An "Austrian" Interpretation of the Meaning of Austrian Economics: History, Methodology, and Theory

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The Use of the Name "Austrian," and How the Austrians and Others Thought About It

In general the term "Austrian Economics" has been used both descriptively and normatively. It has either designated a set of ideas about the fundamental nature of economic theory and its logical implications or it has been viewed as a conception of society and the market with certain policy implications concerning the limits to and dangers from government intervention and control.

The terms "Austrian" or "Austrian School" or "Austrian Economics" were not used by Carl Menger, the School's founder, in his own early writings, neither in his *Principles of Economics* (Menger, 1871) nor in his *Investigations into the Method of the Social Sciences with Special Reference to Economics* (Menger, 1883). His points of attack were what he considered to be the faulty foundations of the existing (classical) theory of value for explaining human decision-making and market phenomena; and his highly critical analysis of the German Historical School for its emphasis on period-specific fact and data mining in an attempt to inductively derive economic theories to explain social and market phenomena in particular historical epochs.

It is sometimes difficult to appreciate today the full flavor of the ideas of these German historicists. The entire trend of thinking in Germany for most of the 19^{th} century had been in a direction totally anathema to what became the ideas of the Austrian School.

Following the defeat of Napoleon, the anti-liberal spirit (in the broadest sense) had been strongest and most successful in the German States. German Romanticism had started as a literary and poetic movement extolling the "spirit" over the intellect and the connectedness of man to nature. But in the hands of a growing number of German thinkers it was turned into a revolt against the Enlightenment, reason, liberalism, and free trade (Kohn, 1950).

It was not only that they rejected much of economic theory as it had developed from the time of Adam Smith and David Ricardo, including the ideas that emerged out of the "marginalist" revolution of the late 19th century. Nor that they insisted upon and erroneously believed that they were actually following a "theory-free" approach to historical and statistical investigations in trying to unearth period-specific "laws" of economics.

It was also, and crucially, their philosophical and ideological collectivism that rejected methodological, epistemological and ethical individualism. Social analysis did not begin with the individual, but with the collective whole. What defined the collective were such things as nation, race, genetics, and intuitive insight belonging to a select and chosen few who "understood" the true meaning and real interests of the German people, the *Volk*. In their view the role of all economic policy was to help prepare the nation for war and conquest as the path to "national greatness."[i]

Menger's *Investigations into the Method of the Social Sciences* was a frontal assault against the very foundations of the Historical School. He insisted that the purpose of social science was to develop "exact laws" that would be derived from an analysis of the universal and unchanging elements ever present in the human condition. These exact laws would, then, enable the social analyst to deduce the origin of economic value under conditions of inescapable scarcity, and to show the logical process by which men evaluate goods at "the margin," (though Menger never gave a name to this concept in his *Principles*) in a world of time, uncertainty, and causality.

From these "exact laws," the social analyst would deduce the "laws" of price formation and the ranges within which market prices must settle, given conditions of either monopoly or emerging competition. It was these exact laws that would enable the social scientist to then give intelligibility and interpretation to the evolutionary processes of human society, of which the institutions of the market were one subset.

Contrary to the German historicists, who looked to conscious laws and political powers to understand the evolution of society and its institutions, Menger insisted that many if not most human institutions were results of spontaneous social interactions among multitudes of human actors, the outcomes of which often led to consequences far superior to the planned actions of governments. Menger admitted that many aspects of the social order were the result of conscious intention through political and legal decision-making. But he emphasized that those spontaneous institutions – language, manner, customs, traditions, much of the law itself, as well as money and commercial rules and procedures – grew in ways outside of intentional designs with numerous positive effects for humanity (Menger, 1883, pp. 139-159).

Menger also believed that the social sciences should not be turned into a handmaiden to political power and national ambition. Economics should be viewed and practiced as a "value-free" discipline. As Menger expressed it a few years later: "It is the task of science to be concerned solely with fact and not with value. Science has to teach us *what has* been, what *is*, and how what is *has come to be*; but not what *ought to be*."(Menger, 1889, p. 20). Any real assistance that economic theory can provide for informed and intelligent pursuit of economic policy would, in fact, be undermined by reducing all of economics to the status of an "applied science" concerned with and indistinguishable from normative perspectives. This, of course, completely ran counter to the German Historicist conception of the nature and role of economics. [ii]

Menger's 1883 treatise on methodology was rudely, if not condescendingly, reviewed by one of the most prominent leaders of the German historicists, Gustav von Schmoller (1883).[iii] Menger replied in a monograph, *The Errors of the German Historical School*, written in the form of sixteen letters to a friend, in which he again completely challenged the methodological, historical, and ideological assumptions underlying Schmoller's writings (Menger, 1884). The contempt that Menger clearly had for Schmoller and his method can be seen in the following passages from Menger's monograph:

> I am aware, my friend, that it is a grievous sin to ridicule the ridiculous. Moreover, it is so hard not to fall into the tone of contempt toward an insolent opponent. But what other tone is appropriate toward the utterances of a man who, without the slightest substantial orientation in the questions of scientific methodology, carries himself like an authoritative judge of the value or non-value of the results of methodological investigation? . . . Discuss in serious fashion the most difficult questions of epistemology with a man in whose mind every effort for reform of theoretical [economics], indeed every cultivation of the same, is pictured as Manchesterism! Discuss, without dropping into a bantering tone, questions with a scholar whose entire stock of somewhat original knowledge in the field of theoretical [economics] consists of a primordial ooze of historico-statistical material; with a scholar who incessantly confounds with one another the most simple concepts of the theory of knowledge! And such a quarrel as that should afford me satisfaction? . . . The most difficult and uninspiring experience

> in the field of science is always critical contact with one-sided representatives of practical partisanship; with men who carry over their one-sidedness and bad habits of party conflict into scientific discussion. How much more unedifying when such opponents pose as of superior scientific rank! . . . If anyone gropes in such complete darkness with reference to the aims of research in the field of [economics], as does the editor of the Berlin *Jarhbuch*, his ideas about the processes of knowledge in the field of our science will be insured against early attack.[iv]

(For his 70th birthday in 1910, Menger asked that every economist in the world send him his or her photograph. He seems to have been surprised that Schmoller was virtually the only one who declined his request!)[v]

It was after these exchanges between Menger and Schmoller, and then the publications by others who adopted Menger's approach and method in their own writings – especially Friedrich von Wieser and Eugen von Bőhm-Bawerk, Emil Sax and Robert Zuckerkindl beginning in the middle of the 1880s – that the name "Austrian School" began to be widely applied to describe their particular set of ideas. But the name was given to them by their opponents in the German Historical School as an expression of distain.[vi] Schmoller insisted that those who propounded the "abstract ideas" of the Austrian School[vii] were not fit for appointments at German universities, which created an almost insurmountable barrier to any of Menger's followers finding professorships in Germany (Seligman, 1962, p. 274).[viii]

