F.A. Hayek: Austrian Economist and Social Theorist

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FRIEDRICH AUGUST VON HAYEK ranks among the most eminent of the modern Austrian economists. Student of Friedrich von Wieser, protégé and colleague of Ludwig von Mises, and foremost among an outstanding generation of Austrian School theorists, Hayek was perhaps more successful than anyone else in spreading Austrian ideas throughout the English-speaking world. "When the definitive history of economic analysis during the 1930s comes to be written," said John Hicks in 1967, "a leading character in the drama will be Professor Hayek.... [I]t is hardly remembered that



F. A. Hayek 1899–1992

there was a time when the new theories of Hayek were the principal rival of the new theories of Keynes." Unfortunately, Hayek's theory of the business cycle was eventually swept aside by the Keynesian revolution. Ultimately, however, this work was again recognized when Hayek received, along with the Swede Gunnar Myrdal, the 1974 Nobel Memorial Prize in Economic Science.

LIFE AND WORK

Hayek's life spanned the twentieth century, and he made his home in some of the great intellectual communities of the period. Born in 1899 to

¹Sir John Hicks, *Critical Essays in Monetary Theory* (Oxford: Clarendon Press, 1967), p. 203.

a distinguished family of Viennese intellectuals (one grandfather, a statistician, was a friend of Eugen von Böhm-Bawerk; the philosopher Ludwig Wittgenstein was a second cousin), Hayek attended the University of Vienna, earning doctorates in 1921 and 1923. Hayek came to the University at age nineteen, just after World War I, when it was one of the three best places in the world to study economics (the others being Stockholm and Cambridge). Though he was enrolled as a law student, his primary interests were economics and psychology, the latter due to the influence of Mach's theory of perception on Wieser and Wieser's colleague Othmar Spann, and the former stemming from the reformist ideal of Fabian socialism so typical of Hayek's generation.

Like many students of economics then and since, Hayek chose the subject not for its own sake, but because he wanted to improve social conditions—the poverty of postwar Vienna serving as a daily reminder of such a need. Socialism seemed to provide a solution. Then, in 1922, Mises published his *Die Gemeinwirtschaft*, later translated as *Socialism*. "To none of us young men who read the book when it appeared," Hayek recalled, "the world was ever the same again." *Socialism*, an elaboration of Mises's pioneering article from two years before, argued that economic calculation requires a market for the means of production; without such a market there is no way to establish the values of those means and, consequently, no way to find their proper uses in production. Mises's devastating attack on central planning converted Hayek to laissez-faire, along with contemporaries like Wilhelm Röpke, Lionel Robbins, and Bertil Ohlin.

It was around this time that Hayek began attending Mises's famed *Privatseminar*. For several years, the *Privatseminar* was the center of the economics community in Vienna. Later, Hayek became the first of this group to leave Vienna; most of the others, along with Mises himself, were also gone by the start of World War II.

Mises had done earlier work on monetary and banking theory, successfully applying the Austrian marginal-utility principle to the value of money, and then sketching a theory of industrial fluctuations based on the doctrines of the British Currency School and the ideas of the Swedish economist Knut Wicksell. Hayek used this last as a starting point for his own research on fluctuations, explaining the origin of the business cycle in terms of bank-credit expansion, and its transmission in terms of capital

²F.A. Hayek, "In Honor of Professor Mises," in idem, *The Fortunes of Liberalism*, vol. 4, *The Collected Works of F.A. Hayek*, Peter G. Klein, ed. (Chicago: University of Chicago Press, 1992), p. 133.

malinvestments. His work in this area eventually earned him an invitation to lecture at the London School of Economics and Political Science (LSE), and then to occupy its Tooke Chair in Economics and Statistics, which he accepted in 1931. There he found himself among a vibrant and exciting group: Robbins, J.R. Hicks, Arnold Plant, Dennis Robertson, T.E. Gregory, Abba Lerner, Kenneth Boulding, and George Shackle, to name only the most prominent. Hayek brought his (to them) unfamiliar views, and gradually, the Austrian theory of the business cycle became known and accepted. At the LSE, Hayek lectured on Mises's business-cycle theory, which he was refining and which, until Keynes's *General Theory* came out in 1936, was rapidly gaining adherents in Britain and the United States, and was becoming the preferred explanation of the Depression.

