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## THE ECONOMICS OF THE LAUSANNE SCHOOL IN ITALY

### TAMOTSU MATSUURA

Pareto's achievement was one of the two prominent contributions by Italians to the history of economics, and Schumpeter pays his tribute of praise in his History of Economic Analysis. Schumpeter elucidates the following four factors concerning the world-wide appreciation for Pareto: (1) (1) the prevalence of Paretian sociology, (2) the interest in the Pareto Law, (3) the high appreciations rendered by Bousquet, Divisia and others in France. At any rate, the popularization of the Lausanne School, based on the general theory of economic equilibrium would be the most important contribution of Pareto.

At the same time, Schumpeter, in his "Ten Great Economists from Marx to Keynes" devotes some pages to enter into Pareto's achievements in economics, where he comments on the Pareto School that "this school was specifically Italian". (2)

Through Schumpeter's considerations on Pareto, we could say that the economics of Lausanne School which flowered at the beginning of this century in Italy had very much like Italian character. Then we will examine following three problems.

- i) With the interpretation that the economics of Lausanne School in Italy have Italian features, what are the fundamental characteristics of this system?
- ii) How should we appreciate the contributions of the economists belonging to this school?
  - iii) How should we consider their historical position?

I should notice Schumpeter's comment; "Pareto School did (never) dominate Italian Economics" [39] p 118. It is sure that Pareto did not give any lesson of economics in his motherland, Italy, but succeeded to Walras's shair in Lausanne University in Switzeland. If we remember the names of the leading Italian economists from 1910 to 1940, we will find that those who were influenced by Pareto were not many. That is, among such well known Italian economists as Luigi Amoroso, Constantino Bresciani-Turroni, Gustavo Del Vecchio, Luigi Einaudi, Marco Fanno, Corrado Gini, Alfonso De Pietri-Tonelli formed the true core of his school. When we read Einaudi's "La Scienza Economica—Reminiscenze—Cinquant' anni di vita intellectuale Italiana, 1986–1946" [16], we can see that most of the economists listed above bent their energies to the development of analysis on the basis of their own theoretical systems, while recognizing Pareto's eminence.

- (1) Schumpeter [38], p. 855.
- (2) Schumpeter [39], p. 118.

Ι

As Graziani points out, (3) what we might call the *naive* utility theory in Italy emerged in the middle of the sixteenth century, in the writings of Lottini. His *Avvedimenti civili* (4) contains not only political views but also some significant suggestions about economic principles.

Lottini, following Aristotle, divided goods into those public and individual. He remarked that public welfare and individual happiness are related closely to each other, and that public goods are the fundations of individual happiness. He amplified that if, for example, a citizen lost his fortune, he could regain his well-being with the aid of the state. Individual needs be considered to be satisfied with goods which produced pleasure. His view of pleasure was grounded upon the medieval mode of thought on the one hand, and upon the modern one on the other; he exhibited both the moralistic judgement of the Scholastic and the analytical attitudes of the modern scientist. He insisted that people felt pleasure when their human needs, such as appetite and sexual desire were satisfied, but in order to feel satisfaction, regulation of reason was desirable. Hence, it was a matter of regret for him that too many people pursued their desires greedily, evaluated the present wants unreasonably, and were not sufficiently mindful of the future since they did not follow the dictates of reason but indulged in their own gratification. Thus Lottini, as a moralist, calmly observed the rampage of human desires and the underestimation of the future exigencies. Graziani looks upon Lottini's study as an origin of the scientific utility theory. (5) Nevertheless, I dare say that Lottini cannot be regarded as the scientific economist who systematized the utility theory. For his argument about economic problems was fragmentary and he did not treat the utility problem as a subject of economics. Rather, Davanzati<sup>(6)</sup> and his followers—Montanari<sup>(7)</sup> and Galiani,<sup>(8)</sup> and especially the latter, should be regarded as the starting point for the formulation of economics based on the naïve utility theory in Italy because they regarded this naïve utility theory of value as the principle of economics and tried to apply it to various economic problems.

