

Joseph A. Schumpeter

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VILFREDO PARETO
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SUMMARY

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In a volume devoted to Pareto's life and work,¹ Professor Bousquet relates that the obituary article devoted to Pareto in the socialist daily, *Avanti*, described him as the "bourgeois Karl Marx." I do not know that a man can be rightly called "bourgeois" who never missed an opportunity to pour contempt on *la bourgeoisie ignorante et lâche*. But for the rest, the analogy conveys very well the impression that Pareto had made upon his countrymen: they had in fact raised him to an eminence that was unique among the economists and sociologists of his time. No other country erected a similar pedestal for his statue, and in the Anglo-American world both the man and the thinker have remained strangers to this day. There was, indeed, a short Pareto vogue in this country that followed upon the translation of his sociological treatise.² But it died out soon in

1. G. H. Bousquet, "Vilfredo Pareto, sa vie et son oeuvre," (in the *Collection d'études, de documents et de témoignages pour servir à l'histoire de notre temps*, Paris, Payot, 1928). Except for the mathematical parts of Pareto's work, this book, written in a vein of generous enthusiasm by a man who is an economist and sociologist in his own right and as far as possible removed from the state of mind of the disciple or biographer who basks in reflected glory, is herewith strongly recommended. Bousquet also wrote a *Précis de sociologie d'après Pareto*, introductions to the latter's *Systèmes Socialistes* and *Manuel d'économie politique*, and also a short English appraisal entitled, *The Work of Vilfredo Pareto*, 1928, besides reserving for him a place of honor in his *Essai sur l'évolution de la pensée économique*. Of other memorial appraisals it will suffice to mention what may be called the official one, Professor Alfonso de Pietri-Tonelli's address to the economic section of the Italian Association for the Advancement of Science, published in the *Rivista di Politica Economica*, November and December, 1934, and January, 1935, and Professor Luigi Amoroso's article in *Econometrica*, January, 1938.

2. At Harvard, this vogue was represented by the eminent physiologist, the late Professor L. J. Henderson. See his *Pareto's General Sociology*, 1935. Some Harvard men will still remember his informal Pareto "seminar" that practically consisted in a series of monologues by the Professor. Sympathetic understanding and a profound sense of the unconventional greatness of Pareto's thought there struggled valiantly with inevitable professional handicaps.

an uncongenial atmosphere. Moreover, so far as the small circle of pure theorists is concerned, Pareto came to exert considerable influence on Anglo-American economics in the 1920's and 1930's, that is, after the publication of Professor Bowley's *Groundwork*. But both in England and the United States, Marshallian and post-Marshallian economics offered enough in the line in which Pareto excelled to prevent him from gaining much ground of his own even before other tendencies took away whatever he had gained.

This might seem surprising owing to the fact that several important developments in theoretical economics are now seen to stem from him. But it is not difficult to explain. Pareto was the product of a sector of the Franco-Italian civilization that is far removed from English and American currents of thought. Even within that sector his towering figure stood almost alone. Pareto cannot be pigeon-holed. He paid court to no "ism." No creed or party can claim him as its own, although many creeds and parties appropriated fragments of the vast intellectual realm over which he held sway. He seems to have taken pleasure in running counter to ruling humors and slogans. Votaries of extreme laissez-faire may cull plenty of passages from his writings in support of their views. Yet there was nothing he despised so thoroughly as the "pluto-democracy" or "plutocratic demagogy" of liberalism. Socialists are under obligation to him for rendering, as we shall see, a very important service to socialist doctrine, and also for his protests against the anti-socialist measures that the Italian government took in 1898. Yet he was not only an anti-socialist but one of that type whose criticism derives sting from contempt. French Catholics might thank him for his attacks upon the persecution of the French clergy that was so unedifying a sequel to the Dreyfus affair. Yet he attacked the "laicist" policies of the Combes ministry because he was a gentleman, and not because he believed either in the mission of the Catholic church or in her teaching.

A gentleman of such independence and pugnacity who is in the habit of dealing vigorous blows right in the midst of arguments that might in themselves be agreeable to some party or another has little chance of being popular. By now he is a figure of the past. But even at the epoch of his prime the political and social slogans with which we are all familiar controlled official phraseology, the press, party programs, and popular literature including its economic sector. The wrapping in which he presented his strictly scientific results were then not much more popular than they would be now. One has only to imbue oneself with the spirit that pervades an American textbook

and then to open Pareto's *Manuel* in order to realize what I mean: the naïve lover of modern social creeds and slogans must feel himself driven with clubs from Pareto's threshold; he reads what he is firmly resolved never to admit to be true and he reads it together with a disconcerting wealth of practical examples. Therefore it seems that the problem is not to explain why Pareto did not exert influence more widely; the problem is rather to explain how he came to exert as much as he did.

Could we confine ourselves to Pareto's contributions to pure theory, there would be little need for glancing at the man and his social background and location. But into everything that was not a theorem in the pure logic of economics the whole man and all the forces that conditioned him entered so unmistakably that it is more necessary than it usually is in an appraisal of scientific performance to convey an idea of that man and of those forces. I shall make an attempt to do so first (I). Then I shall briefly survey Pareto's work in pure theory (II). And I shall end up with a glance at his conception of society that has found so inadequate an expression in his *General Sociology* (III).³

I. THE MAN

Pareto's father, the Genoese Marchese Raffaele Pareto, seems to have been a typical product of the Italian Risorgimento of the first half of the nineteenth century, an ardent adherent of Mazzini — perhaps more from national than from social reasons — an uncompromising enemy of all the governments that barred Italy's way towards national unity and a revolutionary in this if in no other sense. Accordingly, he exiled himself to Paris where Vilfredo, the

3. There is a bibliography that cannot be very far from being complete by Messrs. Rocca and Spinedi in the *Giornale degli Economisti*, 1924, but only the following items need be mentioned here: "Considerazioni sui principi fondamentali dell' economia politica pura," *Giornale degli Economisti*, 1892-3; *Cours d'économie politique professé à l'université de Lausanne*, 1896-7; *Résumé du cours donné à l'Ecole des Hautes Etudes Sociales de Paris*, 1901-2; *Les systèmes socialistes*, 1902 (reprinted 1926); *Manuale di economia politica*, 1906 (reprinted 1919); *Manuel d'économie politique*, 1909 (reprinted 1927) (a translation of the preceding item which must however be listed separately because of the mathematical appendix that was completely redone); *Trattato di sociologia generale* (1916) French translation, 1919, English translation, under the title *Mind and Society*, 1935; "L'économie mathématique" in the French *Encyclopédie des sciences mathématiques*, 1911 (the corresponding article in the original German edition of the Mathematical Encyclopedia is of negligible importance). There are several other books besides innumerable articles but they do not, so far as I know them (Pareto published many articles in the daily press, most of which I do not know), contain anything of a scientific nature that is not contained in one or more of the publications mentioned.

subject of this memoir, was born of a French mother: if General Galliéni once described himself as "*Francese ma anche Italiano*," Vilfredo Pareto might have described himself as "*Italiano ma anche Francese*." He was taken to Italy in 1858 and there went through the usual course of studies that issued in a Doctor's degree in engineering in 1869. He immediately embarked upon engineering and industrial management as a profession and after various other appointments rose to be manager general — we should say "president" — of the Italian Iron Works. It was only in 1893 that he was appointed successor of Walras in the University of Lausanne, although he may be considered as a full-time economist a few years before that. Thus, the span during which he was primarily engaged in economic research extends from about 1892 to about 1912 — practically all his later work is sociological in nature. He resigned his chair in 1906 and then retired to his home, a country place on the lake of Geneva, to grow in the course of a vigorous and fertile old age into the "lone thinker of Céligny."

