# New Light on the Prehistory of the Austrian School

di Murray N. Rothbard

#### Introduction

The most notable development in the historiography of the Austrian school in the post-World War II era has been the drastic reevaluation of what might be called its prehistory and, as a corollary, a fundamental reconsideration of the history of economic thought itself. This reevaluation may be summarized by briefly outlining the orthodox pre-war paradigm of the development of economic thought before the advent of the Austrian school.

The Scholastic philosophers were brusquely dismissed as medieval thinkers who totally failed to understand the market, and who believed on religious grounds that the just price was one that covered either the cost of production or the quantity of labor embodied in a product. After briefly outlining the bullionist and anti-bullionist discussion among the English mercantilists and lightly touching on a few French and Italian economists of the eighteenth century, the historian of economic thought pointed with a flourish to Adam Smith and David Ricardo as the founders of economic science. After some backing and filling in the mid-nineteenth century, marginalism, including the Austrian school, arrived in another great burst in the 1870s. Apart from the occasional mention of one or two English precursors of the Austrians, such as Samuel Bailey in the early nineteenth century, this completed the basic picture.

Typical was the encyclopedic text of Lewis Haney: the Scholastics were described as medieval, dismissed as hostile to trade, and declared believers in the labor and cost-of-production theories of the just price. [1] It is no wonder that in his famous phrase, R.H. Tawney could call Karl Marx "the last of the Schoolmen." [2]

## **Schumpeter's Revision**

The remarkably contrasting new view of the history of economic thought burst upon the scene in 1954 in the monumental, though unfinished, work of Joseph Schumpeter.[3] Far from mystical dunderheads who should be skipped over to get to the mercantilists, the Scholastic philosophers were seen as remarkable and prescient economists, developing a system very close to the Austrian and subjective-utility approach. This was particularly true of the previously neglected Spanish and Italian Scholastics of the sixteenth and seventeenth centuries. Virtually the only missing ingredient in their value theory was the marginal concept. From them filiations proceeded to the later French and Italian economists.

In the Schumpeterian view, the English mercantilists were half-baked, polemical pamphleteers rather than essential milestones on the road to Adam Smith and the founding of economic science. In fact, the new view saw Smith and Ricardo, not as founding the sciences of economics, but as shunting economics onto a tragically wrong track, which it took the Austrians and other marginalists to make right. Until then, only the neglected anti-Ricardian writers kept the tradition alive. As we shall see, other historians, such as Emil Kauder, further demonstrated the Aristotelian (and hence Scholastic) roots of the Austrians amidst the diverse variants of the marginalist school. The picture is almost the reverse of the earlier orthodoxy.

It is not the purpose of this paper to dwell on Schumpeter's deservedly well-known work, but rather to assess the contributions of writers who carried the Schumpeterian vision still further and who remain neglected by most economists, possibly from a failure to match Schumpeter in constructing a general treatise. The best development of the new history must be sought in fugitive articles and brief pamphlets and monographs.

### Grice-Hutchinson on the School of Salamanca

The other relatively neglected contributions began contemporaneously with Schumpeter. One of the most important, and probably the most neglected, was *The School of Salamanca* by Marjorie Grice-Hutchinson, who suffered in the economics profession from being a professor of Spanish literature. Moreover, the book bore the burden of a misleadingly narrow subtitle: *Readings in Spanish Monetary Theory*. [4] In fact, the book was a brilliant discovery of the pre-Austrian subjective-value-and-utility views of the late sixteenth-century Spanish Scholastics. But first Grice-Hutchinson showed that the works of even earlier Scholastics as far back as Aristotle contained a subjective-value analysis based on consumer wants alongside the competing objective conception of the just price based on labor and costs. In the early Middle Ages, Saint Augustine (354–430) developed the concept of the subjective-value scale of each individual. By the High Middle Ages, the Scholastic philosophers had largely abandoned the cost-of-production theory to adopt the view that the market's reflection of consumer demand really sets the just price. This was particularly true of Jean Buridan (1300–1358), Henry of Ghent (1217–1293), and Richard of Middleton (1249–1306). As Grice-Hutchinson observed:

"Medieval writers viewed the poor man as consumer rather than producer. A cost-of-production theory would have given merchants an excuse for overcharging on the pretext of covering their expenses, and it was thought fairer to rely on the impersonal forces of the market which reflected the judgment of the whole community, or, to use the medieval phrase, the "common estimation." At any rate, it would seem that the phenomena of exchange came increasingly to be explained in psychological terms." [5]

Even Henry of Langenstein (1325–1383), who of all the Scholastics was the most hostile to the free market and advocated government fixing of the just price on the basis of status and cost, developed the subjective factor of utility as well as scarcity in his analysis of price. But it was the sixteenth-century Spanish Scholastics who developed the purely subjective and pro-free-market theory of value. Thus, Luis Saravía de la Calle (c. 1544) denied any role to cost in the determination of price; instead the market price, which is the just price, is determined by the forces of supply and demand, which in turn are the result of the common estimation of consumers on the market. Saravía wrote that, "excluding all deceit and malice, the just price of a thing is the price which it commonly fetches at the time and place of the deal." He went on to point out that the price of a thing will change in accordance with its abundance or scarcity. He proceeded to attack the cost-of-production theory of just price:

"Those who measure the just price by the labor, costs, and risk incurred by the person who deals in the merchandise or produces it, or by the cost of transport or the expense of traveling ... or by what he has to pay the factors for their industry, risk, and labor, are greatly in error, and still more so are those who allow a certain profit of a fifth or a tenth. For the just price arises from the abundance or scarcity of goods, merchants, and money ... and not from costs, labor, and risk. If we had to consider labor and risk in order to assess the just price, no merchant would ever suffer loss, nor would abundance or scarcity of goods and money enter into the question. Prices are not commonly fixed on the basis of costs. Why should a bale of linen brought overland from Brittany at great expense be worth more than one which is transported cheaply be sea? ... Why should a book written out by hand be worth more than one which is printed, when the latter is better though it costs less to produce? ... The just price is found not by counting the cost but by the common estimation." [6]

Similarly the Spanish Scholastic Diego de Covarrubias y Leiva (1512–1577) a distinguished expert on Roman law and a theologian at the University of Salamanca, wrote that the "value of an article" depends "on the estimation of men, even if that estimation be foolish." Wheat is more expensive in the Indies than in Spain "because men esteem it more highly, though the nature of the wheat is the same in both places." The just price should be considered not at all with reference to its original or labor cost but only with reference to the common market value where the good is sold, a value,

Covarrubias pointed out, that will fall when buyers are few and goods are abundant and that will rise under opposite conditions.[7]

The Spanish Scholastic Francisco García (d. 1659) engaged in a remarkably sophisticated analysis of the determinants of value and utility. The valuation of goods, Garcia pointed out, depends on several factors. One is the abundance or scarcity of the supply of the goods, the former causing a lower estimation and the latter an increase. A second is whether buyers or sellers are few or many. Another is whether "money is scarce or plentiful," the former causing a lower estimation of goods and the latter a higher. Another is whether "vendors are eager to sell their goods." The influence of the abundance or the scarcity of a good brought García almost to the brink, but not over it, of a marginal utility analysis of valuation.

"For example, we have said that bread is more valuable than meat because it is more necessary for the preservation of human life. But there may come a time when bread is so abundant and meat so scarce that bread is cheaper than meat." [8]

## The Spanish Scholastics on Money

The Spanish Scholastics also anticipated the Austrian school in applying value theory to money, thus beginning the integration of money into general value theory. It is generally believed, for example, that in 1568 Jean Bodin inaugurated what is unfortunately called the application of supply-and-demand analysis to money. Yet he was anticipated twelve years earlier by the Salamanca theologian the Dominican Martin de Azpilcueta Navarro (1493–1576), who was inspired to explain the inflation brought about by the importation of gold and silver by the Spaniards from the New World.

Citing previous Scholastics, Azpilcueta declared that "money is worth more where it is scarce than where it is abundant." Why? Because "all merchandise becomes dearer when it is in great demand and short supply, and that money, in so far as it may be sold, bartered, or exchanged by some other form of contract, is merchandise and therefore also becomes dearer when it is in great demand and short supply." Azpilcueta noted that "we see by experience that in France, where money is scarcer than in Spain, bread, wine, cloth, and labor are worth much less. And even in Spain, in times when money was scarcer, saleable goods and labor were given for very much less than after the discovery of the Indies, which flooded the country with gold and silver. The reason for this is that money is worth more where and when it is scarce than where and when it is abundant." [9]

Furthermore, the Spanish Scholastics went on to anticipate the classical-Mises—Cassel purchasing-power parity theory of exchange rates by proceeding logically to apply the supply-and-demand theory to foreign exchanges, an institution that was highly developed by the early modern period. The influx of specie into Spain depreciated the Spanish escudo in foreign exchange, as well as raised prices within Spain, and the Scholastics had to deal with this startling phenomenon. It was the eminent Salamanca theologian the Dominican Domingo de Soto (1495–1560) who in 1553 first fully applied the supply-and-demand analysis to foreign exchange rates. De Soto noted that "the more plentiful money is in Medina the more unfavorable are the terms of exchange, and the higher the price that must be paid by whoever wishes to send money from Spain to Flanders, since the demand for money is smaller in Spain than in Flanders. And the scarcer money is in Medina the less he need pay there, because more people want money in Medina than are sending it to Flanders."[10]

What de Soto was saying is that as the stock of money increases, the utility of each unit of money to the population declines and vice versa; in short, only the great stumbling block of failing to specify the concept of the marginal unit prevented him from arriving at the doctrine of the diminishing marginal utility of money. Azpilcueta, in the passage quoted above, applied the de Soto analysis of the influence of the supply of money on exchange rates, at the same time that he set forth a theory of supply and demand in determining the purchasing power of money within a country.

The de Soto-Azpilcueta analysis was spread to the merchants of Spain by the Dominican friar Tomás de Mercado (d. 1585), who in 1569 wrote a handbook of commercial morality in Spanish, in contrast to the Scholastic theologians, who invariably wrote in Latin. It was followed by Garcia and endorsed at the end of the sixteenth century by the Salamanca theologian the Dominican Domingo de Bañez (1527–1604) and by the great Portuguese Jesuit Luís de Molina (1535–1600). Writing near the turn of the century, Molina set forth the theory in an elegant and comprehensive manner:

"There is another way in which money may be worth more in one place than in another; namely, because it is scarcer there than elsewhere. Other things being equal, wherever money is most abundant, there will it be least valuable for the purpose of buying comparing things other than money.