In the German-speaking world the relationship between the Austrians and the Historical School remained as antagonistic into the 20th century as when Menger and Schmoller originally crossed swords. In the years before the First World War, Ludwig von Mises confronted these ideas as a young member of the Austrian School of

Economics attending the annual meetings of the *Verein fűr Sozialpolitik* [Society of Social Policy], the leading association of academics and scholars in the German-speaking world. Forty years after the World War I, Mises recollected the mentality of the German historicists he met at these meetings and their attitude toward ideas of the Austrian School and economic theory in general:

> Böhm-Bawerk, my conversation partners remarked, is without doubt an honorable seeker of truth. Nevertheless, his deplorable errors resulted in an unacceptable justification of the worst form of unearned income – interest on capital. According to them, it was required of a moral State to use governmental measures to lower high market rates of interest. The most absurd book in economic literature is, they said, Bentham's *Defense of Usury* . . .
>
> They charged that Böhm-Bawerk's allegations against the Marxian exploitation theory were foolish. No matter how much Marx may have been mistaken in his criticism of modern society, he nevertheless had the merit of having revealed the motives of British economists. Compared with the contributions of the German Historical School, Böhm-Bawerk was a stubborn reactionary . . . .
>
> The same thing was allegedly true about my theory of money. The periodic reoccurrence of economic crises was a phenomenon inherent in the nature of capitalism, they said. . . . Strict supervision and skillful regulation of market activities by a super-party government would free the economy of economic crises. It was pointless, they thought, to try to explain economic fluctuations on the basis of monetary and credit policies. The real causes must be sought at a deeper level, they said. . . .
>
> The monetary system, they said, is not an end in itself. Its purpose is to serve the state and the people. Financial preparations for war must continue to be the ultimate and highest goal of monetary policy, as of all policy. How could the state conduct war, after all, if every self-interested citizen retained the right to demand redemption of bank notes in gold? It would be blindness not to recognize that only full preparedness for war – not only in the military sense but also with regard to the economy – could ensure the maintenance of peace. It was admitted that the Historical School has long neglected the treatment of monetary

> problems. Yet, with Knapp's *State Theory of Money*, they said, the German spirit has finally rejected the destructive theories of the English economists. . . .
>
> There could be only one excuse for my errors, namely, that they were the logical results of the subversive ideas that the "Austrian School" had taken over from the doctrines of the Manchester men. Thinking in a vacuum was characteristic of Menger, Wieser, and Böhm-Bawerk, and was my error too. What would the monetary system be like if the State did not stand behind it with all its power? It was fortunate, they alleged, that even in Austria only a small group of naïve authors shared the views of the "Austrian School." . . .
>
> They were ready to grant me that I wrote in good faith. But they were convinced that my book only served the interests of unpatriotic and subversive speculators. They never entered into any kind of process of theoretical thinking. The quantity theory of money and the theories of the Currency School were, in their eyes, nothing but curiosities in the historical literature. One of these gentlemen remarked that a colleague of his had asked whether I was not also an adherent of the phlogiston theory. Another gentleman suggested that he considered my "Austrianness" to be a mitigating circumstance; with a citizen of Germany he wouldn't even discuss such questions . . .
>
> Such were the opinions of my interlocutors during the last five years before the First World War (Mises, 1959, pp. 54-58).[ix]

In the English-speaking world, the name "Austrian" came to designate the ideas of Menger and his followers not only in terms of their distinction from the German Historical School, but from both the older Classical Economists and the other marginal utility theorists, such as William Stanley Jevons and Leon Walras and their respective followers. James Bonar presented the first detailed exposition of their ideas to appear in English in his article, "The Austrian Economists and Their View of Value" (1888). It was soon followed by William Smart's short book, *An Introduction to the Theory of Value, on the Lines of Menger, Wieser and Bőhm-Bawerk* (1891).

In the early 1890s, the writings of some of the Austrian Economists began to appear in English. William Smart undertook the meritorious and demanding task of translating Bőhm-Bawerk's two volumes, *Capital and Interest* (1884) and *The Positive Theory of Capital* (1889) And shortly after their appearance, Smart also edited the translation of Wieser's *Natural Value* (1889). Bőhm-Bawerk (1890, 1891, 1894) and Wieser (1891, 1892) also wrote articles for English-language journals in both America and Great Britain in which they explained the core ideas of the Austrian School.[x]

For economists and many other social scientists outside the German-speaking world "Austrian Economics" connoted a group of thinkers attempting to radically reconstruct economic theory along lines that were parallel to similar trends found in the writings of Jevons and Walras. But Bőhm-Bawerk and Wieser also emphasized what they considered to be different or distinct in the Austrian approach.

As Bőhm-Bawerk expressed it, "But the direction in which I believe the Austrians have outstripped their rivals, is the use they have made of the fundamental idea [of marginal utility] in the subsequent construction of economic theory. The idea of final [i.e., marginal] utility is to the expert the open sesame, as it were, by which he unlocks the most complicated phenomena of economic life and solves the hardest problems of the science. In this art of explication lies, as it seems to me, the peculiar strength and the characteristic significance of the Austrian school" (1891, p. 365)

However, many of the distinctions that the Austrians attempted at the time to draw between themselves and other "marginalist" thinkers were not often understood or clearly expressed.[xi] The ambiguities were sometimes due to the fact that the Austrians found themselves facing two fronts at more or less the same time: Sometimes they were in alignment with other marginalist schools against the anti-economic arguments of the German Historicists; at other times they were trying to show what separated them from the Jevons-Walras traditions.

By the end of the first decade of the 20th century, therefore, it seemed to many that the core ideas of the Austrian School had been absorbed by the majority of "modern" economists around the world. Most economists (especially outside of Germany) accepted and utilized the theory of marginal utility; employed Wieser's notion of "cost" as forgone alternative product; often used Bőhm-Bawerk's formulation of the "marginal pairs" to explain the determination of market prices, and at least debated and took seriously the Austrian (i.e., Bőhm-Bawerk's) theory of capital and interest.

In this early period of the 20th century, the prominent Austrian Economists of the time did not see or fully understand many of the implications of their own ideas that only became clearer to the interwar generation of the School – most especially by Ludwig von Mises and Friedrich A. Hayek. Only when they were confronted with challenges from the mainstream of the economics profession during the 1920s and 1930s did they most clearly began to realize that they often meant different things than many of their marginalist "cousins," even when they used the same words or phrases (Ebeling, 2003, pp. 1-9, 34-60). But at the time, it appeared to many of them that Austrian Economics was now more or less an integral part of contemporary economics

So it, apparently, seemed to Carl Menger. In 1903, he told an American scholar visiting him in Vienna, "It is entirely indifferent to me whether the name Austrian School be preserved. The important thing is that every economist worthy of the name has now virtually adopted every essential thing that I stood for."[xii]

Many decades later, Ludwig von Mises, reflecting on the origin and contributions of the Austrian School after having lived through and participated in its development through a majority of the decades of the 20th century, said the same thing about that period: "But after some years all the essential ideas of the Austrian School were by and large accepted as an integral part of economic theory. About the time of Menger's demise (1921), one no longer distinguished between an Austrian School and other economics. The appellation 'Austrian School' became the name given to an important chapter of the history of economic thought; it was no longer the name of a specific sect with doctrines different from those held by other economists" (1969, p. 19).