Let us summarize Galiani's utility theory according to his *Della moneta*. He showed that *value* is the subjective equivalence relation between a certain quantity of one good and that of another, that the value of a good never has meaning unless it is related to a quantity of another good and, further, that *value* depends on *utility* and *scarcity*. But he could not explain how the subjective value relation was transmuted to the objective value relation in the market,

- (3) Augusto Graziani (1865-1944) [19].
- (4) Gian Francesco Lottini (fl. 1548) [24].
- (5) Graziani, op. cit. pp. 29-32.
- (6) Bernardo Davanzati (1529-1606); Nuccio [26].
- (7) Geminiano Montanari (1633-1687); Nuccio [26]. For Davanzati and Montanari see Arias [4].
  - (8) Ferdinando Galiani (1728-1787); Nuccio [26]. Cf. especially Galiani [17] and [18].

though he recognized it as a special case. It was due to the lack of marginal concept in his reasoning. He meant by *utility* all that produced pleasure or welfare, and regarded it as distinct from *usefulness*. *Scarcity* was defined as the quantitative relation between the quantity in existence, and its uses. Of course, he had some predecessors who had tried to recognize economic phenomena in such a manner. But, he thought of the "paradox of value" to be solved on the basis of this recognition. Taking this fact into account, it seems to me that he had a claim to a preeminent position among his contemporaries.

As Einaudi says, (9) when we read Galiani's work, we find that his theory approached very near the marginal utility theory established by the "Marginal Revolution" in the latter half of the 19th century. The differences between them are as follows: (1) Galiani could not formulate the theory of price determination as a consequence of the lack of the exact marginal concept, (2) not apply his analysis to the theory of cost and distribution. As to the first point, it is thinkable that this was a condition difficult to be established in his days, when the just-price theory had still a dominant influence upon the traditional or customary price-support policy in a city economy. As a consequence of the inexistent theory of the determination of prices based on objective value, the second problem of cost and distribution could not be developed. The labour theory of value was adopted in his cost theory, resulting in a lack of consistency with the theory of value. On the other hand, Adam Smith succeeded in an integral understanding of price and cost theories on the basis of the labor theory of value, stating that the natural price (at which the selling price is equal to its cost of production) is established by introducing the principle of free competition. This was one reason why the subsequent Italian economists could not succeed in the co-ordination of price and cost theories on the basis of utility theory. We must remember the important fact that it was difficult for them to develop the clear marginal concept when the mode of thought based on differential calculus was not prevalent.

In the generation subsequent to Galiani, Italian economists had already been influenced strongly by about 1800 by the British Classical School. And their leading members were mainly interested in the synthesis of utility theory of value and cost theory, which seems to be theoretically barren as stated above. Graziani, in his excellent work Storia critica della teoria del valore in Italia, (10) examines in detail the studies of economists in this generation. He suggests that the characteristic feature of leading Italian economists of the early 19th century such as Isola, (11) Gioia, (12) Ressi, (13) and Bosellini (14) was their endeavors to combine

<sup>(9)</sup> Einaudi, op. cit. p. 76. (10) Graziani [19], chap. 4, 5 and 6.

<sup>(11)</sup> Francesco Isola, Istituzioni di commercio e di econmia civile, 1711; cf. Graziani [19], p. 79. (12) Melchiorre Gioia, Nuovo prospetto delle scienze economiche, 1815; cf. Graziani, ibid., pp. 121-125.

<sup>(13)</sup> Adeodato Ressi, Dell'economia della specie umana, 1817-1820; cf. Graziani, ibid., pp. 129-130.

<sup>(14)</sup> Carlo Bosellini, Nuovo esame delle sorgenti della privata e pubblica ricchezza, 1816-1817; cf. Graziani [19], pp. 80-82.

the utility theory with cost theory.