Hayek and Keynes had sparred in the early 1930s in the pages of the Economic Journal over Keynes's Treatise on Money. As one of Keynes's leading professional adversaries, Hayek was well situated to provide a full refutation of the General Theory, but he never did. Part of the explanation for this no doubt lies with Keynes's personal charm and legendary rhetorical skill, along with Hayek's general reluctance to engage in direct confrontation with his colleagues. Hayek also considered Keynes an ally in the fight against wartime inflation and did not want to detract from that issue. Furthermore, as Hayek later explained, Keynes was constantly changing his theoretical framework, and Hayek saw no point in working out a detailed critique of the General Theory, if Keynes might change his mind again. Hayek thought a better course would be to produce a fuller elaboration of Böhm-Bawerk's capital theory, and he began to devote his energies to this project. Unfortunately, The Pure Theory of Capital was not completed until 1941, and by then the Keynesian macro model had become firmly established. ³

Within a very few years, the fortunes of the Austrian School suffered a dramatic reversal. First, the Austrian theory of capital, an integral part of the business-cycle theory, came under attack from Italian-born

³Hayek also believed that an effective refutation of Keynes would have to begin with a thorough critique of aggregate, or "macro" economics more generally. See F.A. Hayek, "The Economics of the 1930s as Seen from London," in idem, *Contra Keynes and Cambridge: Essays, Correspondence*, vol. 9, *The Collected Works of F.A. Hayek*, Bruce Caldwell, ed. (Chicago: University of Chicago Press, 1995), pp. 49–73. Brian McCormick and Mark Blaug propose an entirely different reason: Hayek couldn't respond because the Austrian capital theory, on which the cycle theory was built, was simply wrong. See Brian J. McCormick, *Hayek and the Keynesian Avalanche* (New York: St. Martin's Press, 1992), pp. 99–134; and Mark Blaug, "Hayek Revisited," *Critical Review* 7, no. 1 (1993): 51–60.

Cambridge economist Piero Sraffa and American Frank Knight, while the cycle theory itself was forgotten amid the enthusiasm for the *General Theory*. Second, beginning with Hayek's move to London and continuing until the early 1940s, the Austrian economists left Vienna, for personal and then for political reasons, so that a school ceased to exist there as such. Mises left Vienna in 1934 for Geneva and then New York, where he continued to work in isolation; Hayek remained at the LSE until 1950, when he joined the Committee on Social Thought at the University of Chicago. Other Austrians of Hayek's generation became prominent in the United States—Gottfried Haberler at Harvard, Fritz Machlup and Oskar Morgenstern at Princeton, Paul Rosenstein-Rodan at MIT—but their work no longer seemed to show distinct traces of the tradition founded by Carl Menger.

At Chicago, Hayek again found himself among a dazzling group: the economics department, led by Knight, Milton Friedman, and later George Stigler, was one of the best anywhere, and Aaron Director at the law school soon set up the first law-and-economics program. But economic theory, in particular its style of reasoning, was rapidly changing: Paul Samuelson's *Foundations* had appeared in 1947, establishing physics as the science for economics to imitate, and Friedman's 1953 essay on "positive economics" set a new standard for economic method. In addition, Hayek had ceased to work on economic theory, concentrating instead on psychology, philosophy, and politics. Austrian economics entered a prolonged eclipse. Important work in the Austrian tradition was done during this period by Rothbard, Kirzner, and Lachmann, but, at least publicly, the Austrian tradition lay mostly dormant.

When the 1974 Nobel Prize in economics went to Hayek, interest in the Austrian School was suddenly and unexpectedly revived. While this was not the first event of the so-called Austrian revival, the memorable South Royalton conference having taken place earlier the same year, the rediscovery of Hayek by the economics profession was nonetheless a decisive event in the renaissance of Austrian economics. Hayek's writings

⁴See Earlene Craver, "The Emigration of the Austrian Economists," *History of Political Economy* 18, no. 1 (1986): 1–32.