Substantially, this suffices for our purpose: we have to underline a few of these facts rather than to add others. First, theorists will note that owing to his training as an engineer — and he seems to have cultivated theoretical aspects — he acquired at an early age command of mathematics on a professional level.⁴ Second, it is worth-while to notice that, to a degree quite unusual with scientific economists, Pareto was thoroughly familiar with industrial practice — familiar in a sense which is quite different from the kind of familiarity that may be acquired by the means available to the academic economist, the public servant, the politician. But, third, it was his passionate interest in the current issues of economic and general policy, presently to be commented on in another connection, which made him something of an economist long before he started his own creative work. Francesco Ferrara was then at the height of his fame and influence, and the frosts had not yet fallen upon a theoretical structure glorified by uncritical liberalism. His writings, especially his famous introductions (*prefazioni*) to the classics published in the *Biblioteca dell' economista*, served Pareto as well as, or better than, any of the university courses could have done that were available in his student days. His way to Walras, however, was chalked out later on by Maffeo Pantaleoni.

4. I feel unable to say precisely how much this amounted to. Pareto had to be told by Volterra that an expression of the form $Xdx + Ydy$ has always an infinity of integrating factors whereas with more than two variables no such factor need exist. (*Manuel*, p. 546n.). I wonder whether a real "professional" could have overlooked this.

Nothing of the above will account completely for Pareto's vision of society and politics, or even for his attitudes to the practical problems of his age and country. Nor do I believe for a moment that the deep pool of personality can ever be drained so as to show what is at the bottom of it. But there is the patrician background which, I am sure all who knew him will agree, meant much more in his case than it usually does. In particular it prevented him from becoming a brother in spirit to the men — and a fully accepted member of the various groups — with whom life threw him. It also prevented him from establishing *emotional* relations with the creations of the bourgeois mind, such as the twins that are called democracy and capitalism. Acting upon this background, his financial independence — a bare independence at first, something like affluence later on⁵ — helped to isolate him still further by offering the possibility to do so.

Still acting upon this background, his classical scholarship worked the same way. I do not mean that part of it which he shared with every educated person of his time, but that part which he conquered himself through incessant study of the Greek and Roman classics during his sleepless nights. The ancient world is a museum, not a laboratory of applied science, and he who trusts too much to the wisdom to be gathered there is bound to stray from every group of men that was in existence either in 1890 or in 1920. Isolation was made complete by the result of his participation in the debates on the policies and politics of his country — so complete that he had decided to emigrate to Switzerland even before he received the call to Lausanne. And isolation had its effects — soothed only late in life by a second marriage that brought domestic peace (see the dedication of the *Trattato*) — upon a fiery temperament that was not really made to stand it.

But why should he have left his country in wrathful exasperation — the country that he loved from the bottom of his heart and whose national rebirth he had not only yearned for but witnessed? The detached observer is all the more likely to ask this question because it will seem to him that the new national kingdom did not do so badly in the thirty years that preceded Pareto's emigration. Besides progressing economically at a considerable rate and growing out of financial disorders — *pace* our Keynesians — it took its first steps in social legislation and established itself successfully as one of what then were called the great powers. Looking at things in this

5. This relative affluence was due to an inheritance, not to his previous activity as a business executive.

light, our observer will develop a good deal of respect for a régime such as that of Agostino Depretis. And, considering the difficulties incident to the beginnings of the new national state, he will make allowances for the less exhilarating parts of the picture. But Pareto made no such allowances. He saw nothing but incompetence and corruption. He fought with impartial ferocity the governments that succeeded one another, and it was then that he became known as an ultraliberal — in the nineteenth-century sense of uncompromising advocate of *laissez-faire* — and that he helped to create, among the German New-Dealers of that period, the impression that marginal utility was just a wicked trick with which to thwart reformers.⁶ Possibly this is all there is to say about Pareto's attitude in matters of economic policy and the strong traces it left upon his scientific writing before 1900. But even then there was something in that ultraliberalism of his that points in a direction exactly opposite to the creeds and slogans of official liberalism. He certainly was *anti-étatiste*, but for political reasons rather than for purely economic ones: unlike the English classics, he did not fight against government activity *per se* but against the governments of parliamentary democracy, of the very parliamentary democracy that commanded the fervent allegiance of the English classics. Viewed from this angle, his type of *laissez-faire* acquires a connotation that is entirely at variance with the *laissez-faire* of the English type. And once we realize this, the rest is easy to understand.

Toward the end of the nineteenth and during the first two decades of the twentieth century, an increasing number of Frenchmen and Italians began to voice dissatisfaction that varied from mere disappointment to violent disgust at the manner in which the *cotillon* of parliamentary democracy functioned and at the results it produced in France and Italy. Such sentiments were shared by men so different as E. Faguet and G. Sorel, and they were not confined to any one party. This is not the place to analyze let alone to pass judgment upon them. All that matters for us is their existence and the fact that the later Pareto stands out from this current of thought only because he himself stood out from his contemporaries and because he wrote a sociology that was — along with those of Sorel and Mosca — to rationalize it.

Englishmen and Americans, oblivious of the particular and

6. German critics received his *Cours* accordingly. In fact, the book contains very little that may be used for a different interpretation. It does, however, contain the remark that the virtues therein predicated of pure competition have no bearing upon the actual economic process since pure competition does not actually prevail.

historically unique circumstances that have developed in their minds an equally particular and unique attitude toward parliamentary democracy, have wondered about the possible meaning of Pareto's attitude towards Fascism. But this attitude is not problematical in the least. No theory is necessary in order to explain it. The events of 1914-1922 had called him back to the arena of political debate. The masterly analyses he published on the origins of the First World War, on the miscarriage of Versailles and on the futility of the League are among his strongest performances although they found no answering echo outside of Italy. But above all he witnessed with something like horror the social disorganization in Italy which it is necessary to have seen in order to believe. Attributing all the troubles of those years to the weakness of the political system of a decadent bourgeoisie, the student of Roman history may have thought of the formula by which, in republican Rome, the senate, in order to deal with an emergency, used to direct the consuls to appoint an officer of practically unlimited though temporary power, the dictator: *videant consules ne quid detrimenti res publica capiat*. But there was no such provision in the Italian constitution, and it would not have done any good if there had been one. So the dictator had to appoint himself. Beyond this and beyond approval of the success with which Mussolini restored order, Pareto never went. Mussolini honored himself by conferring senatorial rank on the man who kept on preaching moderation and who stood throughout for the freedom of the press and of academic teaching.⁷ But to his last day Pareto refused to embrace this "ism" as he had refused to embrace any other. There is no point whatever in judging his action — or, indeed, any action or sentiment of his — from the standpoint of Anglo-American tradition.

Everything else is at the bottom of the pool.