In an economy in the process of the unification of national economy, as England's, the factors that increase productivity were stressed, and labour tended to acquire higher economic value than utility. Thus it was considered proper to define value in terms of the labour used in production in order to establish an objective value standard. But it was not true of Italy, where the regionalism was so strict that the economic activites were confined to the framework of city economy; the excellent classical works of Galiani and other writers continued to retain their influence. The utility theory continued without interruption in Italy in spite of the strong influence of the labour theory of value of the British Classical School on the economic doctrines throughout the world.

II

We must not overlook the influence of Scholasticism, the prop and stay of the Catholicism of the period, on the formation of the high-level system of economics in Italy, based on the development of the utility theory of value prior to Adam Smith, Since Schumpeter's clear-cut indication in his *History of Economic Analysis* (15) about the close relation between Scholasticism and modern economics and their importance, some historians of economics, such as De Roover (16) and Warland, (17) have examined this problem in detail.

De Roover<sup>(18)</sup> positively substantiates Schumpeter's epoch-making concept that Scholasticism has significantly contributed to modern economics evaluation through the following two pivotal concepts: i) the concept of Natural Law (Universalism); ii) the exploration of the Aristotelian thought that economic value depends on utility. The former, through Gratius and Puferdorf, led to the core of Adam Smith's economic doctrines—that is, the advocacy of free market, and of freedom from the controls of the nation—the denouncement of Mercantilism. De Roover's latter concept, through St. Thomas and his follower Molina, developed into the subjective value theory of Italian economists in the 18th century such as Beccaria, Verri, Call Cenovesi and Galiani. De Roover analyzes the reason why Adam Smith, who was influenced only by Natural Law philosophy and not by Aristotelian subjective value theory, in which

- (15) Schumpeter [38], p. 97. For the example he says, "this Public Good was conceived, in a distinctly utilitarian spirit, ... and is therefore, ... excactly the same thing as the welfare concept of modern Welfare Economics, Professor Pigou's for instance. The most important link between the latter and scholastic welfare economics is the welfare economics of the Italian economists of the eighteenth century".
  - (16) De Roover [13] and [14].
  - (17) Warland [45].
  - (18) De Roover [13], especially pp. 188-189.
  - (19) Cesare Bonesana, Marchese di Beccaria (1738-1794).
  - (20) Count Pietro Verri (1728-1797).
  - (21) Antonio Genovesi (1712-1769).

needs and their satisfaction were regarded as the cause of value, rather laid stress on the labour value as cost of production. Though his analysis is very interesting in view of the study of the history of economics, I must refrain from entering into it here. (22)

When we try to understand the development of economics in Italy, we should attach much importance to the tradition of the value theory based on the utility concept of Scholasticism. For, as Schumpeter points out, (28) the economic thought involved in Scholasticism was welfare economic theory in substance, and it was this value concept that linked the economic thought of Scholasticism with the theory of welfare economics. In fact, we should regard the theory of welfare economics coupled with the utility theory of value as the fundamental characteristic of Italian economics in the 18th century and as having formed its keynote ever since.

These suggestions of Schumpeter's and his understanding were made good by de Roover's study. (24) Recently, further development and their synthesis were accomplished by Warland in his interesting work Scholasticism and Welfare Economics. (25) Let us summarize what they stated.

The scholastic doctors and Italian economists in the 18th century thought that when people exchanged commodities through just prices in the market, prices were formed on the basis of the value, which was based on wants and their satisfaction. But we must never overlook the concept of Public Good when we discuss the Italian system of economic doctrines. The satisfaction of economic wants had to be discerned by the observer's reason or ratio recta. And actual expression of that observer's reason or ratio recta was the Public Good. Further, according to Italian thought, Public Good was to be the maximum satisfaction of everyone's wants. Hence we may regard Italian thought as the prototype of the analytical device of the utilitarian welfare economics.