⁵However, at Chicago, Hayek was considered something of an outsider; his post was with the Committee on Social Thought, not the economics department, and his salary was paid by a private foundation, the William Volker Fund (the same organization that paid Mises's salary as a visiting professor at New York University).

⁶The proceedings of the South Royalton conference were published as *The Foundations of Modern Austrian Economics*, Edwin G. Dolan, ed. (Kansas City: Sheed and Ward, 1976).

were taught to new generations, and Hayek himself appeared at the early Institute for Humane Studies conferences in the mid-1970s. He continued to write, producing *The Fatal Conceit* in 1988, at the age of 89.⁷ Hayek died in 1992 in Freiburg, Germany, where he had lived since leaving Chicago in 1961.⁸

Hayek's legacy in economics is complex. Among mainstream economists, he is mainly known for his popular *The Road to Serfdom*⁹ and for his work on knowledge in the 1930s and 1940s. Specialists in business-cycle theory recognize his early work on industrial fluctuations, and modern information theorists often acknowledge Hayek's work on prices as signals, although his conclusions are typically disputed. Hayek's work is also known in political philosophy, legal theory, and psychology.

Within the Austrian School of economics, Hayek's influence, while undeniably immense, has very recently become the subject of some controversy. His emphasis on spontaneous order and his work on complex systems have been widely influential among many Austrians. Others have preferred to stress Hayek's work in technical economics, particularly on capital and the business cycle, citing a tension between some of Hayek's and Mises's views on the social order. (While Mises was a rationalist and a utilitarian, Hayek focused on the limits to reason, basing his defense of capitalism on its ability to use limited knowledge and learning by trial and error.)

BUSINESS-CYCLE THEORY

Hayek's writings on capital, money, and the business cycle are generally regarded as his most important contributions to economics. Building on Mises's *Theory of Money and Credit*, ¹⁰ Hayek showed how fluctuations in economy-wide output and employment are related to the economy's capital structure. In *Prices and Production*, ¹¹ he introduced the famous "Hayekian triangles" to illustrate the relationship between the value of

⁷F.A. Hayek, *The Fatal Conceit: The Errors of Socialism*, vol. 1, *The Collected Works of F.A. Hayek*, W.W. Bartley III, ed. (Chicago: University of Chicago Press, 1988).

 $^{^8}$ For a fuller biographical account, see F.A. Hayek, *Hayek on Hayek: An Autobiographical Dialogue*, Stephen Kresge and Leif Wenar, eds. (Chicago: University of Chicago Press, 1994).

 $^{^9{\}rm F.A.}$ Hayek, The Road to Serfdom (Chicago: University of Chicago Press, 1944).

¹⁰Ludwig von Mises, *The Theory of Money and Credit*, H.E. Batson, trans. (Indianapolis, Ind.: Liberty Classics, [1912] 1980).

¹¹F.A. Hayek, *Prices and Production* (London: Routledge and Kegan Paul, [1931] 1935).

capital goods and their place in the temporal sequence of production. Because production takes time, factors of production must be committed in the present for making final goods that will have value only in the future after they are sold. However, capital is heterogeneous; as capital goods are used in particular production processes, they become increasingly specific to those processes, so they cannot be easily redeployed as demands for final goods change. The central macroeconomic problem in a modern capital-using economy is, thus, one of intertemporal coordination: how can the allocation of resources between capital and consumer goods be aligned with consumers' preferences between present and future consumption? In *The Pure Theory of Capital*, ¹² perhaps his most ambitious work, Hayek describes how the economy's structure of production depends on the characteristics of capital goods—durability, complementarity, substitutability, specificity, and so on. This structure can be described by the various "investment periods" of inputs, an extension of Böhm-Bawerk's notion of "roundaboutness," the degree to which production takes up resources over time. 13