II. THE THEORIST

Any appraisal of Pareto's contribution to economics must first of all give due credit to a feat of leadership. He never taught in Italy. The faculty of Law in the University of Lausanne did not make very favorable headquarters for a campaign of intellectual conquest. The country house in Céligny looked like a *buen retiro*. Yet he did what Walras had not been able to do: he formed a school in the full sense of the word. An inner circle of eminent economists, a wider circle of followers of less eminence, and beyond this a broad fringe of more or less definite adherents emerged soon after 1900.

7. See on this, Bousquet, *op. cit.*, pp. 182-194.

They co-operated in positive work. They cultivated personal contact. They stood for one another in controversy. They recognized One Master and One Doctrine.

This school was specifically Italian. As has been pointed out already, there were but few foreign adherents though individual pieces of Paretian teaching eventually gained acceptance both in England and in the United States. Nor did the Pareto school ever dominate Italian economics. No school ever does dominate its own country. Impressions to the contrary, e.g., the impression that the Ricardo school ever dominated English economics, are due to nothing but unrealistic historiography. Several other Italian leaders, like Einaudi, held their own ground entirely, and others, like Del Vecchio, while recognizing Pareto's eminence and adopting this or that of his doctrines, thought and wrote pretty much as they would have done had Pareto never lived. Still, there remains the fact that a school did emerge on the basis of a theoretical structure that was inaccessible not only to the general reader but, in some of its most original parts, also to students of economics, students moreover who had never heard or seen the master.

But once we have duly recognized and thereupon discarded this feat of leadership, we see a theorist who continued the work of Walras. Nobody, of course, ever denied this, not even the most ardent disciple and, least of all, Pareto himself. Difference of opinion on this point is inevitably confined to the extent to which he surpassed the great pioneer and to the relative mental statures of the two men. There are several reasons why disciples will never agree on this either with outsiders or among themselves. One of these reasons must be noticed at once. Walras presented his immortal theory in the garb of a political philosophy that is extra-scientific in nature and, moreover, not to everyone's taste. I am afraid that there is no better way of conveying what that philosophy was than to call it the philosophy of petty-bourgeois radicalism. He felt called upon to preach an *idéal social* that hails from the semi-socialist French writers of the first half of the nineteenth century or, as we may say with equal justice, from utilitarianism. He looked upon the nationalization of land as an essential item in his teaching, and he was a monetary reformer whose plans have a strikingly modern ring. All this was gall and wormwood to Pareto. It was just metaphysical speculation and metaphysical speculation of a very unsympathetic kind. Their common ground was confined to pure theory and specifically to Walras' equations of equilibrium. But in every other respect they were as different as two men can be, and even their

companionship in arms in the fight for mathematical economics and Pareto's obligation to Walras in the matter of the Lausanne professorship did not prevent their deep-seated mutual dislike from asserting itself or even from spilling over in conversation with third persons. While their pure theories are cast in the same mould, their systems of thought taken as wholes and their visions of the social process are not. And all those economists who are not disposed to neglect a man's philosophy and practical recommendations completely, that is to say the majority of the profession, will, for this reason alone, consider the Paretian structure to be something completely different from that of Walras.

In any case — we are neglecting sociology for the moment — it was, with one exception, in pure theory alone that he made scientific history. Let us note this exception first. In the *Cours* and also in a separate memoir of 1896 Pareto published a highly original pioneer achievement in econometrics that first established his international reputation and, under the title of "Pareto's Law," created what may be fairly called a whole literature devoted to its critical discussion. Call N the number of income receivers who receive incomes higher than x , and A and m two constants; then Pareto's "Law" asserts that

$$\log N = \log A + m \log x$$

Chapter 7 of the *Manuel* contains Pareto's most mature interpretation of this generalization. We must confine ourselves here to noticing the two classes of problems which it raises. There is, first, the question of fit. Numerous investigations have been made some of which were held by their authors either to refute the Law completely or else to establish the superiority of other methods of describing the inequality of incomes. The reader will observe that the central issue turns on the approximate constancy of the m . However, by and large, the "Law" has stood fire rather well as the fact suffices to prove that it is sometimes used by competent statisticians even now. But there is, second, the question of interpretation. Granted that up to quite recent times the distribution of incomes according to brackets has been remarkably stable what are we to infer from this? This problem has never been attacked successfully. Most participants in the discussion, Pigou among them, have confined themselves to criticizing Pareto's own interpretation — which, to say the least, was in fact open to objection at first — and, like so many of our controversies, this one has petered out without yielding a definite result. Few if any economists seem to have realized the

possibilities that such invariants hold out for the future of our science.⁸ Viewed from this standpoint, Pareto's "Law" is path-breaking in the literal sense even though in the end nothing whatever is left of its particular form.

I take this opportunity to dispose of another matter. In the *Manuel*, Pareto dealt with his "Law" of Income Distribution in the chapter on Population. So far as the topics are concerned that are usually dealt with under this heading, this chapter does not contain much that would call for notice. But it contains a number of other things which, like the "Law" are not usually included in the theory of population, and it is these items which liven up this chapter and impart to it its freshness and originality. Pareto's theory of the *circulation of the élite* is an example (see below, section III). Most of them are sociological rather than economic in nature, and some of them bring out sharply, indeed almost naïvely, certain prejudices that sat so incongruously upon the great analyst of human prejudice.⁹

In the field of pure theory, properly so called, Pareto's thought developed slowly and in fact retained certain pre-Paretian features to the end. In addition to the early influences of Ferrara and of the English and French economists of the "classic period," he had Walras' equations of static equilibrium to start from — after having realized, not without considerable initial resistance, that they were in fact the keys to everything else. He was further stimulated by all the suggestions that no competent theorist could have helped receiving in the decade from 1885 to 1895¹. Finally, he was acutely aware of the technical shortcomings and other limitations of his immediate predecessors. Thus his own theoretical work was cut out for him —

8. In particular, nobody seems to have realized that the hunt for, and the interpretation of, invariants of this type might lay the foundations of an entirely novel type of theory.

9. For instance, whatever we may think of his explanation of the phenomenon of feminism, we can hardly suppress a smile when we read the first sentence of this discussion (p. 400) which begins with the words, "Le féminisme est une maladie. . ." a turn of phrase that does not indicate much objectivity or detachment. Both on Pareto's theory of population in the strict sense and on those sociological additions, I refer the reader to Professor J. J. Spengler's "Pareto on Population," this *Journal*, August and November, 1944.

1. To some of these suggestions Pareto reacted in a negative, if not, indeed, in a hostile manner. He never appreciated Marshall fully — mainly because he objected on principle to partial analysis — and he seems never to have seen all there was behind the primitive technique of the Austrians. But he did appreciate Edgeworth and, many objections notwithstanding, Wicksteed. Much more than is commonly known he appreciated Irving Fisher, not only the *Mathematical Investigations* but also, later on, the *Nature of Capital and Income* and the *Rate of Interest*. It was a revelation to me to hear him bestow high praise on *Capital and Income*.

most of it, indeed, by Walras himself.² But his earlier work, such as his "Considerazioni sui principi fondamentali dell' economia politica pura" (*Giornale degli Economisti*, 1892-3), never went beyond the range of the Walrasian signposts. This is also true, and emphatically so, of his *Cours*. Some economists who respected Pareto but were not strictly Paretians have paid him the dubious compliment of calling the *Cours* his masterpiece. It is, indeed, a striking performance enlivened throughout by a strong temperament that imparts sparkle even to conventional passages. But Pareto was right in refusing to sanction a reprint or a second edition. For, so far as pure theory is concerned, there was nothing specifically Paretian about it. It was only after 1897 that he rose to heights of his own. The first major publications that testify to his progress are the *Sunto* (*Giornale degli Economisti*, 1900) and the *Résumé* of his Paris course.³ The *Manuale* or rather, because of the appendix, the *Manuel* (1909), then marks the point of highest elevation that he reached.

