tugan cites a passage from Marx’s *Wage Labour and Capital* as evidence that ‘where Marx justifies rather than simply postulating the labour theory of value he argues exactly like any follower of marginal utility’ (Tugan-Baranovsky, 1900, p. 615, citing Marx, 1847, pp. 85–7).
 - 32 In this Tugan had been anticipated by the German Marxist Conrad Schmidt (Howard and King, 1989a, pp. 47–8).
 - 33 For similar speculation concerning Marx’s intentions for volume III by Achille Loria and Ernst Lange, see Howard and King (1991, pp. 12 and 19).
 - 34 As the author of an 1891 monograph on Proudhon, Tugan was heavily influenced both by the so-called Utopian socialists and by Kantian ethics

- (Diehl, 1906, p. 543; Kowal, 1965, chapter III; Nove, 1970, p. 248). Unlike the other Legal Marxists, he remained committed to some form of socialism.
- 35 The only readily accessible Russian work from this period is the detailed exposition and defence of Marx's theory of value written in 1923 by the Menshevik I.I. Rubin (1973).
 - 36 Similar arguments are advanced by Lippi (1979).
 - 37 On Charasoff, see Howard and King (1992, pp. 130–1); for Tugan's attempts to grapple with the transformation problem see Tugan-Baranovsky (1905, chapter VII).

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