In *Prices and Production* and *Monetary Theory and the Trade Cycle*, ¹⁴ Hayek showed how monetary injections, by lowering the rate of interest below what Mises (following Wicksell) called its "natural rate," distort the economy's intertemporal structure of production. ¹⁵ Most theories of the effects of money on prices and output (then and since) consider only the effects of the total money supply on the price level and aggregate output or investment. The Austrian theory, as developed by Mises and Hayek, focuses on the way money enters the economy ("injection effects"), and how this affects relative prices and investment in particular sectors. In Hayek's framework, investments in some stages of production are "malinvestments" if they do not help to align the structure of production to consumers' intertemporal preferences. The reduction in interest rates caused by credit expansion directs resources toward

¹²F.A. Hayek, *The Pure Theory of Capital* (Chicago: University of Chicago Press, 1941).

¹³Hayek ultimately rejected Böhm-Bawerk's "average period of production" as a useful concept, though Hayek had used it earlier in *Prices and Production*. See Hayek, *Hayek on Hayek*, p. 141.

¹⁴F.A. Hayek, *Monetary Theory and the Trade Cycle*, N. Kaldor and H.M. Croome, trans. (New York: Harcourt, Brace, 1933).

¹⁵Hayek thought the more important case was when the market interest rate was kept constant despite a rise in the natural interest rate. In his writings, however, he focused on the expositionally easier case when credit expansion lowers the market interest rate below an unchanged natural rate.

capital-intensive processes and early stages of production (whose investment demands are more interest-rate elastic), thus "lengthening" the period of production. If interest rates had fallen because consumers had changed their preferences to favor future over present consumption, then the longer time structure of production would have been an appropriate, coordinating response. A fall in interest rates caused by credit expansion, however, would have been a "false signal," causing changes in the structure of production that do not accord with consumers' intertemporal preferences. ¹⁶ The boom generated by the increase in investment is artificial. Eventually, market participants come to realize that there are not enough savings to complete all the new projects; the boom becomes a bust as these malinvestments are discovered and liquidated. 17 Every artificial boom induced by credit expansion, then, is selfreversing. Recovery consists of liquidating the malinvestments induced by the lowering of interest rates below their natural levels, thus restoring the time structure of production so that it accords with consumers' intertemporal preferences.

KNOWLEDGE, PRICES, AND COMPETITION AS A DISCOVERY PROCEDURE

Hayek's writings on dispersed knowledge and spontaneous order are also widely known, but more controversial. In "Economics and Knowledge" and "The Use of Knowledge in Society," Hayek argued that the central economic problem facing society is not, as is commonly expressed in textbooks, the allocation of given resources among competing ends.



¹⁶For most of his career, Hayek viewed a system of fractional-reserve banking as inherently unstable, endorsing a role (in principle) for government stabilization of the money supply. In later writings, beginning with *The Constitution of Liberty* (Chicago: University of Chicago Press, 1960), and culminating in *Denationalization of Money: An Analysis of the Theory and Practice of Concurrent Currencies* (London: Institute of Economic Affairs, 1976), he argued in favor of competition among private issuers of flat money.

¹⁷Anticipating modern cycle theories Hayek recognized that the behavior of the cycle depends on expectations about future price and interest-rate movements. But Hayek did not believe agents could know the real structure of the economy, to correctly distinguish movements in interest rates generated by changes in consumers' intertemporal preferences from those generated by changes in the money supply. See F.A. Hayek, "Price Expectations, Monetary Disturbances, and Malinvestments," in idem, *Profits, Interest, and Investment* (London: Routledge, 1939).

¹⁸F.A. Hayek, "Economics and Knowledge," *Economica* 4 (1937): 33–54.

¹⁹F.A. Hayek, "The Use of Knowledge in Society," *American Economic Review* 35 (September 1945): 519–30.