The structure of the tower he erected on that spot is far from faultless. Many things that are essential in a comprehensive treatise received but scant attention. I do not mean merely that Pareto's work cannot stand comparison with Marshall's in those qualities that are ordinarily looked for in a "manual." Much more serious is it that important parts of the *theoretical* organon are inadequately thought out. Pareto's theory of money, for instance, is on the whole inferior to that of Walras. His theory of capital and interest derives all its merits from that of Walras. As regards interest he seems to have been content to rely for explanation on the fact that items of physical capital, hence their services, are not free goods. His theory of monopoly cannot, I believe, be salvaged by even the most generous interpretation.⁴ In spite of all this, the adverse judgment arrived at by some critics is completely wrong. For it neglects not only many individual strong points but, much more important, the essence of

2. Walras was perfectly aware of all the short cuts he had had to make in order to finish what he himself realized was a provisory structure. He never believed that such assumptions as those of constant coefficients of production, of timelessness of production, of absence of overhead costs, of equal size of firms could or should stand forever. It cannot be averred that, in this respect, Pareto was quite just to him. It was not only that Walras' was the pioneer performance: Walras had also indicated what was to be done next.

3. See above, p. 149, note 3.

4. Some merit there was, however, in his inclusion of the theory of monopoly in the body of general theory. Also, his theory of international trade must not be reduced, as it mostly is, to a mere criticism of comparative costs. He sketched, although he did not elaborate, a theory of his own that was the first to apply to international trade the apparatus of general equilibrium. See v. Haberler, *Theory of International Trade*, 1936, p. 123.

the achievement. The most important of those strong points, the theories of value and of production, will be discussed presently. But first we must try to define that achievement itself of which these two theories were but applications.

The first idea that must occur, from a purely theoretical point of view, to anyone who has mastered Walras' system is to raise it to a still higher level of generality. When we follow Walras and, indeed, all the marginal utility theorists on their progress through the phenomena of exchange, production, and so on, we discover that they are trying to solve problems that in ultimate logic reduce to one only: *all* their problems — not only the problems of production — are problems in the transformation of economic quantities and formally alike, the differences consisting merely in the different restrictions to which economic action is subject in different fields. Suppose we decide to do what we do in all the sciences, that is, to separate out the common core of all economic problems and to build a theory of this common core once and for all. The viewpoint of "mental economy" (E. Mach's *Denkökonomie*) will justify this endeavor to utilitarians. A theory of this kind will work with quite general indices, such as "tastes" and "obstacles," and need not stop at the specifically economic meanings that we may assign to these words. We may transcend economics and rise to the conception of a system of undefined "things" that are simply subject to certain restrictions and then try to develop a perfectly general mathematical *logic of systems*. Stretches of this road should be quite familiar to economists who have for generations used primitive devices, such as our venerable friend Crusoe, for the purpose of displaying certain features of economic logic. Pareto simply did the same on a much higher level and on a much broader front. But in these altitudes it is difficult to breathe and still more difficult to gain ground. Critics as competent as the late A. A. Young have been of the opinion that Pareto achieved nothing but "arid generalizations." But only the future can tell whether this is so. Meanwhile we should recognize the greatness of the attempt.

An example will show that such a "rush for generality" may produce not only logical stones but also economic bread, though it suffers from the weakness that it still moves on a relatively low level of generality and, indeed, dates from the *Cours*. As everyone knows, Marx's work is an analysis of the capitalist process, no doubt geared to the purpose of showing that this process will issue in a socialist society but entirely free from any attempt at blocking out the economics of this society. And there are a number of Marxist and

neo-Marxist contributions to the latter problem that can only be described as complete failures. As everyone also knows by now, the service to socialist doctrine that Marxist theorists have been unable to render has been rendered by E. Barone whose famous paper on the subject ("Il Ministro della produzione nello stato collettivista," *Giornale degli Economisti*, 1908) has been surpassed by modern writers only in secondary details. But the essential idea of Barone's argument is clearly indicated in the second volume of Pareto's *Cours* (p. 94) and in his *Manuel* (p. 362), namely, the idea to lift, as it were, the logical core of the economic process above the ground of the institutional garb in which it is given to observation. The reader will observe how easily this idea suggests itself, as a special case, once we place ourselves on the standpoint of Pareto's general theory of tastes and obstacles, although it also suggested itself to Wieser.

In this special case, Pareto has nearly lost his claims to priority — at least among Anglo-American economists — although he had not only posited the problem but also pointed out the way to its solution. In other cases, he lost them completely because he confined himself to mere suggestions. Thus, assisted by hindsight, we may discern in the *Manuel* many pointers toward the later economic dynamics. However, none of them, such as his reference to a form of adaptation similar to a *courbe de poursuite* (dog-and-his-master problem, see, e.g. p. 289) and to the presence of *vibration continue* (see, e.g. p. 528), was put to any use other than the negative one of showing that the economic system's tendency toward a unique and stable "solution" (i.e., a unique set of values that will satisfy its conditions) is a much more doubtful matter than the economists of that period, including Walras, supposed.⁵ No positive use was made of these suggestions,⁶ and no method was indicated for attacking these problems. I therefore think that we should not hesitate to describe Pareto's work as static theory, and that substantial justice is done if we add that he, more than others, was aware of its limitations and of the call of the problems beyond.⁷

5. See, e.g. his discussion of unstable equilibrium in the article in the *Encyclopédie des sciences mathématiques*.

6. The jejune theory of crises (pp. 528–38) certainly does not qualify for being listed as an exception.

7. Pareto himself (p. 147) divided the subject of pure economics into statics; a dynamics that studies successive equilibria and seems to me to denote comparative statics; and another dynamics that studies the *mouvement du phénomène économique* and seems to merge genuine dynamics with the problems of evolution in a manner that would have proved highly inconvenient but for the fact that both remained, with Pareto, quite rudimentary. I know that the situation must look different to a disciple. But although the latter's attitude has its place, it cannot be adopted here.

We now proceed to a brief discussion of Pareto's work in the fields of value and production keeping in mind that, from the standpoint adumbrated above, they really merge into a single theory.