Let us examine Pigou's analysis (26) of the price determination of the decreasing cost industry, an important essence of his welfare economics, in comparison with the Schola-Italian economic thought. In the case of the decreasing cost industry, so called market failure emerges if price determination is committed to the market principle. There is an advantage of technical monopoly in this case; that is production by monopoly enterprise has an advantage of lower cost than production by others. But, unfortunately, if price determination is committed to the monopoly enterprise, the monopoly price is necessarily formed. In order to solve such a problem, the state as a third party should interfere in the price

<sup>(22)</sup> With respect to this point, cf. Kauder [22], p. 5. (This part of this book is a summary of the same author's paper "The Retarded Acceptance of Marginal Utility Theory", Quarterly Journal of Economics, Nov. 1953).

<sup>(23)</sup> Schumpeter [38], pp. 97 and 177.

<sup>(24)</sup> De Roover [13].

<sup>(25)</sup> Warland [45], especially chap. 2 and 9.

<sup>(26)</sup> Pigou [53], especially chap. II, pp. 213-228; cf. also Matsuura [48].

determination, for the public's welfare. We can find some analogous characteristics in the analytical device of Pigou's welfare economics as summarized above and in that of the scholastic doctors or Italian economists of the 18th century.

The features of Italian economics characterized as a system of welfare economics developed administrative elements. It became a science which systematized public administration from the political, social, and moral point of view. For example, Verri thought that "economics is a science which studies the laws regulating economy and social life in order to acquire goods as much as possible." Pecchio also thought that "the scientific significance of economics is to harmonize justice, good customs, the welfare of the inhabitants, economic power, and the wealth of the nation." (28)

In short, the thought being based on the motto "the nation which takes care of the citizens' fortunes and the government which protects them" prevailed in the works of the Italian economists in the 18th century. Two factors contributed to this persuation. First, many of the economists directly took part in administration, as administrators or consultants of coexisting little countries, resulting from the regionalism in Italy. Secondly, the industrial organization of Italy was tardier than other, more advanced countries. Agriculture played a dominant role, industry was still in the infant stage, the quantity of capital was insufficient and credit-commerce activities were not vigorous. As a result of such circumstances, Italian economists devoted their energies primarily to studies in political techniques restricted by local conditions, rather than to the establishment of general economic laws. The fact that welfare economics have had strong influence upon subsequent Italian economists will be understood from this economic and political background, coupled with the influence of the Scholasticism presented in Catholicism.

Ш

So far, we have taken up the two factors that have formed the keynote of Italian economics from its formative period to the present day—that is, utility theory of value, and welfare economics. However, mindful of the characteristics of the Lausanne School in Italy, these two factors are not enough to explain Italian economics completely. We must add the distinctive feature of this school—the general equilibrium theory.

Historians of Italian economics cannot find any achievements comparable to the discovery of the structure of economic circulation by Cantillon<sup>(29)</sup> and Quesnay.<sup>(30)</sup> If we think that the essence of the systematization of economics

- (27) Verri [44], Nuccio [26].
- (28) Pecchio [32].
- (29) Schumpeter remarks that Cantillion [10] discovered this structure first.
- (30) Quesnay [36] occupies the indisputable position as the starting point of this discovery.

exists in the construction of a logical system based on the discovery of the circulation structure, no Italian economist might be cited as having been successful in that effort. Of course, we cannot say that Quesnay's work did not exert any influence on them. But, even if we study the economic theory of Pantaleoni, a representative scholar of the day, the general equilibrium theory, as formulated by Walras, which expresses the mutual interdependence of the various goods, had never existed in Italy until Pareto introduced it, in recognition of the circulation structure.