It is rather a problem of how to secure the best use of resources known to any of the members of society, for ends whose relative importance only those individuals know. Or, to put it briefly, it is a problem of the utilization of knowledge not given to anyone in its totality.²⁰

Much of the knowledge necessary for running the economic system, Hayek contended, is in the form not of "scientific" or technical knowledge—the conscious awareness of the rules governing natural and social phenomena—but of "tacit" knowledge, the idiosyncratic, dispersed bits of understanding of "circumstances of time and place." This tacit knowledge is often not consciously known even to those who possess it, and can never be communicated to a central authority. The market tends to use this tacit knowledge through a type of "discovery procedure" by which this information is unknowingly transmitted throughout the economy as an unintended consequence of individuals pursuing their own ends. ²² Indeed, Hayek's distinction between the neoclassical notion of "competition," identified as a set of equilibrium conditions (number of market participants, characteristics of the product, and so on), and the older notion of competition as a rivalrous process, has been widely influential in Austrian economics. ²³

For Hayek, market competition generates a particular kind of order—an order that is the product "of human action but not of human design" (a phrase Hayek borrowed from Adam Ferguson). This "spontaneous order" is a system that comes about through the independent actions of many individuals, and produces overall benefits unintended and mostly unforeseen by those whose actions bring it about. To distinguish between this kind of order and that of a deliberate, planned system, Hayek used the Greek terms *cosmos* for a spontaneous order, and

²⁰Ibid., p. 520.

²¹F.A. Hayek, "Competition as a Discovery Procedure," in idem, *New Studies in Philosophy, Politics, and Economics* (Chicago: University of Chicago Press, 1978), pp. 170_90

²²Hayek's use of an argument from ignorance as a defense of the market is unusual. Modern economists typically require assumptions of hyperrationality—complete and perfect information, rational expectations, perfect markets, and so on—to justify market allocations as "efficient." In the new microeconomics literature on information and incentives, theorists like Joseph Stiglitz have used deviations from these assumptions of perfection to reach a verdict of market *failure* and to provide a rationale for government intervention. For Hayek, by contrast, the fact that agents are not hyperrational is an argument not against individual freedom, but against state planning and social control.

²³F.A. Hayek, "The Meaning of Competition," in idem, *Individualism and Economic Order* (Chicago: University of Chicago Press, 1948), pp. 92–106.

taxis for a consciously planned one.²⁴ Examples of a *cosmos* include the market system as a whole, money, the common law, and even language. A *taxis*, by contrast, is a designed or constructed organization, like a firm or bureau; these are the "islands of conscious power in [the] ocean of unconscious cooperation like lumps of butter coagulating in a pail of buttermilk."²⁵

Most commentators view Hayek's work on knowledge, discovery, and competition as an outgrowth of his participation in the socialist calculation debate of the 1920s and 1930s. The socialists erred, in Hayek's view, in failing to see that the economy as a whole is necessarily a spontaneous order and can never be deliberately made over in the way that the operators of a planned order can exercise control over their organization. This is because planned orders can handle only problems of strictly limited complexity. Spontaneous orders, by contrast, tend to evolve through a process of natural selection, and therefore do not need to be designed or even understood by a single mind.

HAYEK AND AUSTRIAN ECONOMICS

Clearly, the Austrian revival owes much to Hayek. But are Hayek's writings really "Austrian economics"—part of a separate, recognizable tradition—or should we regard them, instead, as an original, deeply personal, contribution? Some observers charge that Hayek's later work, particularly after he began to turn away from technical economics, shows more influence of Karl Popper than of Menger or Mises: one critic speaks of "Hayek I" and "Hayek II"; another writes on "Hayek's Transformation." Transformation."

²⁴F.A. Hayek, "The Confusion of Language in Political Thought," in idem, *New Studies in Philosophy, Politics, and Economics*, pp. 71–97. Earlier, Hayek had used "organism" and "organization," borrowed from Mises, to distinguish the two; this is the distinction cited by Ronald Coase in his famous 1937 article, "The Nature of the Firm," *Economica* N.S., 4 (1937): 386–405. See F.A. Hayek, "The Trend of Economic Thinking," in idem, *The Trend of Economic Thinking*, vol. 3, *The Collected Works of F.A. Hayek*, W.W. Bartley, III, and Stephen Kresge, eds. (Chicago: University of Chicago Press, 1991), pp. 17–34.

²⁵D.H. Robertson, quoted in Coase, "The Nature of the Firm," p. 35.

²⁶Wieser's have generally been considered a personal contribution, by Hayek himself and others.