Just as an abundance of goods causes prices to fall (the quantity of money and number of merchants being equal), so does an abundance of money cause them to rise (the quantity of goods and number of merchants being equal). The reason is that the money itself becomes less valuable for the purpose of buying and comparing goods. Thus we see that in Spain the purchasing-power of money is far lower, on account of its abundance, than it was eighty years ago. A thing that could be bought for two ducats at that time is nowadays worth 5, 6, or even more. Wages have risen in the same proportion, and so have dowries, the price of estates, the income from benefices, and other things.

We likewise see that money is far less valuable in the New World (especially in Peru, where it is most plentiful), than it is in Spain. But in places where it is scarcer than in Spain, there will it be more valuable. Nor will the value of money be the same in all other places, but will vary: and this will be because of variations in its quantity, other things being equal ... Even in Spain itself, the value of money varies: it is usually lowest of all in Seville, where the ships come in from the New World and where for that reason money is most abundant.

Wherever the demand for money is greatest, whether for buying or carrying goods, ... or for any other reason, there its value will be highest. It is these things, too, which cause the value of money to vary in course of time in one and the same place." [11]

#### **De Roover's Revision**

The outstanding revisionist work on the economic thought of the medieval and later Scholastics is that of Raymond de Roover. Basing his work in part on the Grice-Hutchinson volume, de Roover published his first comprehensive discussion in 1955.[12] For the medieval period, de Roover particularly pointed to the early fourteenth-century French Ockhamite Scholastic Jean Buridan and to the famous early fifteenth-century Italian preacher San Bernardino of Siena (13 80–1444). Buridan insisted that value is measured by the human wants of the community of individuals and that the market price is the just price. Furthermore, he was perhaps the first to make clear in a pre-Austrian manner that voluntary exchange demonstrates subjective preference, since he stated that the "person who exchanges a horse for money would not have done so, if he had not preferred money to a horse."[13] He added that workers hire themselves out because they value the wages they receive higher than the labor they have to expend.[14]

De Roover then discussed the sixteenth-century Spanish Scholastics, centered at the University of Salamanca, the queen of the Spanish universities of the period. From Salamanca the influence of this school of Scholastics spread to Portugal, Italy, and the Low Countries. In addition to summarizing Grice-Hutchinson's contribution and adding to her bibliography, de Roover noted that both de Soto and Molina denounced as "fallacious" the notion of the late thirteenth-century Scholastic John Duns Scotus (1308) that the just price is the cost of production plus a reasonable profit; instead that price is the common estimation, the interaction of supply and demand, on the market. Molina further introduced the concept of competition by stating that competition among buyers will drive prices up, while a scarcity of purchasers will pull them down.[15]

In a later article, de Roover elaborated on his researches into the Scholastic theory of the just price. He found that the orthodox view of the just price as a station-in-life, cost-of-production price was

based almost solely on the views of fourteenth-century Viennese Scholastic Henry of Langenstein. But Langenstein, de Roover pointed out, was a follower of the minority views of William of Ockham and outside the dominant Thomist tradition; Langenstein was rarely cited by later Scholastic writers. While some of their passages are open to a conflicting interpretation, de Roover demonstrated that Albertus Magnus (1193–1280) and his great pupil Thomas Aquinas (1226–1274) held the just price to be the market price. In fact, Aquinas considered the case of a merchant who brings wheat to a country where there is a great scarcity; the merchant happens to know that more wheat is on the way. May he sell his wheat at the existing price, or must he announce to everyone the imminent arrival of new supplies and suffer a fall in price? Aquinas unequivocally answered that he may justly sell the wheat at the current market price, even though he added as an afterthought that it would be more virtuous of him to inform the buyers. Furthermore, de Roover pointed to the summary of Aquinas's position by his most distinguished commentator, the late fifteenth-century Scholastic Thomas de Vio, Cardinal Cajetan (1468–1534). Cajetan concluded that for Aquinas the just price is "the one, which at a given time, can be gotten from the buyers, assuming common knowledge and in the absence of all fraud and coercion." [16]

The cost-of-production theory of just price held by the Scotists was trenchantly attacked by the later Scholastics. San Bernardino of Siena, de Roover pointed out, declared that the market price is fair regardless of whether the producer gains or loses, or whether it is above or below cost. The great early sixteenth-century jurist Francisco de Vitoria (c. 1480–1546), founder of the school of Salamanca, as well as his followers, insisted that the just price is set by supply and demand regardless of labor costs or expenses; inefficient producers or inept speculators must bear the consequences of their incompetence and poor forecasting. Furthermore, de Roover made clear that the general Scholastic emphasis on the justice of "common estimation" (communis aestimatio) is identical to "market valuation" (aestimatio fori), since the Scholastics used these two Latin expressions interchangeably. [17]

De Roover noted, however, that this acceptance of market price did not mean that the Scholastics adopted a *laissez-faire* position. On the contrary, they were often willing to accept governmental price fixing instead of market action. A few prominent Scholastics, however, led by Azpilcueta and including Molina, opposed all price fixing; as Azpilcueta put it, price controls are unnecessary in times of plenty and ineffective or positively harmful in times of dearth. [18]