Demaria writes, "It is Walras who first shed light on the structure of general interdependence, the fundamental characteristic of economic equilibrium. Such great contribution cannot be shared with Pareto". (31) But the prototype of this conceptual device was Quesnay's Tableau économique and, as Molinier points out in his Les Métamorphoses d'une théorie économique (32) the recognition of the importance of the circulation structure from Quesnay to Walras has been appreciated in French economics. Nevertheless, according to Demaria, (33) "the decisive advance in the elucidation of this interdependence was achieved by Pareto's study". As we can see in his letter to Pantaleoni. (34) Pareto was forced to acknowledge that he was "indebted to Walras for the idea of the general equilibrium". He did not succeed to his teacher's and contemporaries' idea unconsciously, but pursued it intentionally. In fact, Pareto could understand the view of society involved in the general equilibrium concept which Walras could not perceive. It is this point which Demaria calls "advance".

If we follow Pareto's argument, group economic behaviours may be regarded as the result of individual ones offsetting each other, and hence they may be considered to have objectivity as social behaviours. Pareto realized that the Walrasian conceptual device of interdependence relation was an expression of the complexity of individual behaviours, and had objectivity.

Pareto's view of society rested upon the basis of the mechanical empiricism of the latter 19th century mechanics. According to this view, it was sufficient for a science to explain mechanically the functional relations between objective physical quantities identified empirically. From this point of view, it was necessarily considered metaphysical to give causal explanations in terms of entity concepts, such as force, in order to describe quantitative relations. Corresponding to this criticism in natural science, Pareto thought that economists ought to and could discard the marginal utility concept, the thesis of individual behaviours, being metaphysical, and not recognizable empirically, and that economists ought to explain economic phenomena in terms of the quantitative relations between group behaviors, expressed objectively in functions.

The correspondence between Pareto and Pantaleoni began in 1890. When

- (31) Demaria [12], p. 632.
- (32) A typical understanding of this points is found in Molinier [25].
- (33) Demaria [12], p. 663.
- (34) Pareto [29], vol. II, p. 261; cf. also Matsuura [46].

we examine these letters, we note that Pareto began to doubt the marginal utility concept in about 1896, (35) and in 1899 he confided his plan of *Manuale di economia politica*, (36) in which he rejected explicitly the marginal utility theory and constructed a new theory of choice. (37)

As a consequence of Pareto's introduction of the general equilibrium theory, the utility theory of value, the keynote of Italian economics, which could have become led to the introduction of the Walrasian theory based upon the marginal utility concept, vanished out of sight. But economic scientists now made their way towards an open frontier: the development of the theory of consumer behavior. The contribution of Giornale degli economisti<sup>(38)</sup> from 1900 to 1920 to the theoretical development in this field was very great. Especially Slutsky's "Sulla teoria del bilancio del consumatore" (39) (1915) should be appreciated as a remarkable fruit with modern elements.

New contents were incorporated into the stream of the welfare economic thought in Italy after the introduction of the general equilibrium theory. The contents concerned with the objective optimum from the mechanical point of view of the efficiency of economic mechanism. The fundamental concept of "Pareto-optimum" was formulated in the mathematical appendix in the French edition of Pareto's *Manuale di economia politica* (1909). (40) Barone, in his "Il ministro della produzione nello stato collettivista" (1908), (41) also developed the theory of objective optimum applicable to any society.

An interesting and noteworthy fact is that Pigou's Wealth and welfare was published in 1912, and the concept of "Pareto-optimum" was formulated by Pareto in 1909. The usual distinction between old- and new-welfare economics rests upon which theory Anglo-Saxon economists accepted earlier, not upon which theory was formulated first.

# IV

By examining the history of Italian economics from the viewpoint of historical continuity and independency of the times, we have found two primary keynotes in it: utility theory of value, and welfare economics.

These two keynotes were certainly modified by the introduction of the general

- (35) Pareto [29], vol. I, p. 211 (June 9th, 1896), p. 197 (April 2nd, 1896), vol. II, p. 283 (May 17th, 1897); cf. also Matsuura [46].
- (36) It is the letter dated 'Sept. 28th, 1899' (Pareto [31], II, p. 430) that is important with respect to this point.
  - (37) Matsuura [48].
- (38) It was a representative academic journal of economics in Italy and acquired world-wide fame.
  - (39) Slutsky [42].
  - (40) Pareto [31].
  - (41) Barone [5].
  - (42) Pigou [34].

equilibrium theory, which had never existed in that country, and, at the same time, by the mechanical view of society inherent in it which had been a prevailing view of science in the latter 19th century. However, they remained substantially the same as the fundamental elements which have characterized the economics of the Lausanne School in Italy.