²⁷For Hayeks I and II, see T.W. Hutchison, "Austrians on Philosophy and Method (since Menger)," in idem, *The Politics and Philosophy of Economics: Marxians, Keynesians, and Austrians* (New York and London: New York University Press, 1984), pp. 203–32; for the "transformation," see Bruce J. Caldwell, "Hayek's Transformation," *History of Political Economy* 20 (Winter 1988): 513–41.

It is true that Popper had a significant impact on Hayek's mature thought. Of greater interest is the precise nature of Hayek's relationship with Mises. Undoubtedly, no economist had a greater impact on Hayek's thinking than Mises—not even Wieser, from whom Hayek learned his craft, but who died in 1927 when Hayek was still a young man. In addition, Mises clearly considered Hayek the brightest of his generation.²⁸ Yet, as Hayek noted, he was from the beginning always something less than a pure follower:

Although I do owe [Mises] a decisive stimulus at a crucial point of my intellectual development, and continuous inspiration through a decade, I have perhaps most profited from his teaching because I was not initially his student at the university, an innocent young man who took his word for gospel, but came to him as a trained economist, versed in a parallel branch of Austrian economics [the Wieser branch] from which he gradually, but never completely, won me over. ²⁹

Much has been written on Hayek's and Mises's views on the socialist calculation debate. ³⁰ The issue is whether a socialist economy is "impossible," as Mises charged in 1920, or simply less efficient or more difficult to implement. Hayek maintained later that Mises's "central thesis was not, as it is sometimes misleadingly put, that socialism is impossible, but that it cannot achieve an efficient utilization of resources." ³¹ That interpretation is itself subject to dispute. Hayek is arguing here against the standard view on economic calculation, found for instance in Schumpeter. ³² This view holds that Mises's original statement of the impossibility of economic calculation under socialism was refuted by Oskar Lange, Fred Taylor, and Abba Lerner, and that later modifications by Hayek and Robbins amounted to an admission that a socialist economy is possible in theory but difficult in practice because knowledge is decentralized and incentives are weak. Hayek's response in the cited text, that Mises's actual position has been exaggerated, receives support

²⁸Margit von Mises, in *My Years with Ludwig von Mises*, 2nd enlarged ed. (Cedar Falls, Iowa: Center for Futures Education, 1984), p. 133, recalls of her husband's seminar in New York that "Lu met every new student hopeful that one of them might develop into a second Hayek."

²⁹F.A. Hayek, "Coping with Ignorance," *Imprimis* 7, no. 7 (July 1978): 1–6.

³⁰Hayek's writings on socialist economic calculation are collected in F.A. Hayek, *Socialism and War: Essays, Documents, Reviews*, vol. 10, *The Collected Works of F.A. Hayek*, Bruce Caldwell, ed. (Chicago: University of Chicago Press, 1997).

³¹Hayek, *The Fortunes of Liberalism*, p. 127.

³²Joseph A. Schumpeter, *Capitalism, Socialism, and Democracy* (New York: Harper and Row, 1942), pp. 172–86.

from the primary revisionist historian of the calculation debate, Don Lavoie, who states that the $\,$

central arguments advanced by Hayek and Robbins did not constitute a "retreat" from Mises, but rather a clarification directing the challenge to the later versions of central planning. . . . Although comments by both Hayek and Robbins about computational difficulties of the [later approaches] were responsible for misleading interpretations of their arguments, in fact their main contributions were fully consistent with Mises's challenge. $^{\rm 33}$

Israel Kirzner similarly contends that Mises's and Hayek's positions should be viewed together as an early attempt to elaborate the Austrian "entrepreneurial-discovery" view of the market process.³⁴ Joseph Salerno argues, by contrast, in favor of the traditional view—that Mises's original calculation problem is different from the discovery-process problem emphasized by Lavoie and Kirzner.³⁵

