
7. Hayek and Mises

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There is no single man to whom I owe more intellectually, even though he [Ludwig von Mises] was never my teacher in the institutional sense of the word . . . Although I do owe him a decisive stimulus at a crucial point in 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 . . . Though I learned that he was usually right in his conclusions, I was not always satisfied with his arguments, and retained to the end a certain critical attitude which sometimes forced me to build different constructions, which however, to my great pleasure, usually led to the same conclusions. (F.A. Hayek, 'Coping with ignorance', 1978, pp. 17–18)

LUDWIG VON MISES AND FRIEDRICH A. HAYEK IN VIENNA

In the twentieth century, the two economists most closely identified as representing the Austrian School of economics were Ludwig von Mises and Friedrich A. Hayek. Indeed, more than any other members of the Austrian School, Mises and Hayek epitomize the academic and public perception of the 'Austrian' approach to economic theory and method, as well as a free-market-oriented view of social and economic policy. Their names have been inseparable from the conception of the 'Austrian' theory of the business cycle; or the 'Austrian' critique of socialist central planning and government intervention; or the 'Austrian' view of competition and the market process; or the 'Austrian' emphasis on the unique characteristics that separate the social sciences from the natural sciences.¹

Yet, as Hayek emphasizes in the quotation with which the chapter begins, he never directly studied with Mises as a student at the University of Vienna; and while considering him the thinker who had the most influence on him in his own intellectually formative years of the 1920s and early 1930s, he approached Mises' ideas with a critical eye. Not always satisfied with the particular chain of reasoning by which Mises may have reached a conclusion on questions of economic theory or policy, Hayek said, he nonetheless often ended up with the same (or similar) results, although through a somewhat different logical process.

That Hayek appreciated his intellectual debt to Mises' own writings was not simply a reflective afterthought in later years following the winning of the Nobel Prize in Economics in 1974. He was appreciative of Mises' intellectual stature from the time he came into Mises' orbit in Vienna in the years shortly after the end of the First World War.

Ludwig von Mises was Hayek's senior by 18 years, having been born in September of 1881 in Lemberg, the capital of the Hapsburg Crownland of Galicia, a far eastern corner of the Austro-Hungarian Empire bordering on the Russian Empire. Among Mises' family were prominent members of the orthodox Jewish community in Galicia, who were strongly liberal in their views on social reform; a few months before Ludwig was born, his great-grandfather had been ennobled by Emperor Franz Joseph with the hereditary 'Edler von' in recognition of his service as a leader of the Jewish community in that part of the Hapsburg domains.

Ludwig's father moved his branch of the family to Vienna in the early 1890s. After attending the Acedemisches Gymnasium (a high school geared toward those destined for higher education), Mises entered the University of Vienna in 1900 planning to specialize in history. But in 1903 he discovered Carl Menger's *Principles of Economics* (1871), the founding work of the Austrian School, and it had such a profound impact on the 22-year-old Ludwig that he decided to become an economist. He graduated in 1906 with a doctorate in jurisprudence, since economics was studied through the law faculty at the University of Vienna.²

Mises had already started making a controversial figure of himself even before the First World War. He had caused a minor stir in some official circles when he challenged, in a series of articles published in scholarly journals between 1907 and 1910, the reluctance of the Austro-Hungarian Bank to complete the monetary reforms that had begun in 1892 to formally put the Hapsburg Empire on the gold standard with legally required redemption of Austrian notes and deposits for specie currency (Mises, 1907, pp. 3–20; 1909, pp. 31–82; 1910a, pp. 95–103).³ And he was already a strong liberal critic of the growing fiscal and regulatory burdens of the Austrian government on the country's economic and industrial development (Mises, 1910b, pp. 117–30).

Mises published his first major work in June 1912, *The Theory of Money and Credit* (Mises, 1912), and on its basis was awarded in February 1913 the status of *Privatdozent* (an unsalaried lecturer) at the University of Vienna, permitting him to offer a seminar each term; he was promoted to 'professor extraordinary' in 1918, an honorific title of 'tenure' as an unsalaried lecturer.⁴

The Theory of Money and Credit attempted to advance monetary theory in several directions. First, following the lead of Carl Menger's 1892

monograph on 'Money' (Menger, 1892, pp.25–107), Mises developed a 'subjectivist' and 'marginalist' formulation of the cash balance approach for explaining the general value or purchasing power of the monetary unit, based on the individual's demand for money. Second, he developed a thoroughly micro-based theory of the non-neutrality of money through an analysis of the time-sequential process resulting from changes in the quantity of money in terms of its impact on the structure of relative prices and wages, relative income shares, and the allocation of resources among competing uses in the economy, the longer-run outcome of which would be an overall change in the general scale of prices in the economy.

And, third, Mises attempted to integrate Eugen von Böhm-Bawerk's theory of capital and interest with the more recent work of Knut Wicksell which showed how changes in the supply of money and credit could bring about a discrepancy between the 'natural rate' and the 'money rates' of interest. The result was a theory of the business cycle emphasizing the unsustainable boom that set the stage for an economic downturn: a mis-direction of resources and mal-investment of capital caused by a credit expansion that pushed the money rates of interest below the 'natural rate', thus bringing about a time-structure of investments inconsistent with the available amount of real savings.⁵

While his early scholarly reputation was based upon his writings as a monetary theorist, Mises made his living for almost of a quarter of a century, from 1909 to 1934, as a senior economic analyst at the Vienna Chamber of Commerce, Crafts and Industry. He was responsible for policy evaluation and recommendations on behalf of the Vienna business community relating to a wide variety of monetary, fiscal and regulatory legislative matters that came before the Austrian parliament.⁶

His first, full-time academic position came in 1934 – at the age of 53 – when he was invited by the Graduate Institute of International Studies in Geneva, Switzerland to take up a visiting chair in International Economic Relations. Mises held this position until the summer of 1940 when he escaped to the United States from the uncertainties of an increasingly war-ravaged Europe as the Lowlands countries and France were falling under Hitler's control in May and June of that year.