Subjectivism and Action in the Austrian Conceptions of the Market Process

In the late 1960s, when the only references to the Austrian School in the works of most economists were in the context of the history of economic thought, Ludwig M. Lachmann observed, "Unfortunately, they [the Austrians] never were able to show with the cogency their case required the incompatibility between the idea of planned action, the very core of Austrian economic thought, and an analytical model which knows no action, but only reaction" (1969, p. 164)

It was all so clear, yet so confusing almost from the start. All the new marginalist thinkers were interested in explaining why "value" was not inherent in a good, as the labor theory of value seemed to imply. They wanted to demonstrate that whether something possessed valued depended upon a certain relation: the quantity of a good relative to the demand for it. And demand, they all said, was based on the "usefulness" or "utility" of a good for a user. Furthermore, people not only distinguished between different types of goods (water vs. diamonds), but they evaluated units of the same good in different ways – based on the marginal significance of the last use of a supply of good that has had been or could be applied.

This analysis introduced a distinct "subjective" element – the personal judgment of the individual user about the "utility" or "pleasure" or "usefulness" that a unit of the good might have for him. Hence, tastes and the evaluation of goods (at the margin) were subjective, being known and weighed only by the user.

Already there were differences, but only understood through a glass darkly. For Jevons and Walras, "utility" was a magnitude of pleasure from the consumption of goods, the ratios of which could be compared to the "objective" prices of the market to determine whether or not there might be additional gains from acquiring more of one good relative to another. Francis Edgeworth, in his *Mathematical Psychics*, even looked forward to the day when man would have it in his power to devise a "hedonometer" that could be put on people's head to measure the amount of pleasure provided by the consumption of goods, for above all his was "the concept of man as a pleasure machine" (1881, p. 15).[xiii] Here, finally, would be a truly quantitative economics that would equal the methods and power of the natural sciences. Edgeworth's indifference curves were meant to be quantitative totals of utility received from consuming various combinations of goods (p. 24).

Pareto's "hills of ophelimity" may have been claimed by him to be a way to get around the problem of measuring utility by "merely" determining the individual's preference between combinations of goods that were more, less, or equally preferred. But this was only a sleight-of-hand to be able to maintain the use of the powerful tools of the calculus to determine optimal combinations relative to the budget constraints and the relative prices of goods (Pareto, 1927, pp. 113, 120).

Once we had these indifference curves, Pareto said, "The individual can disappear, provided he leaves us this photograph of his tastes" (p. 120). The human actor no longer had a purpose or function in the economist's analysis. He was merely one of the "variables" the interaction between which determined equilibrium states.

Pareto, here, was only following in the steps laid out earlier by Jevons and Walras. Jevons created his demand curves by assuming the individual decides what quantities of goods he might be interested in buying when he is confronted with alternative prices in "perfect markets" with the participants already knowing the equilibrium ratios of exchange (Jevons, 1879, pp. 87-90). Walras conjured up an auction in which the auctioneer cries out prices to the respective demands and suppliers; from the individual demands and suppliers he then adds up the market demands and suppliers, juxtapositions them and derives his "simultaneous solutions" for a general equilibrium state (Walras, 1874, pp. 93, 122, 143).[xiv]

In these analyses, the actor was a passive agent, who merely "reacted' to the constraints and data with which he was confronted to derive the necessary utility or demand curves that the economist needed to close the circle of his equilibrium theory. This came close to Veblen's caricature of economic man as a mere "globule of desire" with little thought or action other than as a gluttonous consumer of quantities of "stuff" offered to him at "given" prices (Veblen, 1899).

In addition, what place or role could time, uncertainty, or expectations play in these versions of the marginalist approach? Jevons assumed that each individual entered the market knowing their own tastes and endowments of goods, and knew the same about everyone else in his conception of a "perfect market." This assured that no errors could occur and all trade took place at equilibrium prices. Walras paternalistically took care of the problem for the suppliers and demanders by generously supplying them with that auctioneer who gathered all the necessary data before any trades were consummated at equilibrium prices.

Pareto distinguished between "logical" and "non-logical" action, with the economist only concerned with "logical" action under which repeated trades and accumulated information from the transactions assured that everyone in the market knew the "objectively" correct means and ends, and the right equilibrium terms of trade at which to buy and sell. Sociologists (and Pareto was a profound and insightful sociologist as well) were left to deal with those more complex and indeterminate situations resulting from imperfect knowledge, psychological and ideological biases and prejudices, and institutional uncertainty that he encompassed under the heading of the field of "non-logical" action (Pareto, 1927, pp. 30-32; 1966, pp. 124-125, 193-195).

How different was the Austrian view of these things from the economists who were the precursors of what has become known as the Neo-classical, or mainstream, tradition in economics!

Carl Menger

Menger began his analysis with the reminder that all things are subject to the laws of cause and effect. The task of man was to discover those causalities that would assist him in finding and applying the appropriate means to his desired ends. To speak of causality was to refer to time: a before and an after; a becoming and a became. But time also introduced the element of uncertainty – the uncertainty over whether what one wants now will still be what is wanted when actions over time have produced a particular outcome; and whether the means thought to be available will turn out to be actually there when one needs them at some later stage in the production process that transforms "higher order" goods into "lower order" consumer goods. There were also the uncertainties about the actions of others, whose decisions influenced the possible outcomes of one's own plans (Menger, 1871, pp. 67-68, 80-81, 148-150).

When Menger turned to the process by which prices were formed on the market, he did not simply assume competitive conditions of equilibrium or an artificial auctioneer. No, he explained that trade normally would begin with various traders having a monopoly position, based on those individuals who had first started offering a product or chose some specialization in the division of labor. Only later as others observed the monopolist's trading successes would competition emerge as those others entered the market as his rivals. From a wide range within which price could fall in a bilateral monopoly situation the arrival of more suppliers and demands would slowly narrow the range within which price would be formed and determined (Menger, 1871, pp. 180, 190-195).

In Menger's world, social institutions were not taken as given. One of the central tasks of economic analysis is to show how the social order emerges, develops, takes shape, and evolves over time. Man's uncertainty and the processes of time result in much in this world being the unintended the result of men's actions, and often with good effects for the betterment of mankind.