In a comment on de Roover's paper, David Herlihy noted that, in the northern Italian city-states of the twelfth and thirteenth centuries, the birthplace of modern commercial capitalism, the market price was generally considered just because it was "true" and "real," if it was "established or utilized without deceit or fraud." As Herlihy summed it up, the just price of an object is its "true value as determined by one of two ways: for objects that were unique, by honest negotiation between seller and purchaser; for staple commodities by the consensus of the marketplace established in the absence of fraud or conspiracy."[19]

John W. Baldwin's definitive account of the theories of just price during the High Middle Ages of the twelfth and thirteenth centuries amply confirmed de Roover's revisionist insight. Baldwin pointed out that there were three important and influential groups of medieval writers: the theologians (whom we have been examining), the Roman lawyers, and the canon lawyers. For their part, the Romanists, joined by the canonists, held staunchly to the principle of Roman private law that the just price is whatever is arrived at by free bargaining between buyers and sellers. [20] Baldwin demonstrated that even the theologians of the High Middle Ages before Aquinas accepted the current market price as the just price. [21]

Several years later, de Roover turned to the views of the Scholastics on the broader issue of trade and exchange. [22] He conceded the partial validity of the older view that the medieval Church frowned on trade as endangering personal salvation; or rather that, while trade *can* be honest, it presents great temptation for sin. However, he pointed out that, as trade commerce grew after the tenth century, the church began to adapt to the idea of the merits of trade and exchange. Thus, while it is true that the twelfth-century Scholastic Peter the Lombard (c. 1100–1160) denounced trade and

soldiering as sinful occupations *per se*, a far more benevolent view of trade was set forth during the thirteenth century by Albertus Magnus and his student Thomas Aquinas, as well as by Saint Bonaventure (1221–1274) and Pope Innocent V (1225–1276). While trade presents occasions for sin, it is not sinful *per se*; on the contrary, exchange and the division of labor are beneficent in satisfying the wants of the citizens. Moreover, the early fourteenth-century Scholastic Richard of Middleton developed the idea that both the buyer and the seller gain by exchange, since each demonstrates that he prefers what he receives in exchange to what he gives up. Middleton also applied this idea to international trade, pointing out that both countries benefit by exchanging their surplus products. Since the merchants and citizens of each country benefit, neither party is exploiting the other.

At the same time, Aquinas and other theologians denounced "covetousness" and love of profit, mercantile gain being only justifiable when directed toward the "good of others"; furthermore, Aquinas attacked "avarice" as attempting to improve one's "station in life." But, as de Roover pointed out, the great early sixteenth-century Italian Thomas Cardinal Cajetan corrected this view by demonstrating that, if this were true, every person would have to be frozen in his current occupation and income. On the contrary, asserted Cajetan, people with unusual ability should be able to rise in the world. In contrast to such northern Europeans as Aquinas, Cajetan was quite familiar with the commerce and upward social mobility in the Italian cities. Furthermore, even Aquinas explicitly rejected the idea that prices should be determined by one's station in life, pointing out that the selling price of any good tends to be the same whether the entrepreneur is poor or wealthy.

De Roover hailed the early fifteenth-century Scholastic San Bernardino of Siena as being the only theologian who dealt in detail with the economic function of the entrepreneur. San Bernardino wrote of the uncommon qualities and abilities of the successful entrepreneur, including effort, diligence, knowledge of the market, and calculation of risks, with profit on invested capital justifiable as compensation for the risk and effort of the entrepreneur. The acceptance of profit was immortalized in a motto in a thirteenth-century account book: "In the name of God and of profit." [23]

De Roover's final work in this area was a booklet on San Bernardino and his contemporary Sant'Antonino (1389–1459) of Florence. [24] In San Bernardino's views of trade and the entrepreneur, the occupation of trade may lead to sin, but so may all other occupations, including that of bishops. As for the sins of traders, they consist of such illicit activity as fraud, misrepresentation of products, the sale of adulterated products, and the use of false weights and measures, as well as keeping creditors waiting for their money after a debt is due. As to trade, there are several kinds of useful merchants, according to San Bernardino: importer-exporters, warehousemen, retailers, and manufacturers.

San Bernardino described the rare qualities and virtues that go into the making of successful businessmen. One is efficiency (*industria*), which includes knowledge of qualities, prices, and costs and ability to assess risks and estimate profit opportunities, which, he declared, "indeed very few are capable of doing." Entrepreneurial ability therefore includes the willingness to assume risks (*pericula*). Businessmen must be responsible and attentive to detail, and trouble and toil are also necessary. The rational and orderly conduct of business, also necessary to success, is another virtue lauded by San Bernardino, as are business integrity and the prompt settlement of accounts.

Turning again to the Scholastic view of value and price, de Roover pointed out that, as early as Aquinas, prices were treated as determined, not by their philosophic rank in nature, but by the degree of the usefulness or utility of the respective products to man and to human wants. As de Roover wrote of Aquinas, "These passages are clear and unambiguous; value depends upon utility, usefulness, or human wants. There is nowhere any mention of labor as the creator or the measure of value." [25]

A century before the Spanish Scholastics and a century and a half before the sophisticated formulation of Francisco Garcia, San Bernardino had demonstrated that price is determined by

scarcity (raritas), usefulness (virtuositas), and pleasurability or desirability (compacibilitas). Greater abundance of a good will cause a drop in its value and greater scarcity a rise. To have value, furthermore, a good must have usefulness, or what we may call "objective utility"; but within that framework, the value is determined by the complicibilitas, or "subjective utility," that it has to individual consumers.