Most modern theorists, although not all, will agree that the historical importance of the utility and marginal utility theory of Jevons, Menger, and Walras rests mainly upon the fact that it served as the ladder by which these economists climbed up to the conception of general economic equilibrium although this conception was much more clearly perceived and much more fully developed by Walras than it was by either the Austrians or Jevons.⁸ In other words, the utility and marginal utility theory was one of several possible avenues to the thing that really mattered and, besides offering an excellent method for demonstrating in an easily understandable way the relations that hold the economic system together and, in fact, make a unified system out of the mass of economic phenomena which departmentalize so easily, had no great importance in itself. Or, to put it still differently, utility theory was an extremely useful heuristic hypothesis and nothing more.⁹ But neither Walras nor the Austrians were of this opinion. On the contrary, for them the utility theory was nothing less than ultimate truth, the discovery of the key to all the secrets of pure economics. In consequence, they placed an emphasis upon it that in turn induced Pareto and the Paretians to

8. As Lord Keynes in his biographical essay on Alfred Marshall has pointed out, Marshall was also in full possession of that conception, and we have Keynes's word, as well as other indications, for believing that he arrived at this conception independently and earlier rather than later than Walras. This does not alter the fact, however, that he published nothing about it that antedates the relevant notes in the Appendix to the *Principles* (notes XIV and XXI of the fourth edition) which, moreover, cannot be described according to the ordinary rules of assigning priority as more than glimpses. We have, therefore, to conclude that Walras' priority is unchallengeable. But so is that of the Austrians and especially of Wieser. It is perfectly clear that it was only lack of mathematical skill and especially the inability to handle systems of simultaneous equations that prevented Menger from producing an exact system that would have been substantially similar to that of Walras. But I do not think that those historians are right who attribute the concept of general equilibrium already to Cournot. Chapter XI of the *Researches into the Mathematical Principles of the Theory of Wealth* contains nothing but recognition of the general interdependence of economic quantities, and neither there nor anywhere else does Cournot offer guidance toward the great attempt to make this conception explicit and fruitful. All the actual work in the *Researches* is either partial analysis or else, to some extent, aggregative analysis.

9. I wish to make it quite clear, however, first, that I do not think that its heuristic value is as yet exhausted, and, second, that the statement in the text must be read with the proviso, "so far as the purpose of establishing the determinateness and stability of static equilibrium is concerned." There may be other uses for it and it is impossible to be sure that for such other purposes it might not be revived any moment.

place undue emphasis upon their renunciation of it. Authors in the English-speaking world, particularly Professors Allen and Hicks, followed suit and very generously congratulated Pareto on what to them also seemed a new departure of first-rate importance. In fact, there is a widespread opinion to the effect that this new departure constitutes Pareto's main contribution.

There are indications in the *Cours* that Pareto was not quite satisfied with the Walrasian theory of value from the first. But his amendments, either insignificant or not original, remained within the precincts of the principle itself. Of the insignificant amendments, we merely mention the introduction of the term *ophélimité* in the place of the term utility (*ophélimité élémentaire* for marginal utility or Walras' *rareté*) on the ground that the latter carried too many misleading associations. Of those that are not original with Pareto I mention the conception of utility and marginal utility as functions of all the commodities that the consuming unit possesses or consumes in an appropriately chosen period of time, instead of Walras' conception of total and marginal utility of every commodity as function of the quantity of that commodity alone. This obvious improvement is due to Edgeworth, but I confess to some doubt whether Edgeworth was fully aware of the theoretical difficulties this improvement would cause, for it turns the final degree of utility that was simply an ordinary differential coefficient with Jevons, Walras, and also with Marshall, into a partial differential coefficient and this greatly increases the mathematical difficulties we encounter when trying to prove the determinateness of the economic system even in its most simplified form.¹

Before long, however, and certainly before 1900, the year in which he delivered his Paris lectures that made his change of standpoint publicly known, Pareto realized that, for his purposes at least, the concept of measurable utility (cardinal utility) might be safely abandoned² or that, in any case, it would have to be abandoned for

1. To be more exact: when we are trying to prove that there is one and only one set of values that will satisfy the equations of general equilibrium, so far as I can see everything is plain sailing so long as we adhere to the assumption that the marginal utility of every commodity depends only on the quantity of that commodity and so long as we do not admit any money but only a *numéraire*. The restrictions that are necessary even then in order to produce proof of determinateness seem to me quite bearable economically. It is the intrusion of those partial differential coefficients which creates the real difficulty.

2. Gustav Cassel came to the same conclusion in 1899. He went even further than Pareto and claimed to be able to do without any utility concept at all. It is not possible to explain here why this claim was unjustified, and why his method of starting with market demand curves which he simply postulated is inadmissible. However, in order to appreciate that episode in the history of

reasons that were first stated exactly in the second part of Irving Fisher's *Mathematical Investigations into the Theory of Value and Price* (1892). To save the situation he appealed to the indifference and preference curves that had been first introduced by Edgeworth. But, whereas Edgeworth still started from a measurable total utility from which he deduced the definition of these lines, Pareto inverted the process. He took the indifference lines as the given thing to start from and showed that it was possible to arrive from them at the determination of economic equilibrium in pure competition and also to proceed to certain functions which might be identical with utility if it exists. In any case, it was possible to obtain (ordinal) *indices* of utility or what Pareto called index functions (*Manuale*, p. 540, note 1).

I wish to bring out two points quite clearly. The first is that Pareto, though he may have adapted an invention of Edgeworth's to his own use, imparted to the indifference varieties a meaning that they do not carry in Edgeworth's *Mathematical Psychics*. They are quite divested of any utility connotation, and what the concept of utility had done for the theory of economic equilibrium was now to be done by certain assumptions about the form of these indifference curves. The new idea was to replace utility postulates by postulates about observable behavior and thus to base economic theory on what seemed to Pareto to be more secure foundations. It might be urged of course that in spite of several attempts nobody has as yet succeeded in carrying out such observations and that it is difficult to indulge in the hope that we might construct them from objective data *in their whole extent* so as to derive a complete empirical indifference map. Let us call them, therefore, potentially empirical or, to misuse a Kantian term, "referring to possible experience." In any case, their introduction for a purpose entirely foreign to Edgeworth's, might be called a truly original achievement were it not for the fact that this achievement had been, as Pareto recognized, foreshadowed in Fisher's work mentioned above.

The second point is that Pareto's own argument brings out the difficulty he experienced in disentangling himself entirely from the economic theory it is necessary to remember that at that time not only the utility theory itself but also all the theory of cost and distribution that was built upon it still met with great resistance. This resistance was, especially in Germany and Italy but also elsewhere, sometimes motivated by objections against operating with unmeasurable and unverifiable psychic magnitudes. And so the opposition to marginal utility theory from Pareto and others joined forces with (or at least added new vitality to) a common-run argument that had been repeated again and again by writers with whom Pareto would not have cared to find himself associated.

old utility theory. He always kept an eye on the cases in which it might be possible to speak of utility and even of cardinal utility, the existence of which — hence the question of integrability — continued to interest him very much. And his index functions bear after all a pretty close similarity to the old concept. In fact, as has been pointed out by Allen and Hicks, he never succeeded quite in disentangling himself entirely, and he continued to use concepts such as the Edgeworthian definitions of rivalry and complementarity that do not go well with his fundamental idea. This fundamental idea, let us add, was developed and defended as early as 1902 by P. Boninsegni.³ By 1908, Enrico Barone, in the paper mentioned already, definitely went beyond Pareto by confining his fundamental assumptions in the matter of value theory to what he called the *fact* that, confronted with given prices of products and productive services, every individual distributes his receipts from the sale of his services between expenditures on consumption goods and saving in a certain unique manner “of which we are not going to investigate the motives.” This, so he pointed out, does away with any concept of either utility or indifference functions. The rest of the story is too well known to detain us. I shall merely mention the papers of Johnson and Slutsky that for the time being remained practically unnoticed; the important reformulation of Bowley in his *Groundwork* that was more influential; and the work of Allen and Hicks, Georgescu-Roegen, Samuelson, and H. Wold. If we accept the present situation as “provisionally final,” we must indeed salute either Fisher or Pareto as the patron saint of the modern theory of value.