Furthermore, Hayek's later emphasis on group selection and spontaneous order is not shared by Mises, although there are elements of this line of thought in Menger. A clue to this difference is in Hayek's statement that "Mises himself was still much more a child of the rationalist tradition of the Enlightenment and of continental, rather than of English, liberalism . . . than I am myself." This is a reference to the "two types of liberalism" to which Hayek frequently refers: the continental rationalist or utilitarian tradition, which emphasizes reason and man's ability to shape his surroundings, and the English common-law tradition, which stresses the limits to reason and the "spontaneous" forces of evolution. 37

Recently, the relationship between Mises and Hayek has become a full-fledged "dehomogenization" debate, with some seeing Hayek's emphasis on knowledge and discovery as substantially different from Mises's emphasis on purposeful human action. Indeed, it has been argued that there are two strands of modern Austrian economics, both



³³Don Lavoie, *Rivalry and Central Planning: The Socialist Calculation Debate Reconsidered* (Cambridge: Cambridge University Press, 1985), p. 20.

³⁴Israel M. Kirzner, "The Socialist Calculation Debate: Lessons for Austrians," *Review of Austrian Economics* 2 (1988): 1–18.

 $^{^{35} \}mbox{Joseph T.}$ Salerno, "Ludwig von Mises as Social Rationalist," Review of Austrian Economics 4 (1990): 26–54.

³⁶Hayek, "Coping with Ignorance."

³⁷For more on the complex and subtle Mises–Hayek relationship, see Peter G. Klein, "Introduction" to Hayek, *The Fortunes of Liberalism*.

descended from Menger. One, the Wieser–Hayek strand, focuses on dispersed knowledge and the price system as a device for communicating knowledge. Another, the Böhm-Bawerk–Mises strand, focuses on monetary calculation (or "appraisal," meaning anticipation of future prices) based on existing money prices. Thus, the dispute is whether the differences between Hayek and Mises are primarily matters of emphasis and language or matters of substance.³⁸

Regardless, there is widespread agreement that Hayek ranks among the greatest members of the Austrian School, and among the leading economists of the twentieth century. His work continues to be influential in business-cycle theory, comparative economic systems, political and social philosophy, legal theory, and even cognitive psychology. Hayek's writings are not always easy to follow—he describes himself as "puzzler" or "muddler" rather than a "master of his subject"—and this may have contributed to the variety of interpretations his work has aroused. ³⁹ Partly for this reason, Hayek remains one of the most intriguing intellectual figures of our time.

Misesian praxeology, the Hayek–Kirzner emphasis on the market as transmission of knowledge and coordination of plans—rather than the Misesian emphasis on continuing coordination of prices, and the ultra-subjectivism of [Ludwig] Lachmann.

Review of Bruce Caldwell and Stephan Boehm, eds., "Austrian Economics: Tensions and New Directions," *Southern Economic Journal* 61, no. 2 (October 1994): 559–60. For a contrary view, see Kirzner's review of Jack Birner and Rudy Van Zijp, "Hayek, Co-ordination, and Evolution," *Southern Economic Journal* 61, no. 4 (April 1995): 1243–44:

To fail to see the common economic understanding shared by Mises and Hayek, is to have been needlessly misled by superficial differences in exposition and emphasis. To compound this failure by perceiving a clash, among modern Austrians, of "Hayekians" versus "Misesians," is to convert an interpretive failure into a *dogmengeschictliche* nightmare.

³⁹Along with himself, Hayek named Wieser and Frank Knight as representative puzzlers, and Böhm-Bawerk, Joseph Schumpeter, and Jacob Viner as representative masters of their subjects. As Hayek recalled,

I owed whatever worthwhile new ideas I ever had to not being able to remember what every competent specialist is supposed to have at his fingertips. Whenever I saw a new light on something, it was as the result of a painful effort to reconstruct an argument which most competent economists would effortlessly and instantly reproduce.

³⁸See, for example, Joseph T. Salerno, "Mises and Hayek Dehomogenized," *Review of Austrian Economics* 6, no. 2 (1993): 113–46; and Leland B. Yeager, "Mises and Hayek on Calculation and Knowledge," *Review of Austrian Economics* 7, no. 2 (1994): 93–109. Rothbard identifies three distinctive and often clashing paradigms within Austrian economics:

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