Bőhm-Bawerk

If Menger was content to merely explain the ranges within which prices had to fall due to the marginal evaluations of demands and suppliers, Bőhm-Bawerk was interested in trying to explain exactly how the market arises from the subjective evaluations of traders (Bőhm-Bawerk, 1959, pp. 203-222).[xv] Each man enters the market, he said, with an understanding of the quantity of the goods he has available to sell for what it is he wishes to buy. But he usually only has a clouded conception about what his maximum demand bids and minimum sell offers might be.

Indeed, he argued that all of the resulting market actions were grounded in expectations – expectations of the degree to which the good that might be bought was important to the actor's future well-being and therefore the intensity of marginal significance that good possessed. This would begin to set in the actor's mind the maximum bid that he might be willing to make to acquire it; and as he started to interact with others in the market he would form an expectation of what minimum price he would have to bid to successfully beat his closest rival in the contest of purchasing the good. Similar expectations would be at work in the minds of those on the supply-side about the minimum price they would accept for the good if necessary, and what maximum price they could ask for, without running the risk of losing the sale to a more eager competitor anxious to make a sale (pp. 240-243).

It is only in the interactions of the market that men discover actually how much they value what they could buy and how little they value what they can sell. In Bőhm-Bawerk's world the traders initiate the bids and offers. They decide whether they value a good more than they originally thought, so as not to lose out to the next most interested buyer who also wants to purchase that desired commodity. Up goes the price, with each transactor deciding if the latest bid by one of his demand-side rivals has pushed the price up to the maximum threshold point at which he chooses to bow out, due to the price now being greater than what he thinks the good to be worth at the margin.

The same process plays itself out on the supply-side with suppliers eager to not miss out on a profitable sale by allowing one of their rivals to underbid him. Each weighs whether or not the price has reached a minimum below which it is not worth selling and better to hold on to the good. The two-sided competition continues until a price range has been reached within which all willing buyers on the demand-side are successfully matched with willing sellers on the supply-side. Bőhm-Bawerk's market may also be an auction, but it is one in which the actors make the bids and offers; they initiate the actions that form the prices that finally brings the arena of exchange into balance.

And behind it all, Böhm-Bawerk insisted, was the fact that "price is, from beginning to end the product of subjective valuation" (p. 225). But, clearly, in Bőhm-Bawerk's meaning subjective valuation was something more than merely "tastes and preferences." His actors have reflective minds, they evaluate what things might be worth to them, what they might have to bid or offer to get it; and how far it was worth going in the actual interchange and process of the market competition before deciding to fall by the wayside under the pressure of some rival with a demand to buy or a willingness to sell more intense than his own.

Wieser

Part of Wieser's analysis of subjective valuation and marginal decision-making was in direct contradiction to the manner in which the Jevons/Walras traditions developed the marginalist idea. He did not look for ways to apply the calculus by assuming infinitely small variations in the amounts of goods; he did not think that the logic of understanding the agent's decisions about choosing among goods required the mathematical nicety of the equi-marginal principle.

> It would, however, be a mistake to believe – as almost every writer who has occupied himself with this question had done, Jevons more than any other – that it is necessary to keep strictly in every branch of expenditure to the same degree of satisfaction, the same level, the same marginal utility. This is quite against the nature of wants, for wants have not each an equal but a peculiar satiation scale. Were the "level of household expenditure" be understood in this way, every addition to income would require to be laid out equally in corresponding enlargement of every branch of expenditure. As a matter of fact it is usually spent on a few branches, while others remain as they are; or, if the additional income be so great as to allow of an improved condition of things all round, the extra expenditure is distributed in the most irregular manner. The satiation scales of wants are very diverse, the receptive power of one want is great, that of another comparatively small; that is to say one is susceptible of a degree of intensity which another does not reach, or which it oversteps. (Wieser, 1889, p. 15)

Wieser's emphasis, then, was on the reality of wants and the choice process. Goods are discrete; the scale of wants is discontinuous in its make-up with some wants reaching levels of satisfaction before others, with some dropping out of the realm of future desirability (at least for the time being), and being replaced by other wants previously unsatisfied at all; or when all-round additions to the satisfaction of wants is possible, they are frequently enlarged in a non-proportional fashion.

"Rather than to economic equilibrium" Wieser said, "theory should turn to margins of use" (1914). Wieser's *subjectivist realism*, in other words, called for economic theory not to be designed to fit a preconceived notion of mathematical conformity of the data to fit the method. Instead, a "subjectivist" approach required asking, how do men actually evaluate goods? What is the way they really order and arrange their preferences given the concrete discreteness of desirable commodities? And in what way are their wants actually satisfied at the margin in comparison to others? The method should follow the nature of the subject matter being studied. The subject matter should not be remolded into a shape merely to fit a preconceived idea of what is the appropriate method of "science." *Subjective margins of use, not ratios of marginal quantities of utility*, should be the way to study men's choices concerning goods.

Philip Wicksteed

As Bőhm-Bawerk pointed out, not all economists in Austria were "Austrians," and not all "Austrians" were from Austria.[xvi] As the Austrian Economists became better known and read in different languages, a growing number of economists adapted the "Austrian" conceptions of the nature of economics. One of them was the British economist, Philip Wicksteed. He is usually considered a follower of Jevons who attempted to synthesis Jevons' ideas with those of the Austrians (Schumpeter, 1954, p. 832; Robbins, 1970, pp. 202-205). And there is some truth in this. But if we understand the wider Austrian idea of subjectivism beyond mere given tastes and preferences, Wicksteed is far more "Austrian" than "Jevonian."

He was a major contributor to the concept of economics as a logic of choice. Economics is not a study of one particular side or aspect of human life – the pursuit of material wealth, as many of the Classical Economists presumed – but the study of an inescapable relationship between any and all human ends in comparison to any and all means for their fulfillment. Whenever means are insufficient to serve human ends, then that relationship has an particular economic aspect to it: the necessity to rank ends in order of importance and allocate the available means in a manner consist with those preferences (Wicksteed, 1910, pp. 20-30). Thus, he said, "from first to last . . . the laws of Economics are the laws of life" (p.404).

He also developed a subjectivist notion of cost, demonstrating that all costs are themselves subjective evaluations concerning the use of means in alternative directions having nothing to do merely with the expenditure of labor effort or the physical use of factors of production. This lead him to argue that there is no such thing as a supply curve, since any supply of a good is merely the mirror reflection of its (marginal) reservation demand in other uses (p. 785).

But what has been given less attention in the context of the themes we are discussing is Wicksteed's develop of a theory of price formation and price change on the basis of entrepreneurial expectations and experience. Everyday experience tells us that prices are not normally formed through auction processes, whether of the type presented by Walras with an imaginary auctioneer, or in the form presented by Bőhm-Bawerk where all the buyers and sellers are actively shouting out bids or crying out offers.