But, still more definitely than patron saint of the modern theory of value is Pareto the patron saint of the “New Welfare Economics.” The story of how, once more, he came to render a service to a cause with which he was — or would be — completely out of sympathy, is not without its humor. From the very beginnings of economics, a loosely defined public welfare played a great role in the writings of economists. The familiar slogans of utilitarianism (Beccaria, Bentham) did something toward rationalizing the concept, and the utility theory of value seemed admirably qualified to implement it: in fact it was promptly harnessed to the task, e.g. in the field of taxation. The Fisher-Pareto theory of indifference varieties, destroying as it did the bases of arguments that worked with cardinal utility or even with interpersonal comparison of utility (satisfaction), should, so we might think at first blush, have done away with all this. But instead

3. “I fondamenti dell' economia pura,” *Giornale degli Economisti*, February 1902.

of drawing this conclusion — and in spite of his contempt for the political humanitarianism of our age — Pareto immediately went on to attack the problem of maxima of *collective* satisfaction afresh. The definitive formulation was left for Barone,⁴ but the main idea is again Pareto's. He observed, first, that all changes imposed upon any given economic pattern may be said to increase welfare or collective satisfaction in a perfectly objective sense if those who gain in terms of *numéraire* could compensate those who lose in terms of *numéraire* and still have some gain left. This criterion will in fact salvage some though not all of the welfare judgments usually passed by economists.⁵ Second, Pareto pointed out that welfare judgments that cannot be salvaged in this manner must be explicitly based on extra-economic, e.g. "ethical," considerations. And third, he showed (pp. 363-4) that the criterion may be used in order to establish that *l'état collectiviste* may improve upon the level of welfare that is practically attainable under perfect competition.⁶ But, barring developments, these points are pretty much what the New Welfare Economics amounts to.

That part of Pareto's welfare economics which deals with the logic of production provides a convenient transition to his second great contribution to pure theory, his theory of production.⁷ Approaching the problem from the side of the theory of choice and applying to the producer's case the general apparatus of indifference curves and derivative concepts (*lignes du plus grand profit, lignes de transformations complètes et incomplètes* etc.), he sketched out a comprehensive structure only parts of which are explicitly present in the literature of his time⁸ and which may be said to constitute the

4. See "Il ministro. . ." p. 276, (mentioned above, p. 159).

5. The criterion, in strict logic, is independent of whether that compensation is actually made or not. In the latter case, we simply split the change imposed into two parts: into a change that improves collective satisfaction to which the criterion applies and a transfer from losers to gainers to which it does not apply. Even so, I do not wish to appear in the role of an advocate of the welfare judgments that the criterion protects from being invalidated by objections against the use of cardinal utility or of interpersonal comparison of states of satisfaction. There are other and much more important ones, especially the objection that these "objective" welfare judgments neglect all but the immediate effects.

6. The last sentence on p. 363 of the *Manuel* seems to me to anticipate substantially Professor Hotelling's argument in "General Welfare in Relation to Problems of Taxation and of Railway and Public Utility Rates", *Econometrica*, VI, (1938). The practical application to railroads of the principle that welfare might be maximized by charging prices that will cover marginal cost even in the case of decreasing cost industries and by financing fixed costs (as Pareto said) in some other way, is old. So far as I know, it is due to Launhardt who inferred from this that investment in railroads should "never" be left to private industry (*Mathematische Begründung der Volkswirtschaftslehre*, 1885, p. 294; and earlier writings.)

foundation of the mathematical theory of production of our own age or, at all events, of its statics. In particular, its very generality leaves room for all the special cases that we may wish to treat without placing exclusive emphasis on any one of them: the "obstacles" may be anything at first, and can then assume any of the forms that occur more commonly in practice — the factors that are required in fixed quantities irrespective of output, the factors that are required in technologically determined quantities per unit of output, the "compensatory" factors, and so on, all take their places in a theoretically complete schema of possibilities. In appraising this achievement, we must keep in mind that Pareto was primarily concerned with generalizing and otherwise improving the work of his great predecessor. Again his work may be divided into a first part that culminated in the *Cours* and a second part that culminated in the *Manuel*, though some minor touches were added in the article in the *Encyclopédie des Sciences Mathématiques* (Volume I, 1911).

Originally, Walras had expounded his theory of production on the assumption of fixed coefficients of production — fixed (average) inputs per units of output — not because he believed that this was the only or even a very important case but because he thought himself justified in adopting what he considered to be a simplification.⁹ His reply to private criticisms that poured in on him was that "the economists who will come after me are free to insert one by one all the complications they please. They and I, so I think, will then have done everything that it was our duty to do" (*édition définitive*, p. 479). So far as this goes Pareto cannot be said to have done more than take Walras' advice. In addition, when the *Cours* appeared, Walras had already introduced variable coefficients, on a suggestion of Barone's that reached him in 1894,¹ though without altering the argument of

7. See in particular *Manuel*, Chapter III, paragraphs 74–82, 100–105; Chapter V, and paragraphs 77–107 of the Appendix.

8. But if we leave out the word "explicitly," then a much greater part of Pareto's schema must be credited to some of his contemporaries, or even predecessors, and especially to Marshall.

9. It is curious that the greatest of all theorists should have entertained that opinion. For, first, this simplification creates analytic difficulties that may set us wondering whether in the end it is a simplification at all; and, second, it creates a gulf between theory and reality that is great enough to make it doubtful whether results obtained by means of it are of any use.

1. This was done in a *Note* published in 1896 and reprinted in the third edition of the *Eléments*. In the fourth edition (1900) a full-fledged marginal-productivity theory was presented in the 36th *leçon* in a form that was open to criticism on various counts and was later on revised for the final edition that was published posthumously in 1926. See on this and for a useful rendering of Pareto's later theory: H. Schultz, "Marginal Productivity and the General Pricing Process," *Journal of Political Economy*, October 1929.

the fundamental section on production. In the same year (1894) appeared Wicksteed's *Essay on the Coordination of the Laws of Distribution*. Finally, variable coefficients of production were no novelty in any case after all that Jevons, Menger, and Marshall had said on the subject. Pareto's *Cours* added only an elegant formulation and a number of reasons — not all of them convincing — why the case of compensatory coefficients should not be treated as the only or the fundamental one either.