Friedrich Hayek was born in 1899, the year before Mises entered the University of Vienna. By late 1918 Hayek had returned from fighting in the Austrian army on the Italian front during the First World War; he enrolled at the University of Vienna shortly after returning home. As a war veteran he was able to enter an accelerated program that allowed him to earn his doctorate in jurisprudence in 1921. He had been undecided about whether to focus on psychology or on economics, and ended up choosing the latter because it offered a more likely career track, given the

employment situation in postwar Vienna. He earned a second doctoral degree in political science in 1923 (Caldwell, 2004, pp. 133–49).

But it was after earning his first degree in 1921 that he began his decade-long close relationship with Mises. At the university, Hayek had studied with one of the leading figures of the ‘older’ Austrian School, Friedrich von Wieser. Carl Menger, the founder of the Austrian School, had retired from his teaching position at the university in 1903 and was replaced by Wieser, who had been a professor at the German University of Prague.

Eugen von Böhm-Bawerk, Wieser’s brother-in-law and the other major figure who had helped establish the international reputation of the Austrian School in the last decades of the nineteenth and the early years of the twentieth centuries, had died in 1914. Böhm-Bawerk had offered a renowned graduate seminar at the University of Vienna for nearly a decade during which both Mises and Joseph A. Schumpeter had been among the attendees.

Hayek tells us that he was greatly taken by Wieser as a scholar and a personality, and even suffered from a degree of student hero-worship.⁷ When he graduated in 1921 and was in need of employment, Wieser wrote a letter of introduction for him addressed to Mises, who at that time, besides his duties at the Chamber of Commerce, was in charge of a special Office of Accounts established by the League of Nations to sort out Austrian government prewar debts among the ‘successor states’ that had replaced the Hapsburg Empire. More than once, Hayek recounted that first meeting with Mises:

I remember vividly how, after presenting to Mises my letter of introduction by Wieser, in which I was described as a promising young economist, Mises said, ‘Well, I’ve never seen you in my lectures.’ That was almost completely true. I had looked in at one of his lectures and found that a man so conspicuously antipathetic to the kind of Fabian [socialist] views that I then held was not the sort of person to whom I wanted to go. But of course things changed. That meeting was the beginning. After a short conversation, Mises asked, ‘When can you start work?’ This led to a long, close collaboration . . . During [the] next ten year he certainly had more influence on my outlook of economics than any other man. (Hayek, 1978, pp. 17–18)

Hayek found Mises to be an extraordinarily productive economist and efficient administrator. He was, Hayek said:

the kind of man who, as was said about John Stuart Mill, because he does a normal day’s work in two hours, has always a clear desk and time to talk about anything. I came to know him as one of the best-educated and best-informed men I had ever known, and what was most important at the time of great inflation [as Austria and Germany were experiencing in the early 1920s], as the only man who really understood what was happening. (Hayek, 1992, p. 132)

For Hayek, Mises was not simply an economist. In Hayek's eyes, Mises' 'acute knowledge' and 'profound wisdom' was more 'in the tradition of the great moral philosophers' such as Montesquieu, Voltaire, Adam Smith or Alexis de Tocqueville.

When Hayek was in the United States in the mid-1920s and 'tried to explain Mises' position in pretty much the same words to Wesley Clair Mitchell in New York, [he] only encountered – perhaps understandably – a politely ironic skepticism' (Hayek, 1992, p. 153).

What began that influence on Hayek's views on economics and social philosophy in general was the impression made by Mises' *Socialism: An Economic and Sociological Analysis* (Mises, 1922). The book had grown out of a journal article that Mises had published two years earlier on 'Socialist calculation in the socialist commonwealth' (Mises, 1920). As the First World War ended, there was the rise to power of the Bolsheviks in Russia in 1917, then short-lived Marxist regimes in Hungary and Bavaria in 1919, and large socialist movements in Germany and Austria calling for the abolition of private property and the implementation of centrally planned economies.

Mises raised a fundamental question about the instituting of a socialist planned society: how would the newly established central planners know how to rationally and efficiently plan an economy once private property in the means of production was abolished, market competition had been done away with, and market-generated money prices no longer existed?

Mises' essential argument was that the only realistic and meaningful way to determine the value that people placed upon alternative consumer goods and services they could buy, and the only way to effectively determine the opportunity costs of employing the scarce means of production in their potential competing uses, was through a market-based pricing system. The heterogeneous physical 'things' of the world that were potentially suitable for men's uses could be reduced to a valuational common denominator through which entrepreneurs could rationally calculate the most profitable ways to direct production for the purpose of satisfying the most urgently expressed wants of the buying public. Socialism, by doing away with the crucial institutions without which this would be 'impossible', meant not a greater and more productive 'horn of plenty' for humanity, but instead meant economic 'planned chaos'.

This critique of the economic viability of a socialist economy was placed in a far wider setting in Mises' treatise on *Socialism*. Here Mises broadened the analysis to include the social, political, historical, ethical and cultural dimensions of a fully and comprehensively implemented collectivist order. And from virtually every angle, Mises found that the socialist dream was in reality a doorway to social stagnation, political tyranny and

economic irrationality. Indeed, as Hayek suggested, it went outside the far more narrow range of the mere economist's frame of reference.

Years later, Hayek stated that:

When *Socialism* first appeared in 1922, its impact was profound. It gradually altered the outlook of many of the young idealists returning to their university studies after the World War. I know, for I was one of them . . . Socialism promised to fulfill our hopes for a more rational, more just world. And then came this book. Our hopes were dashed. *Socialism* told us that we had been looking for improvement in the wrong direction . . . [T]o those of us who experienced its first impact, *Socialism* will always be his [Mises'] decisive contribution. It challenged the outlook of a generation and altered, if only slowly, the thinking of many . . . To none of us young men who read the book when it appeared the world was ever the same again. If [Wilhelm] Röpke, stood here, or [Lionel] Robbins, or [Bertil] Ohlin (to only mention those of exactly the same age as myself) they would tell you the same story . . . Although there were few unquestioning followers at first, he attained interest and admiration among a younger generation and attracted those who were concerned with the borderline of social theory and philosophy . . . [F]or our generation it must remain the most memorable and decisive production of Professor Mises' career. (Hayek, 1992, p. 133–40)

After spending over a year in the United States, Hayek returned to Vienna and went back to work for Mises at the League of Nations Office of Accounts on prewar Austrian debt obligations. Hayek also began to regularly attend Mises' already famous *Privatseminar*, which brought together economists, political scientists, sociologists, philosophers, and historians for wide-ranging discussions on virtually all facets of the human sciences, many of whom became internationally renowned in their particular scholarly fields. Many of those who participated in the seminar recalled in later years that they considered it to be one of the most rewarding and challenging intellectual experiences of their lives because of the consistent quality of the papers delivered and the discussions that followed (Mises, 1940b, pp. 81–3; Mises, Margit von, 1984, pp. 202–11).⁸ The partial lists of the themes and topics discussed in the papers presented at the private seminar that are among Mises' 'lost papers' show that during the years when Hayek was participating he delivered presentations on the theory of imputation, credit and banking policy, price level stabilization, and a variety of related subjects.