We enter the market and the prices are already given to us. We, as consumers, decide how much of each commodity we shall buy. The prices may be different tomorrow when we return to the market, but the buyers certainly do not make the prices nor change them. They react to the prices that they find in the market. So from whence come these prices, and how and who changes them?

Wicksteed explains that in the division of labor this is part of the role of the retail entrepreneur. Consumers do not all enter the market during the trading day at the same time. Rather they come in sequence, one at a time as the day progresses. They may come in a greater cluster in the morning or the afternoon. But however they appear in the market, the total demand for the available supplies will not materialize all at once.

Precisely because all demanders would not appear simultaneously, what will be the total demand by all buyers over the whole trading day was "a matter of estimate and conjecture." And in Wicksteed's view the responsibility for forming these expectations fell on the shoulders of the seller (p.236).

The seller could adjust the price to sell all of his available stock to buyers who, say, do their shopping early in the morning. Buyers later in the day, alas, will discover the shelves empty when they arrive. Expecting "a constant flow of potential customers throughout the day," Wicksteed explained, at any moment the sellers "have a reserve price, not on their own account but in anticipation of the wants of others." The seller, therefore, acts as the "reader of the public mind, anticipator of future wants, or speculator as to the wants of the portion of the public not present in person." As Wicksteed elaborated, "What the purchaser meets in the market is a reflection of her own mind and that of her compeers thrown back from the mind of the seller . . . It is the collective mind of the purchasers, then, as estimated by the sellers, that determine the price proclaimed by the latter." Thus, the "primary function" of the sellers was "to represent the whole body of consumers in his dealings with each individual consumer" (pp. 218-219, 231-236).

The price set by the seller, therefore, was meant to be one that represents the best estimate the seller could make about the total demand for the good relative to his available stock. Thus, the buyer who sees plenty of the good in the store and wonders why the seller doesn't lower its price to make it more attractive for him to purchase more right now, fails to see his invisible demand-side rivals who also want to buy some amounts of the good but are not presently in the market and who will only show up later in the trading day.

Wicksteed goes on to say that the seller's pricing policy has nothing to do with altruism. But rather is another example of the "invisible hand" served through the motive of self-interest. If he were to lower the price sufficiently to clear out his stock in the morning, say, then he will miss out on all the afternoon business that could have been his at a uniform higher price throughout the trading day. At the same time, if he over-estimates the afternoon sales and sets the price too high over the entire trading day, when the day's business is done he will be left with unsold inventory, and sales revenue will be less than it might have been.

Possibility for error abounds, Wicksteed emphasized, since market conditions are constantly changing. Thus entrepreneurial expectations of demand across time are crucial for success. Yet mistakes will be made. Inventories will be depleted too much, or will accumulate above desired levels. In the next trading day, prices will be set anew based on the reality of the day before and what that experience suggestions for forming expectations today (p. 225-226).

These changes in stock will then be communicated backward up the production chain to wholesalers and to manufacturers and to the suppliers of the "original" factors of production. This will set in motion the resulting shifts in relative demand, prices and resource allocations in the "higher stages" of the production processes to see to it that the relative structures of production reflect the changing patterns of demand for the goods and services ultimately bought by the consuming public (p. 393).

In Wicksteed's world, there are no "simultaneous solutions" in the market. Exchanges occur in sequential patterns through time; expectations need to be formed on the part of sellers as to the volume of consumer demand for the setting of prices; errors and miscalculations result in trades at "false prices"; corrections and revisions in sellers' expectations send ripples of re-evaluation through the production process to the factors of production, and brings about changes in the structure of relative prices based on new expectations from market experiences. And as a result, any equilibrium towards which the market might be tending was "path dependent." Or as Wicksteed expressed it, "any actual transactions made in consequence of a mistake in estimating the equilibrium price at any given moment will theoretically alter the equilibrium price itself," through alterations in preferences and endowments (p. 227).

Herbert Davenport

In the United States, a close follower of the Austrian School was Herbert Davenport. He had written an entire book in the form of an imminent criticism to clarify the Austrian analysis of the relationship between value and marginal utility. (Davenport, 1908). His purpose was not to deny or disprove the Austrian argument but to refine it and place it on a sounder footing (Davenport, 1902).

But his particular contribution to the Austrian subjectivist theory of the market process was in his later work, *The Economics of Enterprise* (1913). He reminds the reader that the market is a complex network of interdependent participants, in which any change in one corner results in ramifications and necessary adjustments in other parts of the system. But, again, interdependency did not mean simultaneity, and certainly not through any fictitious auctioneers or mathematical simultaneous solutions. It was equally absurd to even speak loosely about the "society" solving the economy problem. There were no collective entities called "society" or "the market." There were only individuals whose interactions generated the outcomes of the market. To understand how markets work and who does what to assure patterns of coordination, we must look at the actions of individuals and analyze their roles and activities in the division of labor.[xvii]

The market is ultimately driven by the demanders, Davenport argues, whose wants direct all that happens in the arena of exchange and production. But demanders do not directly guide the processes of production. This is done by the entrepreneur who stands "as the intermediary in the case, representing in his hiring and buying of productive factors, the demand of the purchasing public, and representing in his cost computations, the degree of scarcity of the production factors relative to the demand for their products." It is "the competition of the entrepreneurs of each industry with the other entrepreneurs of the same industry, and of the competition of the entrepreneurs of each industry with those of other industries" that brought about the prices of the factors of production (p. 194).

The real world of market activity, Davenport emphasized, is one of constant change, shifting demand, modified supplies, and new innovations for producing things.

This meant that whatever the entrepreneurs planned today, in terms of products to be brought to the market tomorrow, is based on uncertain expectations concerning a future that was not likely to be a copy of the day before.

Since it is through the prism of the entrepreneur's expectations that decisions are made, then the cost of production – in the form of the money prices that are offered and paid for the hire and use of factors of production – are reflections of the mental judgments of those who undertake the responsibility of "captaining" the society's enterprises. All costs, therefore, are entrepreneurial costs within the firm. And it is their estimates that determine what land, labor, and capital are worth. Their estimates are based on what they think consumers may want and the prices they might be willing to pay. But, nonetheless, they are the subjective appraisements about a future that might be, and is not yet realized.

As Davenport expressed it, the entrepreneur's "cost" of production was reducible to his individual judgments, estimates, and expectations of what *he saw* as the opportunities and their relative *future* market worth. "The cost computation must stand as a purely personal and individual computation . . . it must express and report his [the entrepreneur's] method, process, and decision . . . .The bearing of cost . . . is significant only for such person's as undertake the cost" (pp. 50, 70).

In Davenport's hands, the market process is an analysis in subjective relationships bound together by the gain-seeking activities of competitive entrepreneurs. The causal connections were evident to him: goods have value because they serve wants; production has a motive in the creation of goods to satisfy those wants; for equilibrium, the supplies of goods and the factors of production need to be so distributed so that no net advantage exists for the shifting of “supplies” from one alternative use to another in the service of competing demands.