Again, only the marginal element is lacking for a full-scale pre-Austrian theory of value. Coming to the brink of the later Austrian solution to the classical economists' "paradox of value," San Bernardino noted that a glass of water to a man dying of thirst would be so valuable as to be almost priceless, but fortunately water, though absolutely necessary to human life, is ordinarily so abundant that it commands either a low price or even no price at all.

Correcting Schumpeter's ascription of the founding of subjective utility to Sant'Antonino and observing that he had derived it from San Bernardino, de Roover showed further that recent scholarship demonstrates that Bernardino derived his own analysis almost word for word from a late thirteenth-century Provençal Scholastic, Pierre de Jean Olivi (1248–1298) Apparently, Bernardino did not give credit to Olivi because the latter, coming from another branch of the Franciscan order, was at that time suspected of heresy. [26]

Turning to the concept of the "just price," de Roover made it clear that San Bernardino, following Olivi, held the price of a good or service to be "the estimation made in common by all the citizens of the community" This he held explicitly to be the valuation of the market, since he defined the just price as "the one which happens to prevail at a given time according to the estimation of the market, that is, what the commodities for sale are then commonly worth in a certain place." [27]

Wages were treated by the two Italian friars in the same manner as the prices of goods. For San Bernardino, "The same rules which apply to the prices of goods also apply to the price of services with the consequence that the just wage will also be determined by the forces operating in the market or, in other words, by the demand for labor and the available supply." An architect is paid more than a ditchdigger, asserted Bernardino, because "the former's job requires more intelligence, greater ability, and longer training and that, consequently, fewer qualify.... Wage differentials are thus to be explained by scarcity because skilled workers are less numerous than unskilled and high positions require even a very unusual combination of skills and abilities."[28] And Sant'Antonino concluded that the wage of a laborer is a price which, like any other, is properly determined by the common estimation of the market in the absence of fraud.

### **After the Scholastics**

During and after the sixteenth century, the Roman Catholic church and Scholastic philosophy came under increasingly virulent attack, first from Protestants and then from rationalists, but the result was not so much to eliminate any influence of Scholastic philosophy and economics as to mask that influence, since their proclaimed enemies would often fail to cite their writings. Thus, the great early seventeenth-century Dutch Protestant jurist Hugo Grotius (1583–1645) adopted much of Scholastic doctrine, including the emphasis on want and utility as the major determinants of value, and the importance of the common estimation of the market in determining price.

Grotius, in fact, explicitly cited the Spanish Scholastics Azpilcueta Navarro and Covarrubias. Even more explicitly following the Spanish Scholastics of the sixteenth century were the Jesuit theologians of the following century, including the highly influential Flemish Jesuit Leonardus Lessius (1554–1623), a friend of Luís de Molina, and the even more influential Spanish Jesuit Cardinal Juan de Lugo (1583–1660), whose treatise was originally published in 1642 and was reprinted many times in the next three centuries. Also explicitly following the Scholastics and the Salamanca school in the seventeenth century was the Genoese philosopher and jurist Sigismundo Scaccia (c. 1618), whose treatise was widely reprinted, as well as Antonio de Escobar (c. 1652), author of a moral manual.

To return to what would be the dominant Protestant trend for later economic thought, Grotius's legal and economic doctrines were followed closely in the later seventeenth century by the Swedish Lutheran jurist Samuel Pufendorf (1632–1694). While Pufendorf followed Grotius on utility and scarcity and the common estimation of the market in determining value and price, and while he certainly consulted the writings of the Spanish Scholastics, it is the rationalist Pufendorf who dropped all citations to these hated Scholastic influences upon his teacher. Hence, when Grotian doctrine was brought to Scotland by the early eighteenth-century professor of moral philosophy at Glasgow Gershom Carmichael (1672–1729), who translated Pufendorf into English, knowledge of Scholastic influences was lost. Hence, with Carmichael's great student and successor Francis Hutcheson, utility began to be weakened by labor and cost-of-production theories of value, until finally by the time Hutcheson's student Adam Smith (1723–1790) wrote the *Wealth of Nations*, pre-Austrian Scholastic influence had unfortunately dropped out altogether. Hence the view of Schumpeter, de Roover, and others that Smith and later Ricardo shunted economics onto a wrong track, which the later marginalists (including the Austrians) had to correct.

Scholastic doctrine had a more lasting influence on economists on the Continent, particularly in Catholic countries. Thus, the brilliant mid-eighteenth-century Italian the Abbé Ferdinando Galiani (1728–1787) is often credited by historians with inventing full-blown the concept of utility and scarcity as the determinants of price. No one wished to stress Scholastic writings in that rationalistic age, but strong Scholastic influence is detectable in Galiani's work, whose section on value even contains an explicit citation to the Salamanca Scholastic Diego Covarrubias y Leiva. Galiani's uncle Celestino, who brought up the youthful economist, had been professor of moral theology before becoming an archbishop and was therefore undoubtedly familiar with the Scholastic literature on the subject, which filled the Italian libraries of the eighteenth century. Galiani's contemporary, Italian economist Antonio Genovesi (1712–1769), was also directly influenced by Scholastic thought; he had served as professor of ethics and moral philosophy at the University of Naples.