After Mises stepped down from his administrative role at the Office of Accounts in February 1925 and returned to his full-time duties with Vienna Chamber of Commerce, Hayek searched for a better-paying position, since he had recently married. Unable to get Hayek a job with the Chamber of Commerce, Mises proceeded with an alternative plan to assist his young friend. While in the United States, Hayek had spent a good

deal of time studying various statistical methods developed by American economists for investigating the phases of the business cycle. While many of these statistical methods are certainly out of date now, in the Vienna of the mid- and late 1920s, Hayek had cutting-edge knowledge of empirical techniques that few others possessed in the German-speaking world, and most certainly not in the Austria of that time.⁹

Mises, who through his position at the Chamber of Commerce was well known and highly respected in Austrian business circles, arranged for the financing and legal approval for the establishment of the Austrian Institute for Business Cycle Research, with Hayek proposed as its director.¹⁰ In November 1926, Mises explained the purpose for such an institute at a conference of the executive directors of the various Austrian Chambers of Commerce. Central to the case for such an institute, Mises argued, would be its unbiased independence in its analytical and statistical studies of the economic conditions in Austria; its autonomy would place it above and separate from politics, something that would not be the case if such studies were done within the Chamber of Commerce, since it was understood to speak for the interests of business. As Mises stated matters:

The Institute for Business Cycle Research will never compete with such agencies of economic policy as the Chambers of Commerce. Rather, it will use, in the analysis of statistical data, its entire spectrum of scholarly knowledge in the field of economics, so as to distill truths from mere numbers, irrefutable evidence from the plethora of subjective and corruptible data. Only thus will statistical material have reached a level of qualification and maturity to be considered and employed by economic policy makers. Statistics in themselves are merely instruments for the understanding and exploitation of economic data. Only after a thorough, an objective, and a scientific treatment will such statistical data attain the status of objective truth and serve the common good, and only then will the full value of the efforts of those who collected such data be appreciated . . . The Institute's findings will offer to all political parties and all politico-economic interests, a solid foundation for reliable decision-making. (Mises, 1926)

The Austrian Institute for Business Cycle Research opened its doors in January 1927 in the same building housing the Vienna Chamber of Commerce, with Hayek as its founding director at the age of 28. Until his departure for Geneva in the summer of 1934, Mises served as an acting vice-president for the Institute. In 1930 Mises had also helped arrange financial support for Hayek and the Institute from the Rockefeller Foundation, a support that continued until 1938 (Leonard, 2011, pp. 92–3). Especially with the start of the Great Depression, the Rockefeller subsidy became crucial. Already in December of 1930, Hayek reported to the Institute's Board of Trustees that the Austrian dues-paying membership to the

organization had stagnated, and recommended that a public relations (advertising) campaign be initiated. Mises, according to the minutes of the discussion that followed, strongly argued, however, that the format of any advertisements should avoid being 'too American' in style.

Within a short time, the Institute was publishing a monthly bulletin on economic conditions and trends in Austria and in Central Europe in general (with the issues virtually all written by Hayek in the first years). It was in one of these bulletins in the spring of 1929 that Hayek has sometimes been credited with predicting the coming of the Great Depression in the United States. He suggested that the economic depression that was already affecting parts of Europe was not likely to end until interest rates declined, and this depended upon an end to the economic boom in the US, which he thought likely to happen within the next few months (Hayek, 1975, p. 2).

The archives of the Austrian Institute for Business Cycle Research and the League of Nations in Geneva show that the Institute was periodically working with and preparing reports for the League's economic intelligence service. For instance, only a little over a year after the Institute had starting functioning, in March 1928 it hosted a two-day meeting of Central European business cycle institutes in Vienna at which Hayek recommended a partnership for standardizing of the methodology used by the organizations in their collection of statistical data, especially in terms of price-level indices, interest rates, production levels, stock market prices, railway traffic, and unemployment and foreign trade; and that these institutes should synchronize the publication of their respective monthly findings.

In 1930, Hayek prepared graphical and statistical data exhibitions for two business cycle institute conferences held in London and Berlin that were well received at both events. In March of 1931, Hayek traveled to Geneva for a League-sponsored conference of economic research institutes on the economic crisis, for which he summarized the origins and impact of the Great Depression up to that point in Austria. And he, again, attended a League-organized meeting in Geneva in July 1931 as part of an effort to coordinate the research activities of the various economic and business cycle institutes.

The Institute also began a book series, under the general title of 'Contributions to Business Cycle Research', the first volumes of which were Hayek's *Monetary Theory and the Trade Cycle* (Hayek, 1929), Fritz Machlup's *The Stock Market, Credit, and Capital Formation* (Machlup, 1931) and Hayek's *Prices and Production* (Hayek, 1931).