The critical issue is to explain how an equilibrium would tend to come into being – an explanation, Davenport argued, that would run in terms of individual actions of personalities possessing thought, will, consciousness, and memory. Market costs, as an element in this process, are all reducible to the subjective estimates of the respective entrepreneurs whose competitive actions generate the “objective” factor prices.

<u>Conclusion: The Meaning of Austrian Economics – The Human Mind Behind the Subjectivism of the Market Process</u>

What conclusions may we draw from this excursion into the ideas of the Austrian Economists up to the First World War? What distinguished them from other “marginalist” economists at that time? And what does that tell us about Austrian Economics today?

In his 1915, *Economic Principles*, American “Austrian” economist, Frank A. Fetter stated that, “In truth the presence of men is always, and must always be, implied and understood in any study of the value of wealth. This means not merely that man is the evaluator, the chooser of goods, this means also that man is the doer of acts.” There is nothing static in the world, Fetter said. “Desire is a mental reaching out for things” and “the fitness of things for accomplishing man’s desires is what makes them objects of choice.” In all of this, man “ceases to accept passively [nature’s] conditions, and to live on its grudging gifts, he becomes its fashioner, in a sense its creator. His intelligence and his wants are most important factors determining what the form of the physical world about him shall be” (Fetter, 1915, pp. 23, 50, 52, 171-172).

This in essence is what did and still does distinguish the Austrians from many if not most other economists. Man is not simply a "functional form" in a set of simultaneous equations. His ends and goals are not merely "arguments" in a utility function. His conception and use of means are more than sets of "initial endowments." In fact, to reduce man to this is to strip him of those qualities that, well, make him man.

Jevons and Walras and most of those who have followed them have been captives of the scientistic fallacy, i.e., the uncritical and misplaced application of one conceived method of doing science to a subject matter for which that method is inappropriate. As Hayek explained in *The Counter-Revolution of Science* (1955), it was a hard and long struggle for the natural sciences to completely free themselves from the anthropomorphism of primitive man. A method of analysis and a set of tools were constructed that could study physical world without the presumption that forces of nature possess human-like qualities.

The "scientific method" in the natural sciences was successful beyond belief. Its use at the applied level has helped transform the world and the human condition. But precisely because of its astounding achievements, other scholars in unrelated fields came to believe that refinement of their discipline required adopted the methods of their natural science colleagues.

Another way of saying this is that because the natural scientist concluded that rocks were different from men for purposes of his scientific inquiry, the social scientist decided that therefore if a field like economics was to become a "real" science men had to be studied as if they were rocks. In other words, anthropomorphism was banished from economics. The absurdity of this, of course, is that anthropomorphism is quite legitimate in a field such as economics because the subject matter – acting man – has the same human-like qualities as the economists studying their behavior.

The Austrians have been anthropomorphists. That is, they have believed that the proper study of man is man. Not man as a purely "objective object," or as a mathematical function, or as a statistical magnitude, or as some invisible entity that may disappear just as long as he has left us a trace of himself in the form of a photograph of his tastes, as Pareto put it.

In this sense, the Austrians have been more "empirical" than many mainstream economists. They have "naively" started by asking, what are man's basic characteristics that come into play for understanding market phenomena? And, as we saw, man is the initiator of action; he has intentionality and purpose. He looks for causal connections between means and ends, and he weighs them at the margin.

But what does "the margin" mean? We saw that Wieser insisted that understanding marginal decision-making requires understanding how men implicitly construct and pursue the fulfillment of their value scales, in a world of discrete choices and discontinuous opportunities. Usually the mainstream critic responds to this type of Austrian argument about marginal analysis, by saying, "Well, of course, you're correct, but these are only simplifying assumptions to make some problems more tractable without 'really' doing any serious injustice to the actual facts of the case."

Whether this is true and useful for certain problems may be set aside. What the Austrians feel uncomfortable about is that everything is always put through this methodological sieve. The scientistic prejudice has lead mainstream economists to believe that any analysis not reduced to and made to fit this mold is intractable and not really "science." The Austrians just refuse to be intimidated by what Axel Leijonhufvud years ago satirized as the "high priests" of the math-econ tribe (1973).

When Austrians look at man they do not just see a subjectivism of tastes, but of action and meaning. It breathes on virtually every page of the early Austrian Economists that have been discussed. Prices are not just "given," they emerge out of mental processes of evaluation, decision and action. Whether in Böhm-Bawerk's horse market; Wicksteed's entrepreneurial price setting to allocate supplies of goods through time to consumers; or Davenport's entrepreneurs who are the initiators of production, the weighers of what resources are worth in an uncertain and changing future, and therefore the bears of cost that only impinge through the process of choosing and acting; in every instance, the analysis is alive and vibrant with images of real men as we find them in the real world with human-like qualities and characteristics, because, after all, they are men like ourselves.

We can analyze and understand them in ways different from solely the methods of the natural sciences because they are exactly like us. We can draw upon that taboo source of knowledge: the introspective glance at the workings of our own mind. Listen to Wieser:

> The theoretical economist need never deplore a lack of the instruments which are employed in the exact natural sciences. Whatever advantages they may otherwise enjoy and great as are their achievements, they are nonetheless strangers to their object. They may never scan the innermost recesses of nature. Let their instruments be infinitely refined, still they must be content to describe a succession of happenings, abandoning the hope of showing how the effect springs from the cause. The group of practical sciences, of which economics theory is one, accomplish more. The object of investigation is man in a condition

> of activity. Hence our mind ratifies every accurate description of the processes of his consciousness by the affirmative declaration that such is the case, and by the compelling feeling that it must be so. . . Where the natural sciences can only offer proof, the theory of economics can persuade, it can enlist the unqualified inner consent of the reader. (Wieser, 1914, pp. 8-9)

This may and does shock many economists and other social scientists. But it is nevertheless how we know a good deal about what it means to evaluate, anticipate, choose, and act. How would we even know what these concepts meant if we could not find out their meanings by asking ourselves, "What is it that we do, and how do we do it, and why?" And our minds very helpfully answer back.

The meaning and essence of Austrian Economics was encapsulated by the American sociologist, Albion Small, in his exposition of the place of the Austrian School in the development of 19th century sociology: "We might reduce the contention of the Austrian School to the proposition: *The phenomena of the market are at the same time phenomena of the mind, and they must be explained accordingly*" (p. 172, italics in the original).

The peculiar circumstance was that even while some people saw what Austrian Economics was all about; even when its proponents went about "doing" Austrian analysis in explaining marginal decision-making and the workings of the market process; they somehow failed to fully and consciously clarify both to themselves and to others how and why what they were doing was different, distinct, and uniquely insightful.