It is of course a mere matter of terminological taste whether or not we are to confine the phrase "marginal productivity theory" to this case.² Pareto did so confine it and, in the years following upon the publication of the *Cours*, grew increasingly hostile to it, declaring it definitely "erroneous." He was evidently under the impression that he had refuted or, at any rate, outgrown it in the same sense in which he felt that he had refuted or outgrown the marginal utility theory. His brilliant theory of cost — which, among other things, withdraws from their dangerously exposed positions the textbook theorems that, in perfect equilibrium of pure competition, price should equal marginal cost and total receipts should at the same time equal total cost — permit us to test this claim.³ So far as productive combinations depend on economic considerations — and, after all, it is the economic considerations which it is the economists' task to clear up — the difference, as compared with straight marginal productivity theory, is not great. But Pareto does teach us how to handle the deviations from it that technological and social restrictions impose. And, here as elsewhere, he does something else: he always points beyond himself.

2. The main reason for doing so is a textbook tradition which takes into account only production functions that represent quantities of product as dependent on "substitutional factors" alone and arrive at the theorem that, in perfect equilibrium of pure competition, the unit of each of the innumerable requisites of production earns a compensation that equals physical marginal productivity times the price of the product. But we do not leave the precincts of the marginal productivity argument if we admit "limitational factors" or, more generally, restrictions upon the production function that will produce results at variance with that theorem. See, e.g. A. Smithies, "The Boundaries of the Production Function and the Utility Function," *Explorations in Economics, Notes and Essays contributed in Honor of F. W. Taussig*, 1936.

3. We use this opportunity in order to advert to Pareto's conception of rent which arises in the cases where those two conditions (total cost = total receipts; price = marginal cost) are incompatible, and especially in the cases where transformation of savings into certain kinds of capital goods meets with difficulties. This theory of rent has experienced a renaissance in our days. It may help us toward an improved theory of friction. But it can hardly do more.

III. THE SOCIOLOGIST

There is nothing surprising in the habit of economists to invade the sociological field. A large part of their work — practically the whole of what they have to say on institutions and on the forces that shape economic behavior — inevitably overlaps the sociologist's preserves. In consequence, a no-man's land or everyman's land has developed that might conveniently be called economic sociology. More or less important elements that hail from that land are to be found in practically every economic treatise or textbook. But beyond this many economists, and especially those who define economics proper rather strictly, have done sociological work. A. Smith's *Moral Sentiments* and Wieser's *Gesetz der Macht*, are both outstanding instances of a large genus. But few if any men in the list of great economists have devoted so large a part of their energy as has Pareto to what at first sight seems to be an extra-curricular activity, and few if any owe so much of their international reputation to what they have done in that field. But his achievement is not easy to characterize and to appraise. The enthusiastic applause of some and the hostility of others are both understandable but neither can be taken quite seriously because the non-scientific sources of both are painfully obvious in most cases. Although several minor works and a large number of newspaper articles would have to be considered in order to give a satisfactory picture, we need not go beyond the *Systèmes Socialistes*, the *Manuel* (especially Chapters 2 and 7) and the *Trattato di Sociologia Generale*.

Let us begin with two aspects of Pareto's sociology that are perfectly obvious and the reverse of difficult to characterize. First, although Pareto the economist touched upon a large number of extremely concrete and practical problems throughout his long life, his purely scientific contribution is in the realm of the most abstract economic logic. It is, therefore, quite understandable that he should have experienced a wish and, in fact, a need to erect alongside his pure theory another building that would shelter facts and reasonings of a different kind, facts and reasonings that would do something toward answering the question how the elements taken care of by his economic theory might be expected to work out in practical life. Second, we have seen that in his earlier days, at least as long as he lived in Italy, he had taken a passionate interest in the debates on questions of economic and general policy. The born thinker that he was must have been struck by the impotence of the rational argument, and the question must have intruded upon him of what it really is

that determines political action and the fate of states and civilizations. Again, it is quite understandable that, so soon as he had settled down to a life of thought, this question should have emerged from the sphere of easy and superficial answers that all of us are prone to give when immersed in our daily work, and that he should have attempted to raise it to the plane of scientific analysis. This amounts to saying that primarily and fundamentally his sociology was a sociology of the political process. Of course, everything that man does or thinks or feels and all his cultural creations and his attitudes toward cultural creations are bound to come in somehow or other when we think about the political process which then becomes but a special case. But it was this special case which fascinated Pareto and for the sake of which he erected and adorned a much larger structure.

Next still moving on ground that is relatively easy to survey, we shall consider his method. Pareto himself emphasized again and again that he simply applied the same "logico-experimental" methods that had served him for the purposes of economic theory to the task of analyzing the "experimentally" verifiable reality of other aspects of social life, allowing himself to be guided here as elsewhere by the example of the physical sciences. This was, of course, a complete delusion. It is easy to observe, for instance, that he made large and in part illegitimate use of psychological interpretations for which there is no analogy in the physical sciences and that his material, such as it was, was the product of observation and not of experiment — a difference which is fundamental from the standpoint of method. I am afraid that what he really meant to emphasize when trying to formulate his rules of procedure was simply the detachment of the philosopher who does not identify himself with any party, interest, or creed. The possibility of such detachment raises, of course, a very well-known fundamental difficulty and one that Pareto was the less qualified to overcome because he failed to see it. Actually he used two different analytic schemata: one that may be called a morphology of society and does invite the use of facts that are, potentially at least, amenable to observation in a similar sense as are the facts of anatomy or biology; and another that pertains to social psychology. Both schemata are indeed *illustrated* or even, to some extent, *verified* by historical and contemporaneous instances, but neither is *derived* from them by anything like a "logico-experimental" method: both are reflexes of a highly personal vision of the social process that owes much to Pareto's background, practical experience — and resentments. The affinity of the morphological schema with Darwinian selection and of the socio-psychological schema with

parts of the teaching of Tarde, Dürkheim, Lévy-Bruhl, and Th. Ribot is obvious. Still more so is the relation of both with the current of thought glanced at in the first section of this essay that issued in derogatory criticism of the doings of parliamentary democracy — the current that was anti-intellectualist, anti-utilitarian, anti-equalitarian and, *in the special sense defined by these terms*,⁴ anti-liberal. But the force of the man created from these materials something that was nevertheless specifically his own.⁵

The morphological schema centers in the proposition that all societies consist of heterogeneous masses of members — individuals or families — and are structured according to the aptitudes of these members for the relevant social function: in a society of thieves, the *ex hypothesi* widely varying ability to steal would determine social rank, and hence influence upon the government of the society. Pareto seems to assume that these abilities, while capable of improvement and of decay, are substantially innate though he makes little effort to establish this. Moreover, though distributed continuously in the population, they lead to the formation of classes, the “higher” ones of which have and use the means of buttressing their position and of separating themselves from the lower strata. In consequence, there is in the lowest strata a tendency to accumulate superior ability that is prevented from rising, and in the topmost stratum, in the aristocracy or *élite*, a tendency to decumulate energy through disuse — with resulting tension and ultimate replacement of the ruling minority by another ruling minority that is drawn from the superior elements in the *couches inférieures*. This *circulation des élites* does not, however, affect the principle that it is always *some* minority which rules, and does not do anything to bring any given society nearer to the ideal of equality, though it does produce equalitarian philosophies or slogans in the course of the struggles that ensue. With a turn of phrase that recalls the first sentence of the *Communist Manifesto*, Pareto proclaimed that history is essentially a history *de la succession des aristocraties* (*Manuel*, p. 425). But his presentation of this part of his argument is so very sketchy and he leaves his readers with so much to

4. This proviso is very necessary. There are other meanings of the word “liberal,” one of which would describe Pareto’s position much better than could any other term. Similarly, there is a sense in which he might be justly called a great humanitarian. But it is not the one which he applied to *individus dégénérés, d’intelligence et de volonté faibles* (*Manuel*, p. 130.)