Hayek delivered the four lectures that became *Prices and Production* at the London School of Economics (LSE) in late January 1931. Shortly

afterward he was offered the Tooke Chair in Economic Science and Statistics at LSE, and moved to England in the summer of 1931 to take up his teaching duties in the fall term.^{11 12}

Around the time Hayek arrived in London, *Prices and Production* was beginning to make an impact on the economics profession and debates over business cycle theory and policy. He was also invited to deliver guest lectures at many other universities across Great Britain, and he was soon hailed as an original and creative thinker offering unique insights on monetary theory and policy, the business cycle, and the economic crisis through which the world was passing.¹³

But the international recognition only made Hayek even more aware of how much he owed to Ludwig von Mises in terms of the many ideas for which he was being so widely praised. In a letter to Mises written in November 1931, Hayek expressed the debt he owed to his mentor:

[Lionel] Robbins presented me as an eminent authority, so that people always want to hear my opinion on all matters. I am aware for the first time, that I owe you virtually everything that gives me an advantage as compared to my colleagues here and to most economists even outside my narrow field of research (here my indebtedness to you goes without saying). In Vienna one is less aware of [this intellectual debt to you] because it is the unquestioned common basis of our circle. If I do not deceive too many expectations of the people here at LSE, it is not to my credit but to yours. However [my] advantage [over the others] will disappear with your books being translated and coming generally known. (quoted in Hulsmann, 2007, p. 635)¹⁴

With Hayek's move to Great Britain, his frequent, if not daily, association and interaction with Mises came to an end. Their correspondence clearly shows that rarely did much time pass that they were not communicating with each other, sharing their experiences, ideas and frustrations over the political and economic trends over the years and decades before Mises' death in 1973. But they never again lived so directly in one another's company as in those years in Vienna in interwar Austria, nor influenced each other's lives in so immediate a way.

THE MASTER AND THE PUZZLER

In 1975, Hayek published an article titled 'Two types of minds' (Hayek, 1975, pp. 50–56). He contrasted two types of thinkers. First, the 'master of his subject', the one who has read virtually everything in his field and has the ability to recall, explain and critically analyze all the literature, controversies, and competing views within his discipline. The second kind of thinker Hayek labeled the 'puzzler', or he even suggested the 'muddler'.

He is the person who constantly finds it necessary to rethink arguments that he has heard or read before, who never finds it easy to systematically formulate the ideas of others, and is more likely to take bits of ideas from others and incorporate them in various ways into his own thoughts that often seem not to have fully coherent and logical themes from some clear first principles. The puzzler muddles through, groping his way, rather than reasoning from any carefully thought-out starting premises or ‘first principles’.

Hayek suggested that examples of these two types of minds among the Austrian economists had been Eugen von Böhm-Bawark, a true ‘master’ of his subject who could restate all of his own and his opponents’ arguments in economics with great logical clarity; and Friedrich von Wieser, who was clearly more of the ‘puzzler’ in the way he thought and wrote through a maze of ideas that often seemed to lack any reasoned coherence or relationship to the ideas of others (other than from Menger, Hayek suggested, from whom Wieser had drawn his early inspiration).¹⁵

I would like to suggest that one way to approach the relationship between Mises’ and Hayek’s ideas on various themes in economics is in the contrast between the ‘master’ and the ‘puzzler’. Ludwig von Mises, in this comparison, was surely the ‘master’. When Hayek at the age of 22 first met Mises, who was already 40, Mises was in the process of formulating an entire logical system of economic thought from a set of core principles. Hayek, on the other hand, was groping toward his general conception of the monetary and market processes.

Unlike Athena who emerged full-grown and ready for combat in warrior dress from Zeus’s forehead, Mises’ theory of human action, or ‘praxeology’ as he later came to call it, did not take shape in his mind all at once. It took form over 20 years, from before the time *The Theory of Money and Credit* originally appeared in 1912, to the early 1930s when he published a collection of methodological essays (Mises, 1933). By this time Mises had formulated an ‘axiomatic-deductive’ conception of human action and choice; constructed a theory of conceivable social and economic orders in the form of a contrast of the alternatives of capitalism, socialism and interventionism; and developed a theory of money, the monetary order and the business cycle. It is true that Mises’ ‘system’ was not presented as an integrated whole until 1940 when he published *Nationalökonomie: Theorie des Handelns und Wirtschaftens* (Mises, 1940a) in Geneva in the midst of the Second World War, and then reformulated it almost a decade later in its English-language version, *Human Action: A Treatise on Economics* (Mises, 1949). But nonetheless, together, Mises’ writings from this earlier 20-year period offer a systematic view of man, society, and the economic and social order.¹⁶

Hayek never wrote a systematic treatise on economics in which he integrated and formulated his overall conception of human choice, the social order and the economic system. The two treatises that he wrote later in life, *The Constitution of Liberty* (Hayek, 1960) and his three-volume *Law, Legislation, and Liberty* (Hayek, 1973, 1976, 1979), are primarily concerned with the social, legal and political orders of a free society. All of his ideas on the nature and workings of the economic system and market order are clearly embedded in and centrally inform the content and orientation in these works. Indeed, his economic writings during the 1920s, 1930s and 1940s are the essential foundations for his later profound work on social and political philosophy. But Hayek the economist never offered his version of Mises' *Human Action*.

Instead, what one finds in Hayek's economic writings from the interwar period and after is the work of a scholar often being 'inspired' by some theme earlier developed by Mises, and then, as he expressed it, proceeding to reformulate the problem and its analytical construction in his own 'puzzler's' way in response to the economic theory and policy controversies of his own time.

THE NATURE OF THE ECONOMIC ORDER AND MARKET COORDINATION

In early February 1933, Hayek sent Mises a draft of his paper, 'The trend of economic thinking', which Hayek delivered as an inaugural lecture at the London School of Economics in early March. A week after receiving the draft of the lecture, Mises sent Hayek his comments, in which he said:

There is a substantial divergence in our views in that you discuss the issue of laissez-faire in the tradition manner rather than from the standpoint of the various organizational possibilities of societal collaboration (i.e., individual property, communal property, etc.), a distinction that I make in my own work. From my standpoint it is essential that the issue is not whether to choose laissez-faire or an omnipotent state, but rather which of a limited number of conceivable types of organization is best suited or the only appropriate organization for allowing human cooperation in the economy. (Mises, 1933)

What Mises seemed to object to in Hayek's lecture was the absence of a particular ordering principle in the context of which Mises believed questions concerning economic systems needed to be investigated. In this LSE inaugural lecture, Hayek emphasized the misdirection the German Historical School has given to economic reasoning by rejecting 'theory' in place of a narrow study of 'the facts' of history; he also focused on

the failure of later economists who were influenced by these German Historicists from any longer having a full appreciation of the ‘spontaneous institutions’ that generate an order to economic and social processes, the recognition of which demarcates economic science’s distinct subject matter.