So even many of the Austrians in those early years of the 20th century thought that the mainstream of the economics profession had somehow adopted all of the essentials of their teachings, when in fact many of the real essentials were missed or rejected.

In spite of the refinements, elaborations, and enriched developments by members of the Austrian School over the last one hundred years, it is a problem that contemporary Austrian Economists are still trying to overcome.

End Notes

[i] For a thoughtful discussion of the evolution of these ideas from the late 18th century through the Second World War, see, Kohn [1965]; also, Kohn [1945], pp. 433 & 435: "The 'socialists of the chair' desired a benevolent paternal socialism to strengthen Germany's national unity. Their leaders, Adolf Wagner and Gustav von Schmoller, [Heinrich von] Treitschke's colleagues at the University of Berlin and equally influential in molding public opinion, shared Treitschke's faith in the German power state and its foundations. They regarded the struggle against English and French political and economic liberalism as the German mission, and wished to substitute the superior and more ethical German way for the individualistic economics of the West . . . In view of the apparent decay of the Western world through liberalism and individualism, only the German mind with its deeper insight and its higher morality could regenerate the world."

[ii] Menger (1889, p. 29): "The inadequacies of economic policy are but the corollary of an economic theory that leaves to the arbitrary judgment of politicians the answer to such questions as whether duties on grain raise their price on predominantly grain-importing countries, whether higher grain prices raise the price of bread, or whether duties on coffee, petroleum, and tobacco or other indirect taxes raise the price of the corresponding articles of consumption."

[iii] See, Cossa, (1893, pp. 429-430): "War was declared upon the too exclusive tendencies of the historical school when Menger published his *Untersuchungen* [*Investigations*] . . . Schmoller printed an acrimonious and quite ignorant review of Menger's *Untersuchungen* [*Investigations*], only to bring down upon his head Menger's most lively and remarkably aggressive rejoinder."

[iv] Quoted in Small (1924, pp. 231-232). Schmoller was the long-time editor of the *Jahrbuch für Gesetzebung, Verwaltung, und Volkswirthschaft im deutschen Reich*. See, also, Bloch (1940, p. 432): "Now the ire of the quiet and distingushed Viennese was aroused, and in the [*Errors of the German Historical School*] he out-thundered the pompous Prussian by the brilliance and fire of his style as well as by the force of his refutation. Schmoller retaliated by announcing in his journal that although Menger had sent him a copy of *the Errors of the Historical School*, he was unable to review it because he had returned it to the author. He reprinted the insulting letter which he returned with the returned copy."

[v] See, Kauder (1965, p. 236): "For his seventieth birthday Carl Menger desired that each economist of the whole earth should be photographed and have picture sent to him. Everyone except Gustav Schmoller and Lujo Brentano did so. Apparently, the leaders of the historical school could neither forgive nor forget."

[vi] See, Bőhm-Bawerk (1894, pp. 6-7): "This name, given to us by our opponents, includes a number of theoretic economists. Not all of those included are Austrians, nor does the group include all the Austrian economists." And Böhm-Bawerk, (1891, p. 363): "But although the strife of methods, perhaps more than anything else, has drawn attention to the Austrian economists, I prefer to regard it as an unimportant

episode of their activity. The matter of importance to them was, and is, the reform of positive theory. It is only because they found themselves disturbed in their peaceful and fruitful labors by the attacks of the historical school, that they, like the farmer on the frontier who holds the plow with one hand and the sword with the other, have been constrained, almost against their will, to spend part of their time and strength in defensive polemics and the solution of the problems of method forced upon them."

[vii] See, Menger (1889) for a strong defense of "abstract theory" and its methodological implications against the criticisms of members of the Historical School.

[viii] See also, Blumenthal (2008, p. 20): "In contemporary German public finance Sax's work was recognized but rejected. In a polemic review Gustav Schmoller makes clear that he disapproves of the Mengerian abstract-deductive method applied [by Sax to the problems of tax policy and tax incidence]. Much more than a scholarly discussion, Schmoller sees the intellectual struggle as he calls Sax an 'enemy in principle' belonging to the Austrian School."

[ix] The phlogiston theory originated in 1667 with Johann Joachim Becher; it posited that inside flammable substances was a special element without odor, color, taste, or mass that is freed by the burning process, and is what caused the burning process. It was refuted in the 18th century through a variety of quantitative experiments. To show that that the more things change, the more they stay the same, the following comment was made by, now Nobel Prize winner, Paul Krugman, (1998): "A few weeks ago, a journalist devoted a substantial part of a profile of yours truly to my failure to pay due attention to the "Austrian theory" of the business cycle—a theory that I regard as being about as worthy of serious study as the phlogiston theory of fire."

[x] Menger's own writings did not appear in English until well into the 20th century, with the exception of his article, "On the Origin of Money" (1892).

[xi] However, see, Green, (1895, pp. 54-55) groped at explaining the subjectivist elements that separated the Austrians from the other marginal utility theorists: "Although Jevons and the Austrians agree considering marginal utility as the basis of value, we find an important difference in regard to the fundamental meaning of the word value . . . Jevons accepted . . . the use of the word . . . as expressing the ratio in which commodities in open markets are exchanged against each other . . . The Austrians, on the other hand, follow Menger in defining value as 'the importance that concrete goods, or quantities of goods, receive for us from the fact that we are conscious of being dependent on our disposal over them for the satisfaction of our wants.' The difference must not be overlooked. On one side value is regarded as a ratio between commodities, on the other as importance for human well-being. One conception is objective, the other subjective. . . It seems to be largely through the Austrian influence, however, that recent contributions to economic theory have generally accepted the subjective concept as the primary meaning of value. . . . The Austrians, as Menger's definition indicates, consider value as primarily as an individual matter." From this "Austrian" perspective, Green (1894, pp. 225-226) deduced that from ideas such as Wieser's "the very nature of costs" as "opportunity-sacrifices" is that they "must always have the unreal character of might-have-beens," since they are what the actor in his mind considers to have been the alternative end worth forgoing so as to be able to pursue some other. And thus the term "opportunity costs" entered the economics profession for the first time, with the clear emphasis that "cost" is a mental creation of the chooser, and not something objective or measurable by an external observer or yardstick.

[xii] See, Small (1924, p. 173), who was the American sociologist to whom Menger said this.

[xiii] Francis Edgeworth, *Mathematical Psychics* [1881] (New York: Augustus M. Kelley, 1967) pp. 12 & 15: "The conception of Man as a pleasure machine may justify and facilitate the employment of mechanical terms and Mathematical reasoning in social science . . . 'Mechanique Sociale' may one day take her place along with 'Mechanique Celeste', enthroned upon the doublesided height of one maximum principle, the supreme pinnacle of moral as of physical science."

xiv In fairness to both Walras (1874, pp. 184-185) and Pareto (1927, p. 147), each stated that that the mathematical constructions of equilibrium states could never be used to replace the real processes of the market through which balance between supply and demand was actually brought about.

xv On Böhm-Bawerk's theoretical contributions as well as his role as Austro-Hungarian finance minister, see, Ebeling (2001).

xvi See footnote five, above.

xvii Davenport, (1913, pp. 389-390): "In the price problem the need is to understand precisely how the particular individuals arrive at their respective demand prices. There is no one single homogeneous utility or any one single aggregate demand price. Utility, for purposes of analysis, is an individual category . . . So far . . .as we know here is no social organism in the sense of a personality fulfilling" the requirement of market coordination."