From Galiani the central role of utility, scarcity, and the common estimation of the market spread to France, to the late eighteenth-century French abbé Etienne Bonnot de Condillac (1714-1780), as well as to that other great abbé Robert Jacques Turgot (1721-1781). Knowing only Galiani as his predecessor, Turgot echoed the Salamanca school in holding the prices of goods and the value of money, as the result of the "common estimation" of the market, to be built up out of the subjective valuations of individuals in that market. François Quesnay (1694–1774) and the eighteenth-century French physiocrats — often considered to be the founders of economic science — were also heavily influenced by the Scholastics, both in their natural law theory and their emphasis on consumption and subjective value. Scholastic doctrine even appears in the fiercely anti-Catholic *Encyclopédie*, including the doctrine of natural law, as well as the analysis of price as determined by the current common estimation of the market. Even during the nineteenth century, strong traces of Condillac and Turgot appear in Jean-Baptist Say (1767–1832), who upheld a utility model for the future. [29] At about the same time as Schumpeter, Grice-Hutchinson, and de Roover published their researches, Emil Kauder set forth a similar revisionist viewpoint. Kauder traced the connection between the Scholastics and Galiani, first to the mid-sixteenth-century Italian politician Gian Francesco Lottini (1512–1572).[30] He showed that Lottini first worked out a rudimentary concept of time preference: that people estimate present wants higher than future. The next link was the late sixteenth-century Italian merchant Bernardo Davanzati (1529–1606), who applied subjective-value theory to money in 1588. Indeed, Schumpeter was soon to point out that Davanzati also solved the "paradox of value," that water is very useful but not valuable on the market because it is highly abundant. Whether or not Davanzati was influenced by San Bernardino is not known.[31] He was followed almost a century later by the Italian mathematics professor Geminiano Montanan (1633– 1687). Galiani was then definitely influenced by Davanzati.

Kauder then developed in an original way the great contributions of Galiani. For not only did Galiani comprehensively set forth the familiar theory of utility and scarcity as determinants of price — which lacked only the marginal principle to arrive at the Austrian theory — but he also went on

to apply the utility theory to the value of labor and other factors of production. For the value of labor is, in turn, determined by the utility and scarcity of the particular kind of labor being considered. The highly skilled are paid much more than the common laborer, since nature produced only a small number of able men. But not only that; for Galiani it is not labor costs that determine value, but value — and consumer choice — that determines labor cost.

Furthermore Galiani touched on a pre-Böhm-Bawerk, time-preference theory of interest, with interest being the difference between present and future money.[32] Turgot then anticipated the Austrians in applying Galiani's utility theory to a detailed analysis of isolated exchange. Turgot, furthermore, as Schumpeter pointed out, developed a time analysis of production and worked out a pre-Austrian general analysis of the law of eventually diminishing returns that was not to be matched until the end of the nineteenth century. Quite justly Schumpeter wrote that "it is not too much to say that analytic economics took a century to get where it could have got in twenty years after the publication of Turgot's treatise had its content been properly understood and absorbed by an alert profession."[33] Instead, as Kauder pointed out, it was left to Condillac to offer a last-ditch and neglected defense of Galiani's utility theory against the rising tide of British cost theory. In Condillac's trenchant phrase, "A thing does not have value because it costs, as people suppose; instead it costs because it has a value."[34]

In a fascinating companion article, Kauder speculated on the persistence of utility-and-subjective-value theory on the Continent, as compared to the rise and dominance of a quantity-of-labor-and-cost-of-production theory in Great Britain. [35] He was particularly intrigued by the fact that the pre-nineteenth-century French and Italian subjectivists were all Catholics (and, of course, he might have added the medieval and sixteenth-century Scholastics as well), while the British economists were all Protestants, or, more precisely, Calvinists. Kauder speculated that it was their Calvinist training that led John Locke and particularly Adam Smith to reject the Continental tradition (Smith knew Turgot and read Grotius) and to emphasize a labor theory of value. The Calvinists believed that work or labor was divine; could not this imprint have led Smith and the others to adopt a labor theory of economic value?

Furthermore, Kauder pointed out that until the middle of the eighteenth century the French and Italian universities were dominated by Aristotelian philosophy, particularly as transmitted by the Jesuits and other religious orders. Kauder added that, in contrast to Calvinism, Aristotelian-Thomist philosophy did not glorify work or labor *per se* as divine; work may be necessary, but "moderate pleasure-seeking and happiness" — in short, utility — "form the center of economic actions." Kauder concluded that "if pleasure in a moderate form is the purpose of economics, then following the Aristotelian concept of the final cause, all principles of economics including valuation must be derived from it."[36]

Kauder admitted that his is a conjecture that cannot be proved and also that it does not particularly hold for the nineteenth century. However, he did offer an intriguing explanation for Alfred Marshall's failure to adopt the full marginal utility theory and, instead, his shunting aside of the theory in favor of a recrudescence of Ricardo's objective cost-of-production theory. That explanation lies in Marshall's undoubtedly strong Evangelical and Calvinist background.[37]

Finally, Emil Kauder convincingly demonstrated the direct influence of Aristotelian philosophy on the founders of the Austrian school and contrasted the result with the other marginalist schools of the late nineteenth century. First, in contrast to Jevons and Walras, who believed that economic laws are hypotheses dealing with social quantities, Carl Menger and his followers held that economics investigates, not the quantities of phenomena, but the underlying essences of such real entities as value, profit, and the other economic categories. The belief in underlying essences inherent in superficial appearances is Aristotelian, and Kauder pointed out that Menger studied and cited Aristotle extensively in his methodological work. He also noted the similarities discovered by Oskar Kraus between the Austrian and the Aristotelian theories of imputation.