This problem may be elucidated still more if we compare the economics of this school with the contemporary doctrines in other countries. Let us take Cassel<sup>(43)</sup> in Sweden as an example. He also removed the utility concept from Walrasian general equilibrium theory, and constructed a theory of market price determination. But can we find any promise of the subsequent development of the analysis of consumer behavior in his theory? Can we find any development of welfare economics as in Barone (44) whose theory had some similar character? Compare the economics of the Lausanne School in Italy to Pigouvian welfare economics (45) in the Cambridge School. In the latter, it is the analysis of producer's behavior in industry that was stressed, and we can find no noteworthy development of the theory of consumer behavior. The difference in the welfare economics of the two schools is that the mechanical efficiency concept, as "Paretooptimum", played a main role in the Lausanne School, while the concept of maximizing group welfare on the basis of the Benthamite utilitarian criteria prevailed in the Cambridge School. But this characteristic of the Lausanne School should be regarded as a result of the view of science which was introduced into Italy with the general equilibrium theory. (46) In fact, it is this technical element of the general equilibrium theory made clear in Pareto's analysis, that constituted the fundamental characteristic of the Lausanne School in Italy as distinguished from other schools. After Pareto Amoroso emphasized the technical element strongly. Grasping the dynamic workings of an economy, he constructed a system of economic mechanics (47) as well as the appropriateness of the systematization of economics adopting the approach of natural science. We may regard this approach as an ultimate form of the general equilibrium theory, as advanced by Pareto.

V

Firstly, we must appraise the tradition of the utility theory in Italian history of economic thought. As we could see in the theory of Galiani, the economic theories in this tradition were not complete, being devoid of considerations on the aspect of production, which obstructed the integral understandings about market mechanism, unlike the theory of Adam Smith. Nevertheless, after

- (43) Cassel [11].
- (44) Barone [6].
- (45) Pigou [35].
- (46) Cf. Matsuura [48].
- (47) Amoroso [1].

Marginal Revolution, introducing the concept of the general economic equilibrium, that traditional current of Italian history of economic thought have contributed to the development of the theory of consumer's behavior. The fundations of the modern theory of consumer's behavior, whose glorious Bill of Rights given by Hicks and Samuelson were to be established by this school to which Pareto, Antonelli, Boninsegni, De Pietri-Tonelli, Amoroso and Slutsky belonged.

The economic thought of welfare which was held by the Schola economists was also succeeded by the economists of Lausanne school. Above all, Pareto, in his Cours d' economie politique, recognized the objectivity of the market mechanism in an economy and elucidated the so-called "Pareto-optimum" concept of maximizing public welfare from a standpoint of nonmeasurability of utility, though some defects were to be found in his doctrines. That concept was proved anew to be applicable to socialist economy by Barone. We must not overlook the fact that, with the additional elements of political manipulation, this concept led to the development not only of Lange's and Taylor's competitive-socialism theory but also to that of Hicks, Samuelson's and Bergson's new-welfare economics.

- (48) Hicks [21].
- (49) Samuelson [37].
- (50) Pareto [31].
- (51) Antonelli [3].
- (52) Boninsegni [9].
- (53) De Pietri-Tonelli [33].
- (54) Amoroso [2].
- (55) Slutsky [42].
- (56) Pareto [30].
- (57) Cf. Matsuura [48].
- (58) Barone [5].
- (59) Lange and Taylor [23].
- (60) *Ibid*.
- (61) Hicks [21].
- (62) Samuelson [37].
- (63) Bergson [8].

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