Hayek suggested that socialists had slowly come to realize that many of the features that they most objected to in the market economy – such as interest in the savings–investment relationship – would have to be incorporated in a planned economy if a rational use of resources were to occur. ‘The best a dictator could do in such a case would be to imitate as closely as possible what would happen under free competition’, Hayek said. The leading hurdle preventing the ‘wise planner’ from doing so, in Hayek’s view, was the pressure of special-interest groups who lobbied for the maintenance of the status quo upon which their present income positions were dependent.

He also argued that appreciation of the spontaneous order of the market did not imply a ‘purely negative attitude’ toward the role of the state in economic affairs. Indeed, Hayek hoped that the generally critical stance against government intervention by economists, due to the often naïve and uninformed policy prescriptions of the ‘lay mind’, would ‘not prevent economists from devoting more attention to the positive task of delimiting the field of useful State activity . . . To remedy this deficiency must be one of the main tasks of the future’ (Hayek, 1933, pp. 26, 29–31).

For Mises the most important contribution to economic theory in his time had been the discovery of the logical impossibility of rational economic calculation under a system of comprehensive socialist central planning.¹⁷ The nature and requirements for economic calculation were the cornerstones for evaluating and judging the political practicability of alternative economic systems.

In both his 1920 essay on economic calculation and his 1922 book on *Socialism*, Mises had emphasized that there would be no difficulty in solving resource allocational problems under socialist planning if, on the day before the socialist revolution, markets were in equilibrium, and if nothing changed in the society after central planning was introduced. But neither of these conditions could be presumed to be true. Change was inescapable and inevitable in the real world, and decisions would have to be made anew all the time concerning how best to arrange the productive activities in the socialist society of tomorrow (Mises, 1922, p. 105). Thus, the central planner could not simply inherit the capitalist economy of the day before, and then continue things as under capitalism.

Seeds of Hayek’s later emphasis on the division of knowledge in society and the informational role of prices in the economy were already in Mises’

analysis. As Mises saw it, 'In societies based on division of labor, the distribution of property rights affect a kind of mental division of labor, without which neither economy nor systematic production would be possible' (Mises, 1922, p. 101). And:

This is the decisive objection that economics raises against the possibility of a socialist society. It must forgo the intellectual division of labor that consists in the cooperation of all entrepreneurs, landowners, and workers as producers and consumers in the formation of market prices. But without it, rationality, i.e., the possibility of economic calculation, is unthinkable. (Mises, 1927, p. 50)

Thus, issues concerning the role and extent of government control, planning or regulation of economic activities were inseparable from whether or not a functioning and competition-based price system was in operation and allowed to determine the best and most efficient uses of the means of production to serve consumer ends, as guided by those using their own capital and resources in the division of labor as they considered most profitable. Without such a price system, participants in that 'intellectual division of labor' could not, as consumers, inform producers of what goods they desired and the relative value they placed upon them, and could not, as entrepreneurs and factor owners, decide what lines of production were the ones most consist with those consumer preferences, given the opportunity costs of resource uses in other ways as they saw them.

This idea binds together most of Mises' arguments about the nature of the market order. If the absence of a functioning price system under comprehensive central planning does away with all economic rationality (in terms of efficient and effective uses of means in the achieving of ends in the social system of division of labor), then government interventions through either price controls or production regulations represent 'sand in the machine' that prevents prices from conveying the information without which market coordination through economic calculation is diminished or made impossible, and prevents entrepreneurs from using their best judgments as to how to arrange resource uses that satisfy consumer demands on the basis of what prices are interpreted as telling them.

Thus, the idea that one could pick and choose what one desired to be the functions of government in terms of government ownership, or regulation, control or redistribution, was inconsistent with an appreciation that the fundamental issue concerning the role of government in society concerned the extent to which government intervention or planning interfered with the existence and effective operation of those institutions – private property, competitive exchange and market-based prices – without which a cooperative system of division of labor could not properly solve the 'economic problem'.

When Hayek edited the collection of essays on *Collectivist Economic Planning* (Hayek, 1935) just two years after his inaugural lecture at LSE, his views on the central role of the price system and its crucial role for ordering the productive activities of the society were expressed in ways much closer to Mises' view of things. But as a number of commentators have suggested, the real turn in Hayek's conception of the workings of the market order emerged out of the challenge of the 'market socialists' and the proposed 'mathematical solutions' to the economic problem. Already in his own contributions to *Collectivist Economic Planning*, Hayek had pointed out the implied (and unrealistic) assumption that all the detailed and dispersed technical and related 'data' was somehow known or could be made available to the planners, without which they could not effectively know how to best use the 'society's' collective means to serve its collective ends (Hayek, 1992, pp. 93–7).

It was grappling with these issues that clearly led Hayek to questions and answers that he tried to deal with in 'Economics and knowledge' (1937), 'Socialist calculation: the competitive "solution"' (1940), 'The use of knowledge in society' (1945) and 'The meaning of competition' (1946). Reading them in succession, one sees the evolution of Hayek's thinking about what he came to regard as the fundamental weaknesses of the emerging neoclassical microeconomic framework that, building on the perfect competition model, assumed away all the problems of economic coordination in the real world of constant change and imperfect and decentralized knowledge.

This also, it seems, made him reflect on how his own emergent ideas on these themes related to those of Ludwig von Mises, whose writings were a central starting point for his own intellectual discovery process. More specifically, Hayek began to wonder if Mises' methodological starting point was a sufficient one to fully explain the competitive procedure through which coordination of multitudes of interdependent individual plans could be successfully and fully accomplished.

Hayek accepted Mises' (and Wieser's) argument that the social sciences construct their understanding of the human world from a different type of knowledge than the natural sciences. To understand 'human action' it was necessary to draw upon a particular source of knowledge: the introspective reflection about the logical workings of the human mind. 'Action', after all, can be seen as nothing more than 'reason' applied to purpose. And if this is so, then to comprehend the 'logic' in men's actions, it is necessary to look into that mind of which any one of us has the closest knowledge: the workings of our own.¹⁸

Understanding the logical relationships that can be 'discovered' from thinking about our own actions concerning the meanings and

relationships between ends and means, or costs and benefits, or trade-offs and ‘marginal’ decision-making enable us to fully grasp how the formal economic logic of individual minds generate coordination between the various actions being undertaken by those individuals, respectively. But what does this tell us about how, or through what mechanism, the planned actions of multitudes of individuals become coordinated with one another?