Kauder also pointed out that Menger applied the fundamental Aristotelian distinction between matter and form to economic theory: economic theory deals with the underlying form of events,

while history and statistics deal with the concrete matter. The concrete historical cases are the exemplifications of general regularities, the Aristotelian matter that contains potentialities, while the economic laws "are the Aristotelian forms which actualize the potential, that is, they provide the laws and concepts valid for all times and places." [38]

Second, Menger held, in contrast to Jevons and Walras, that economic laws as expressed in mathematical equations are only arbitrary statements; on the contrary, genuine economic laws are "exact," in Menger's terminology meaning fixed laws that describe sequences invariable to time and place. Thus, Menger and the Austrians build up an "eternal structure of economics ... stripped of all historical peculiarities."

In short, Menger and, following him, Böhm-Bawerk were Aristotelian social ontologists, maintaining the absolute and apodictic reality of economic laws. Kauder perceptively pointed out that in contemporary economics, "only von Mises, the most faithful student of the three [Marginalist] pioneers, maintains the ontological character of economics laws. His theory of human action is a 'reflection about the essence of action.' Economic laws provide 'ontological facts.'"[39] Finally, the Jevons-Walras mathematical method necessarily deals with "functions of interdependent phenomena," whereas, for Menger and the Austrians, economic laws are genetic and causal, proceeding from the utility and the action of the consumer to the market result. As Kauder put it:

"For Marshall, value and cost, supply and demand are interdependent factors whose functional connection can be explained in an equation or a geometrical figure. For Wieser, Menger, and especially for Böhm-Bawerk the wants of the consumer are the beginning and the end of the causal nexus. The purpose and the cause of economic action are identical. There is no difference between causality and teleology, claims Böhm-Bawerk. He knew the Aristotelian origin of his argument."

Kauder also pointed out that the characteristically Austrian method of proceeding with words from a Robinson Crusoe model and then proceeding step by step to a fully developed economy accords with the Aristotelian concept of entelechy, in which "the motion from the potentiality to the actualization determines not only the structure of the system but also the presentation of the thoughts."[41]

In attempting to explain the Austrian choice among all the marginalists for philosophical realism and social ontology, Kauder pointed to the late nineteenth-century influences on the Austrian intellectual climate of Aristotle, Thomas Aquinas, and other schools of realistic philosophy. Most influential was Aristotle, who was studied carefully down to the middle of the nineteenth century, and who was often taught in the secondary schools in Austria. And while realism gave way to empiricism in the Austrian schools by the turn of the twentieth century, "the Viennese *Schotten gymnasium*, the intellectual nursery of many famous Austrians including Wieser, required, even after 1918, the students to read Aristotle's metaphysics in the original Greek."[42] In contrast, of course, the influence of Aristotelian philosophy in Britain or even France during the nineteenth century was virtually nil.

In recent decades, the revisionist scholars have clearly altered our knowledge of the prehistory of the Austrian school of economics. We see emerging a long and mighty tradition of proto-Austrian Scholastic economics, founded on Aristotle, continuing through the Middle Ages and the later Italian and Spanish Scholastics, and then influencing the French and Italian economists before and up till the day of Adam Smith. The achievement of Carl Menger and the Austrians was not so much to found a totally new system on the framework of British classical political economy as to revive and elaborate upon the older tradition that had been shunted aside by the classical school.

- [1] Lewis H. Haney, *History of Economic Thought*, 4th ed. (New York: Macmillan, 1949), pp. 106–8.
- [2] R.H. Tawney, *Religion and the Rise of Capitalism* (New York: New American Library, 1954), pp. 38–39.
- [3] Joseph A. Schumpeter, A History of Economic Analysis (New York: Oxford University Press, 1954).
- [4] Marjorie Grice-Hutchinson, *The School of Salamanca: Readings in Spanish Monetary Theory*, 1544–1605 (Oxford: Clarendon Press, 1952).
- [5] Ibid., p. 27.
- [6] Luis Saravia de la Calle, *Instruccion de mercaderes* (1544), in Grice-Hutchinson, *School of Salamanca*, pp. 79–82.
- [7] Ibid., p. 48.
- [8] Francisco García, *Tratado utilisimo y muy general de todos los contractos* (1583), in Grice-Hutchinson, *School of Salamanca*, pp. 104–5.
- [9] Martín de Azpilcueta Navarro, *Comentario resolutorio de usuras* (1556), in Grice-Hutchinson, *School of Salamanca*, pp. 94–95.
- [10] Domingo de Soto, De Justitia et Jure (1553), in Grice-Hutchinson, School of Salamanca, p 55.
- [11] Luís de Molina, *Disputationes de Contractibus* (1601), in Grice-Hutchinson, *School of Salainanca*, pp. 113–14; Tomás de Mercado, *Tratos y contratos de mercaderes* (1569), ibid., pp. 57–58 and; Domingo de Baftez, *De Justitia et Jure* (1594), ibid., pp. 96–103.
- [12] Raymond de Roover, "Scholastic Economics: Survival and Lasting Influence from the Sixteenth Century to Adam Smith," *Quarterly Journal of Economics* 69 (May 1955): 16 1–90; reprinted in de Roover, *Business, Banking, and Economic Thought* (Chicago: University of Chicago Press, 1974), pp. 306–35.
- [13] Ibid., p. 309.
- [14] Raymond de Roover, "Joseph A. Schumpeter and Scholastic Economics," *Kyklos* 10(1957):128. De Roover traced the concept of mutual benefit as exhibited in exchange back to Aquinas, who wrote that "buying and selling seem to have been instituted for the mutual advantage of both parties, since one needs something that belongs to the other, and conversely" (ibid., p. 128).
- [15] De Roover, *Business, Banking, and Economic Thought*, pp. 312–14. Elsewhere de Roover noted that the Scotists were a small minority among medieval and later Scholastics, whereas the Scholastics discussed here were in the mainstream of Thomist tradition.
- [16] Raymond de Roover, "The Concept of the Just Price: Theory and Economic Policy," *Journal of Economic History* 18 (December 1958): 422–23.
- [17] Ibid., p. 424.