References

Bloch, Henri-Simon. (1940). Carl Menger: The Founder of the Austrian School. *Journal of Political Economy*, June, pp. 428-433.

Blumenthal, Karston. (2008). Emil Sax's Tax Theory: A Revaluation of an Underestimated Contribution to Public Finance Theory. Diskussionsshriften aus dem Institut fur Finanzwissenshaft der Universitat Hamburg, No. 73

Bőhm-Bawerk, E. v. ([1884] 1890). *Capital and Interest*. London: Macmillan.
([1889] 1891). *The Positive Theory of Capital*. London: Macmillan.
(1890). The Historical vs. the Deductive Method in Political Economy. *Annals of the American Academy of Political and Social Science.* October, pp.244-271.
(1891). The Austrian Economists. *Annals of the American Academy of Political and Social Science*, January, pp. 361-384.
(1894). The Ultimate Standard of Value. *Annals of the American Academy of Political and Social Science*, September, pp. 1-60.
(1959). *Capital and Interest*, Vol. II: *The Positive Theory of Capital*. South Holland: Libertarian Press.

Bonar, J. (1888). The Austrian Economists and Their View of Value. *Quarterly Journal of Economics,* October, 1-31.

Cossa, L. (1893). *An Introduction to the Study of Political Economy*. London: Macmillan.

Ebeling, R. M. (2001). Eugen von Böhm-Bawerk: A Sesquicentennial Appreciation. *The Freeman: Ideas on Liberty*. February, pp. 36-41.

(2003). *Austrian Economics and the Political Economy of Freedom*. Northampton: Edward Elgar.

Edgeworth, F. ([1881] 1967). *Mathematical Psychics*. New York: Augustus M. Kelley.

Davenport, H.J. (1902). Proposed Modifications in Austrian Theory and Terminology. *Quarterly Journal of Economics*. May, pp. 355-384.
([1908] 1964). *Value and Distribution*. New York: Augustus M. Kelley.
([1913] 1968). *The Economics of Enterprise*. New York: Augustus M. Kelley.

Fetter, F. A. (1915) *Economic Principles*. New York: The Century Co.

Green, D. I. (1894). Pain-Cost and Opportunity-Cost. *Quarterly Journal of Economics* January, pp. 218-229.
(1895). Wieser's Natural Value. *American Academy of Political and Social Science*, January, pp. 52-70.

Hayek, F. A. (1952). *The Counter-Revolution of Science*. Glencoe: The Free Press.

Jevons, W.S. ([1879] 1965. *The Theory of Political Economy*. New York: Augustus M. Kelly.

Kauder, E. (1965). *A History of Marginal Utility Theory*. Princeton: Princeton University Press.

Kohn, H. (1945). Treitschke: National Prophet. *Review of Politics*, October, pp. 418-440.
(1950). Romanticism and the Rise of German Nationalism. *Review of Politics*, October, 443-472.
(1965). *The Mind of German: The Education of a Nation*. New York: Torchbooks.

Krugman, P. (1998). The Hangover Theory: Are Recessions the Inevitable Payback for Good Times," *The Dismal Science*, December 4.

Lachmann, L.M. ([1969] 1977). Methodological Individualism and the Market Economy. In Walter E. Grinder (Ed.). *Capital, Expectations, and the Market Process: Essays on the Theory of the Market Process*. Kansas City: Sheed Andrews and McMeel, 1977).

Leijonhufvud, A. ([1973] 1981). Life Among the Econ. In: *Information and Coordination: Essays in Macroeconomic Theory*. Oxford: Oxford University Press.

Menger, C. ([1871] 1981). *Principles of Economics*. New York: New York University Press

([1883] 1985). *Investigation into the Method of the Social Sciences with Special Reference to Economics*. New York: New York University Press.
(1884). *Die Irrthűmer des Historismus in der deutschen Nationalőkonomie*. Wien: Holden.
([1889] 1960). Toward a Systematic Classification of the Economic Sciences. In: Louis Sommer (Ed.) *Essays in European Economic Thought*. Princeton: D. Van Nostrand.
(1892). On the Origin of Money. *Economic Journal*, June, pp. 239-255.

Mises, L. v. (1959). Bemerkungen über die ideologischen Wurzeln der Währungskatastrophe von 1923 [Remarks Concerning the Ideological Roots of the Monetary Catastrophe of 1923]. *Freundesgabe zum 12. Oktober 1959 fűr Albert Hahn*. [Homage by Friends for Albert Hahn on October 12, 1959]. Frankfurt am Main: Fritz Knapp.
([1969] 2003) *The Historical Setting of the Austrian School of Economics*. Auburn: The Ludwig von Mises Institute.

Pareto, V. ([1927] 1971). *Manual of Political Economy*. New York: Augustus M. Kelley.
(1966). *Vilfredo Pareto, Sociological Writings*. S. E. Finer (Ed.) Oxford: Blackwell.

Robbins, L. (1970). *The Evolution of Modern Economic Theory*. London: Macmillan.

Schmoller, G. (1883). Zur Methodologie der Staate und Sozialwissenschaften. *Jarbuch fűr Gesetzgegbung, Verwaltung und Volkswirtschaft im Deutschen Reich*, pp. 974-994.

Schumpeter, J. A. (1954). *History of Economic Analysis*. Oxford: Oxford University Press.

Small, Albion W. (1924). *Origins of Sociology*. Chicago: University of Chicago Press.

Seligman, B. (1962). *Main Currents in Modern Economics*. New York: Free Press.

Smart, W. (1891) *An Introduction to the Theory of Value, on the Lines of Menger, Wieser and Bőhm-Bawerk*. London: Macmillan.

Veblen, T. (1899). *The Theory of the Leisure Class*.

Walras, L. ([1874] 1965). *Elements of Pure Economics*. New York: Augustus M. Kelley.

Wicksteed, P. ([1910] 1969). *The Common Sense of Political Economy*. London: Routledge.

Wieser, F. v. ([1889] 1893) *Natural Value*. London: Macmillan.

(1891) The Austrian School and the Theory of Value. *Economic Journal*, March, pp. 108-121.
(1892). The Theory of Value: A Reply to Professor Macvane. *Annals of the American Academy of Political and Social Science*, March, pp. 24-52.
([1914] 1967) *Social Economics*. New York: Augustus M. Kelly.