An individual can certainly attempt to bring his own actions into a consistent ‘equilibrium’, given the circumstances he finds himself in and the ‘data’ of those circumstances as he knows and understands them. But if we take for granted that the actors do not have a ‘perfect knowledge’ or ‘perfect foresight’ of all circumstances that might affect the outcomes of their own actions – including the planned actions of others with whom they are interdependent in various direct and indirect ways in the division of labor – then by itself our understanding of the formal logic guiding each individual’s own actions does not tell us how their potentially inconsistent interactions might be or are brought into coordinated equilibrium with each other (Hayek, 1937, p. 36).

In later years Hayek stated that this way of expressing the ‘economic problem’ as a knowledge ‘coordination problem’ in his article on ‘Economics and knowledge’ was meant as an ‘gentle’ criticism of Ludwig von Mises, who, Hayek believed, had claimed that the entire logic of how market processes brought about economy-wide coordination could be deduced ‘a priori’ from introspective knowledge of the individual’s formal ‘logic of choice’ (Caldwell, 2004, pp. 220–23).

Hayek was persuaded that an ‘empirical’ element had to be introduced into the economic analysis concerning how individuals learned that their plans may be inconsistent with those of others and discovered in what directions they had to adapt their actions so as to move them into a more coordinated pattern with the planned actions of those others.

One would imagine that this would have led Hayek to propose a particular theory of expectations formation to explain how individuals came to hold views about the relationship of their own actions to that of others, and how experienced disappointments brought about ‘revisions’ in those interdependent expectations in a more coordinated direction. In other words, one would expect Hayek to have suggested an empirically based theory of ‘learning’ in a complex market setting.

Instead, he pursued a different path, and that was to show how individuals did not have to have any detailed knowledge of the actions and plans of others in the complex market order. The ‘problem’ has its solution, in realizing that the prices that Mises had emphasized as so crucial for purposes of economic calculation are also the means for economizing

on the vast and specific knowledge about the intentions of others on both the demand and the supply sides of the market.

Each market participant in their own corner of society needed merely to follow and appropriately respond to the registered price changes that they observed and that were relevant to their own decision-making. At the same time, each individual could then adapt to what those relevant prices told him about the possible actions of others by using the particular knowledge that he or she possessed about their own circumstances and possibilities which those others could not know or appreciate in the same way. This was how 'society' could take advantage of all the types and bits of dispersed knowledge that only exist in the minds of multitudes of individuals without any centralized direction or control (Hayek, 1945).

Thus, by a slightly different chain of reasoning and emphasis, Hayek reached a conclusion parallel and complementary to Mises' earlier argument. Prices are the essential institutional mechanism by which rational use may be made of the means of production relative to the demands for various and competing goods and services in society. But for Hayek the 'calculating' acts which those prices made possible were due to the fact that all the minimum relevant information about the actions of others that individuals needed to know are encapsulated into those market-generated terms of trade.

Mises considered Hayek's development of how knowledge is used in society through the price system to be 'Hayek's valuable contribution to knowledge'. Mises went on to say that:

The fact that knowledge exists dispersed, incomplete, and inconsistent, in many individual minds has been pointed out by Hayek and this is very important. Hayek says that if we are talking about the knowledge of our age, we are making a mistake if we think that this knowledge exists in all minds, or even that all of it exists in the mind of one man. He pointed out, for instance, in the case of the socialistic society that the progress possible is limited by the mind of one man. It is important for the capitalist economy that everybody, who has a better knowledge about some particular problem, can try to profit from this superiority and his attempts contribute to the improvement of the general conditions. In the socialistic economy, knowledge has value only insofar as it is available to the central authority, to the dictators who are making the central plan. Under capitalism, the coordination of the various bits of knowledge is brought about through the market. In a socialistic society it must be effected either in the mind of the dictator or in the minds of the members of the dictator's committee. (Greaves, 1958)

INTROSPECTION, UNDERSTANDING, AND METHODOLOGICAL SUBJECTIVISM

One of the hallmarks of the ‘Austrian’ approach to economic and social analysis has been methodological subjectivism, the idea that if we are to understand and interpret the actions of individuals in the world the starting point must be the meanings that actors give to their own actions, the actions of others, and to the objects in the world.

While this ‘subjectivist’ approach was clearly present in the works of the ‘older’ Austrian School, the form that it has taken in the writings of the later Austrians, including Mises and Hayek, is surely derived from Max Weber in his *Economy and Society* (1922). Weber defines ‘action’ as behavior to which the actor assigns a personal or ‘subjective’ meaning, with the ‘meaning’ defining the purpose or goal of the action. ‘Social action’ is that human conduct in which an individual is conscious of and orients some aspects of his activities to the presence of another human agent. Such social action can be either one-sided or mutual (Weber, 1922, p. 88).¹⁹

The same applies to objects. Regardless of their specific physical characteristics, what makes one sharp object a warrior’s weapon and another a surgeon’s scalpel is the purpose for which the object may have been designed and the goal for which it is applied. Neither archeologist, nor sociologist, nor historian, nor economist would know how to understand the actions of human beings or the things men use for various purposes if the attempt was not made to appreciate these ‘subjective’ meanings that give the intelligibility that may be found in human ‘movements’ and social ‘objects’.

Hayek devoted a part of his scholarly time in the 1940s to analyzing and explaining the significance and importance of ‘subjectivism’ in response to the rise and influence of positivism and behaviorism, and why he considered the misplaced use of the methods of the natural sciences in the social sciences to be not only faulty science – what he referred to as ‘scientism’ – but potentially harmful when applied to questions of social policy (Hayek, 2010, pp. 77–168).²⁰

In *The Counter-Revolution of Science*, Hayek emphasized Mises’ unique place in the consistent application of a subjectivist approach in economics:

it is probably no exaggeration to say that every important advance in economic theory during the last one hundred years was a further step in the consistent application of subjectivism . . . This is a development which has probably been carried out most consistently by Ludwig von Mises, and I believe that most of the peculiarities of his views which at first strike many readers as strange and unacceptable trace to the fact that in the consistent development of the subjectivist approach he has for a long time moved ahead of his contemporaries.