- [18] Ibid., p. 426.
- [19] David Herlihy, "The Concept of the Just Price: Discussion," *Journal of Economic History* 18 (December 1958): 437.
- [20] John W. Baldwin, "The Medieval Theories of the Just Price," *Transactions of the American Philosophical Society* (Philadelphia: July 1959); see also the review of Baldwin by A.R. Bridbury, *Economic History Review* 12 (April 1960): 512–14.
- [21] In particular, the theologians at the great center at the University of Paris in the early thirteenth century: Alexander of Hales and Aquinas's teacher, Albertus Magnus (ibid., p. 71). Baldwin further pointed out that theological treatment of such practical questions as the just price in the Middle Ages only began with the development of university centers at the end of the twelfth century (ibid., p. 9).
- [22] Raymond de Roover, "The Scholastic Attitude toward Trade and Entrepreneurship," *Explorations in Entrepreneurial History* 2 (1963): 76–87; reprinted in de Roover, *Business, Banking, and Economic Thought*, pp. 336–45.
- [23] De Roover, here and in his other writings, pointed to the great deficiency in Scholastic analysis of the market: the belief that any interest on a pure loan (a *mutuum*) constituted the sin of usury. The reason is that while the Scholastics understood the economic functions of risk and opportunity cost, they never arrived at the concept of time preference. On the Scholastics and usury, see the magisterial work of John T. Noonan, Jr., *The Scholastic Analysis of Usury* (Cambridge, Mass.: Harvard University Press, 1957); see also Raymond de Roover, "The Scholastics, Usury, and Foreign Exchange," *Business History Review* 41 (1967): 257–71.
- [24] Raymond de Roover, San Bernardino of Siena and Sant'Antonino of Florence: The Two Great Economic Thinkers of the Middle Ages (Boston: Kress Library of Business and Economics, 1967).
- [25] Ibid., p. 17.
- [26] Onthe originality of Olivi see ibid, p 19.
- [27] Ibid., p. 20.
- [28] Ibid., pp. 23–24.
- [29] On the later influence of the Scholastics, see Schumpeter, *History of Economic Analysis*, pp. 94–106; Grice-Hutchinson, *School of Salamanca*, pp. 59–78; de Roover, *Business, Banking, and Economic Thought*, pp. 330–35; and de Roover, "Joseph A. Schumpeter and Scholastic Economics," pp. 128–29.
- [30] Emil Kauder, "Genesis of the Marginal Utility Theory: From Aristotle to the End of the Eighteenth Century," *Economic Journal* 63 (September 1953): 638–50.
- [31] Schumpeter, *History of Economic Analysis*, p. 300.
- [32] Kauder, "Genesis of the Marginal Utility Theory," p. 645.
- [33] Schumpeter, History of Economic Analysis, p. 249, see also ibid., pp. 259–61, 332–33.

- [34] Emil Kauder, "Genesis of the Marginal Utility Theory," p. 647. Kauder and Schumpeter also noted the early eighteenth-century French mathematician Daniel Bernoulli (1738), who outside the stream of economic thought developed a mathematical version of the diminishing marginal utility of money (ibid., pp. 647–50; Schumpeter, *History of Economic Analysis* pp 302–5).
- [35] Emil Kauder "The Retarded Acceptance of the Marginal Utility Theory," *Quarterly Journal of Economics* 67 (November 1953) 564–75.
- [36] Ibid., p. 569.
- [37] Ibid., pp. 570–71. These two articles are essentially reprinted in Emil Kauder, *A History of Marginal Utility Theory* (Princeton, NJ: Princeton University Press, 1965), pp. 3–29.
- [38] Emil Kauder, "Intellectual and Political Roots of the Older Austrian School,' *Zeitschrift für Nationalökonomie* 17 (December 1957): 411–25.
- [39] Ibid., p. 417.
- [40] Ibid., p. 418.
- [41] Ibid.
- [42] Ibid., p. 420; see also Kauder, *History of Marginal Utility*, pp. 90–100. On Menger as Aristotelian, also see Terence W. Hutchinson, "Some Themes from *Investigations into Method*," in *Carl Menger and the Austrian School of Economics*, J.R. Hicks and Wilhelm Weber, eds. (Oxford: Clarendon Press, 1973), pp. 17–20.