5. It is highly instructive to observe how different the results are that different men arrive at not only from the same facts but also from the same intuitions. Graham Wallas was an orthodox English radical and a Fabian. But in *Human Nature in Politics* he drew a picture that was not in the least more flattering to the slogans of political democracy than was Pareto’s.

interpolate that I am not at all sure that I have rendered justice to his thought. Nevertheless, I had to make the attempt. For some such argument is necessary in order to put his social psychology into its proper light.

The socio-psychological schema centers in the concept of the non-logical (not necessarily illogical) action. This concept recognizes the well-known fact — well-known, in particular, to economists — that the great mass of our everyday actions is not the result of rational reasoning on rationally performed observations, but simply of habit, impulse, sense of duty, imitation and so on, although many of them admit of satisfactory rationalization *ex post* either by the observer or the actor. So far there is nothing in Pareto's psycho-sociology that could be unfamiliar to anyone. What is unfamiliar however is his tremendous emphasis upon the additional facts that a great number of actions — and let us add at once, beliefs — are being rationalized, both by actors and by observers, in ways that will not stand up under scientific analysis and, more important, that some actions and beliefs are altogether incapable of being rationalized in any way that will. The importance of this second step for a sociology of the political process becomes obvious if we take a third one: Pareto maintained that the large majority of all the actions and beliefs that make up that process are of the type mentioned last. Take, as an instance on which we all agree, the idea of the Social Compact or, as an instance on which most of us agree, Rousseau's theory of the *volonté générale*. Only, according to Pareto, practically all the actions, principles, beliefs and so on prevailing in the collective mind of electorates belong in the same category. And a large part of the *Trattato* consists in illustrating this, often amusingly, sometimes instructively.

It will serve our purpose to put this point strongly, more strongly than Pareto himself ever put it. The masses of thought and the conceptual structures that form the conscious surface of the social and in particular of the political process have no empirical validity whatever. They work with entities such as liberty, democracy, equality, that are as imaginary as were the gods and goddesses who fought for and against Greeks and Trojans in the *Iliad*, and are connected by reasonings that habitually violate the rules of logic. In other words, from a logical standpoint, they are nonsense unalloyed. This makes a political philosophy that is best described by its diametrical opposition to that of Jeremy Bentham. It should be observed, however, that this diagnosis of the political myths (Sorel) did not induce Pareto to overlook the function that this logical nonsense may fill in national

life. After having gone through with an analysis that is severely positivist in nature, he refused to draw the conclusion that would seem the obvious one to the positivist. While political creeds and social religions — with Pareto there is very little difference between these two — contribute to dissolution in dissolving civilizations, they also contribute to effective organization and action in vital civilizations. This is a very curious attitude for a thorough-going positivist to take and will perhaps be cited at some future time as an outstanding example of the mentality of an epoch that destroyed one type of metaphysical beliefs while ushering in another. It reminds me of the advice which I have heard some psychoanalysts give to some of their patients, namely the advice to cultivate with a view to possible remedial effects a sort of synthetic belief in God. There is of course no contradiction between maintaining that social and political creeds have no empirical significance and admitting that some of them may make for social cohesion and efficiency. But the social philosopher who should thereupon undertake to advise the adoption of the latter would run into the same difficulty as our psychoanalyst: so long as his *analysis* is being accepted his advice must be ineffective, for no synthetic God can be trusted to help; so soon as his *advice* is accepted his analysis will have to be rejected.

That tissue of creations of our imagination Pareto called *dérivations*. The argument adumbrated in the preceding paragraph abundantly shows that they are not without importance as factors that help to shape the historical process. It was Pareto's opinion, however, that this importance is relatively small and that substantially these *dérivations* do no more than verbalize something more fundamental that comes much nearer to determining actual political behavior and the sum total of non-logical actions. Now if we defined this more fundamental something in terms of group interests, and if we then went on to define these group interests in terms of the social location of groups within a society's productive organization, we should be, to say the least, very near Karl Marx's view of the matter, and there is in this point actually a strong affinity which I think it important to emphasize. In fact, if we adopted this line of reasoning, there would be only two major points of difference left between Marxian and Paretian political sociology. On the one hand, Pareto introduced explicitly an element that is only implicitly present in the Marxist analysis: the importance for the explanation of an actual stretch of history, of the greater or smaller degree of social flexibility that a given society displays, or, in other words, the importance of the fact that there exists an optimum of vertical mobility and of resistance

to it that will better than others guarantee what might be termed stability of political change. On the other hand, we need only recall our sketch of Pareto's social morphology in order to realize that with Pareto the historical process is not so much the result of the conflict of comprehensive social classes as it is the result of the conflict of their ruling minorities. It is submitted that, while both differences are to the credit of Paretian sociology, they do not amount to more than corrective improvements upon the Marxist schema. I might add the fact that property relations *per se* are much less in evidence with Pareto than they are with Marx, and that this also constitutes a claim to superiority of the Paretian analysis. But it will be readily seen, that this point is really implied in the other two.

Actually, however, Pareto did not follow up this line of analysis. With him the link between the tissue of delusions which he called *dérivations* and the objective determinants of actual behavior was supplied by what he called the *résidus*. I am conscious of the danger of being unfair if, for the sake of brevity, I define these *résidus* as impulses generally found to be present with human beings that revive, and not in a very inviting manner, the old psychology of "instincts." We need not discuss the list that Pareto drew up — and which contains such items as an instinct of combinations, the sexual impulse, and so on — especially as Pareto himself does not seem to have been very satisfied with it. It is sufficient to point out the obvious methodological objection to any such procedure; even if Pareto's *résidus* and the "laws" of their association and persistence were much more satisfactorily analyzed than they are, they would still be labels rather than solutions of problems, and call for professional investigation of a kind for which Pareto lacked the equipment. It is therefore quite understandable that Pareto's work has exerted so little influence upon professional sociology and social psychology, and that professional sociologists and social-psychologists have but rarely displayed a sense of the greatness of the structure as a whole.⁶

But those and other shortcomings are not decisive. Pareto's work is more than a research program. Also, it is more than mere analysis. The fundamental principle that what individuals, groups, and nations actually do must find its explanation in something much deeper than the creeds and slogans that are used in order to verbalize action, conveys a lesson of which modern men — and none more than we economists — stand much in need. We are in the habit when discussing questions of policy of accepting at face value the

6. Professor Talcott Parsons' analysis of Paretian sociology stands almost alone in the Anglo-American sociological literature.

slogans of our own and, indeed, of a by-gone time. We reason exactly as if the Benthamite creed of the eighteenth century had ever been valid. We refuse to realize that policies are politics and to admit to ourselves what politics are. We cultivate the subnormal and do our best to suppress whatever there is of strength and sparkle. In conditions such as these, Pareto's message, however one-sided, is a healthy antidote. It is not, like his economics, a technical achievement of the first order. It is something quite different. It is an attempt to preach a sermon.

JOSEPH A. SCHUMPETER.

HARVARD UNIVERSITY