Probably all the characteristic features of his theories – from his theory of money (so far ahead of its time in 1912) to what he calls his *a priori* . . . all follow directly (although, perhaps, not all with the same necessity) from this central position. (Hayek, 2010, p. 94)

Yet, to speak of such a subjectivist approach for analyzing and understanding social and economic phenomena already implies an empirical element in the analysis. It is strange, then, that Hayek failed to see this in Mises' own writings. Mises in his writings in the late 1920s and early 1930s on the methods of the social sciences had already delineated between the 'formal' and abstract character of the universal and 'a priori' theorems of economics, and those elements that could only be known from 'experience' or 'empirical' information.

What it means for men to pursue ends and apply means, to weigh costs and benefits, to make trade-offs, and evaluate alternatives either categorically or at 'the margin', can all be derived from and can only be known through introspective reflection on the logical workings of our own mind. But what it is that men desire, which things or activities they view as means to attain those desired ends, what they consider the 'cost' or the 'benefit', from a choice, what they may view as a 'consumer good' or a 'producer good', and what and how much they may be willing to trade away of one thing to get another – these things can only be known through the 'empirical' facts of the specific circumstances and situations in which men may find themselves. The economist and the social analyst cannot know these things 'a priori'. Rather, it is the logic of human action and choice that provides the analytical schema in the context of which the 'empirical' data may be arranged and ordered to give that interpretive intelligibility to any and all of conscious human conduct (Mises, 1933, 25–31).

But what is the 'empirical' method for understanding how men coordinate their actions toward each other for mutual compatibility in pursuit of their plans in the market place? It must be said that when Hayek wrote 'Economics and knowledge', it is true that Mises had not articulated this in the detail that might have made unnecessary Hayek's 'gentle' criticism of what he considered to be the limits of Mises' 'a priori' logic of choice.

Perhaps it was in response to Hayek's criticism that Mises was stimulated to more explicitly formulate his theory of 'expectations' or 'learning' in his 1940 treatise, *Nationalökonomie* (1940a), which he restated in *Human Action* (1949) and refined in *Theory and History* (1957) and *The Ultimate Foundations of Economic Science* (1962).²¹ Here, too, Mises' starting point was Max Weber. Weber had argued that a central tool of the historian was the method of the 'ideal type', a theoretical construction of essential features or characteristics discerned for interpretive purposes in the study of the actions of individuals, groups or institutions

in which men act and interact. What does it mean to say someone had a 'Napoleon complex', or that the individual's actions were 'typical' of a 'South American military dictator', or that a group of individuals were acting in ways 'typical' of 'religious fanatics'? Or that the actions of people and the activities undertaken were 'typical' of a 'developing industrial city' or that the procedures for electing people to political office were 'typical' of the 'democratic spirit'? Thus, Weber once wrote a monograph on 'The city' meant to historically explain the characteristics that could be gleaned from the actual evolution of towns into cities, to highlight those qualities that could be conceptualized as 'typical' in the development and nature of cities in Europe.

In Mises' refined analysis, Weber's tool of interpretive 'understanding' – the 'ideal type' – is argued to be not only a mental schema to analyze aspects of the past, but also the mental process through which people anticipate and coordinate their actions with those of others looking to the future.

In interacting with other human beings we accumulate knowledge of others, and 'out of what we know about man's past behavior, we construct a scheme about what we call his character', Mises said (1962, p. 50). The source for constructing such composite 'images', or 'pictures' of the qualities and characteristics of others, obviously cannot be known 'a priori'. They can only be derived from 'experience'. This knowledge, Mises stated, is 'acquired either directly from observing our fellow men and transacting business with them or indirectly from reading or hearsay, as well as out of our special experience acquired in previous contacts with the individuals concerned'. And with this knowledge, 'we try to form an opinion about their future conduct' (1957, p. 313).

Actors in the market, using such 'empirical experience', form 'ideal types' that serve as the anticipatory framework in the context of which people form expectations about the likely actions of others with whom they may interact, and whose actions need to be anticipated precisely because what those others may do can influence the outcomes of one's own actions.

If one could say that Hayek's emphasis on the role of prices in economizing and disseminating information, in the context of which individuals might better utilize that special and particular knowledge they possess that others do not, refined and extended Mises' analysis of prices for purposes of economic calculation, the same could be said about Mises' conception of 'ideal types', in that it completed a missing element in Hayek's theory of prices as a communication mechanism.

That is, what are the prices conveyed to the respective actors in the market telling them? In other words, prices need to be interpreted in order

to know what they may be telling someone about the actions of others, to which he must respond in some way. Every seller accumulates in their mind 'images' or typifications of those with whom they regularly interact on the demand or supply side. They use these 'ideal types' to decide whether a price change is permanent or temporary; whether it means that consumers are interested in some new features in the product they market; or whether it reflects some new competitive activity by a rival to which they need to respond.²²

When, in 'The use of knowledge in society', Hayek referred to the special knowledge of particular time and place that only belongs to each individual in his own specific corner in the extended system of division of labor, one of the aspects of that knowledge is the complex of ideal typifications that, say, an entrepreneur has formed in his mind from interacting with the specific buyers he normally deals with and the specific sellers against whom he regularly competes. These anticipatory images derived from market experience enable the formation of expectations to try to coordinate one's own actions with those of others. Disappointments, errors and failures generate shifts (at the margin) in the ideal typifications each is using in directions that, it is hoped, reduce similar dis-coordinating actions or responses in the future.

Thus, the 'subjectivist' agenda is extended from understanding the logic of action and choice to the formation of expectations, for understanding how actors may better coordinate their activities on the basis of the communications provided by the prices formed on the competitive market.

CONCLUSIONS

No two thinkers ever think exactly alike. This is no less true even among those who may share common philosophical, methodological and theoretical ideas. Mises and Hayek were not carbon copies of each other.²³ Yet, their contributions may be thought of as complements rather than substitutes. Indeed, it is difficult to imagine how Hayek the economist and social philosopher would have been possible without Mises, the grand 'subjectivist' system-builder, the elements of which often became the starting point and the intellectual challenge for Hayek to 'puzzle' through to conclusions not much different from and often refined elaborations of those of his mentor.²⁴

For Mises, Hayek was certainly his most valued 'student', if not, as Hayek pointed out, in the literal sense. Together, their contributions in fact are the basis and framework for the entire edifice of modern Austrian economics. It does not detract from the significance of Hayek's body of

work to say that in many of its facets, it was the ideas of Ludwig von Mises that were being carried on.

NOTES

1. On the ideas of the Austrian economists from the founding of this school of thought in the 1870s to around the time of the First World War, see Ebeling (2010b).
2. On Mises' family background, education and the general Viennese cultural milieu when he was a young man in Austria, see Ebeling (2010a, pp. 36–56) and my introduction to Ebeling (2012).
3. According to Mises' *Memoirs* (1940b, pp. 35–9), it seems that while the central bank had been *de facto* redeeming notes and deposits for gold since the end of the nineteenth century, the central bank authorities and members of the Austrian parliament were reluctant to make redemption *de jure* because some of the revenues from foreign exchange transactions were used for various corrupt purposes by bank and government officials, and they were afraid of the greater transparency that legal convertibility would shine on the central bank's accounting methods. On Mises' monetary writings before the First World War, see Ebeling (2010a, pp. 57–87).
4. In Mises' inaugural lecture at the University of Vienna, 'On rising prices and purchasing power policies' (Mises, 1913a, pp. 156–67), he was already showing his strong views against monetary 'activism' by governments and central banks. See also 'The general rise in prices in the light of economic theory' (Mises, 1913b, pp. 131–55), in which he also, in his opening remarks, demonstrates his criticisms of misplaced inductive methods in the construction of economic theory.
5. '[F]or many years', Hayek considered Mises' *The Theory of Money and Credit* to be 'the most profound and satisfying work on the subject available' (Hayek, 1992, p. 127).
6. On Mises' work and writings for the Vienna Chamber of Commerce during the interwar period, see Ebeling (2010a, pp. 88–140) and my introduction to Ebeling (2003).
7. But, like Mises, Hayek also remarked that a 'decisive influence' on his thinking about economics was Menger's *Principles* (Hayek, 1994, p. 57).
8. For some reminiscences by participants in Mises' private seminar, which met twice a month in his Chamber of Commerce office between October and June of each year from 1920 to 1934, including those by Gottfried Haberler and Fritz Machlup, see Margit von Mises' *My Years with Ludwig von Mises* (Mises, Margit von, 1984, pp. 202–11). For Mises' own brief description and clearly fond recollection of the private seminar, see Mises (1940b, pp. 81–3).
9. The uses and limits of statistical methods in economics was, in fact, a significant theme among several of the younger Austrian economists during this time. For example, Gottfried Haberler's first book was on *Der Sinn der Indexzahlen* [The meaning of index numbers] (Haberler, 1927), an analysis of the microeconomic problems and difficulties with aggregated price indexes for estimating changes in real incomes and the real value of deferred payments over time. He also emphasized the limits of macroeconomic price aggregates for any successful analysis of the nature and phases of the business cycle (Haberler, 1928, pp. 107–17). See, also, his 1931 monograph on, 'The different meanings attached to the term, "fluctuations in the purchasing power of gold", and the best instrument or instruments for measuring such fluctuations' (Haberler, 1931). In 1928, Oskar Morgenstern published a book, his first, on *Wirtschaftsprognose, eine Untersuchung ihrer Voraussetzungen und Möglichkeiten* [Economic forecasting: an analysis of its assumptions and possibilities] (Morgenstern, 1928), in which he concluded that the application of statistical techniques for successful prediction of future economic events was virtually impossible. One finds here, in the questions raised about human knowledge and how people form interpersonal expectations, ideas that were

- later clarified and formalized in his contribution to the theory of games (Von Neumann and Morgenstern, 1944). For a summary and critical evaluation of Morgenstern's arguments on the limits and impossibilities for economic forecasting, see Marget (1929).
10. See Hayek (1994, pp.68–9): 'Once I was employed in that office [the Office of Accounts], our contacts rapidly became close, and for the following eight years Mises was unquestionably the personal contact from whom I profited the most, not only by way of intellectual stimulation, but also for his direct assistance in my career . . . It was also Mises to whom I owe the creation of the Austrian Institute for Business Cycle Research, conceived by him, I believe, largely for the purpose of providing for me after he had failed to get me as a sort of scientific assistant into the chamber of commerce where he held his main job (for the purpose of building up there under his direction an economic research division).'
 11. The minutes of the Austrian Institute's board meeting in the summer of 1931, at which Oskar Morgenstern was appointed as Hayek's successor as director, makes clear that Hayek's position at LSE was viewed as a temporary position for one year, after which he would return to Vienna and again take up his duties as Institute director. In fact, Hayek remained at the London School of Economics until 1948. And Morgenstern served as director of the Austrian Institute for Business Cycle Research until March 1938, when he found himself exiled in the United States during a lecture tour at the time of the annexation of Austria by Nazi Germany. The Institute's documents also show that Hayek ran the organization from 1927 to 1931 in a rather chaotic form of 'spontaneous order', with little system or care with paperwork or records. Organizational *Ordnung* only arrived with Morgenstern's appointment as director, after Hayek had moved to London. From that point on, discipline reigned, with a careful keeping of all Institute correspondence, research and financial statements.
 12. I might mention a story Oskar Morgenstern related to me in the mid-1970s, a story that I have never seen recounted anywhere. Morgenstern said that one morning in the spring of 1931, after Hayek had returned from having delivered the London lectures that became *Prices and Production*, he ran into Hayek at the elevator in the Vienna Chamber of Commerce building where the Institute then had its offices (and where Morgenstern was employed as Hayek's assistant). Morgenstern told me that while riding up on the elevator together he turned to Hayek and said, 'We are going to enter the office, you are going to look through your mail, and you will find a letter inviting you to be a professor at the London School.' And they both laughed. In the office, Hayek sat down at his desk and went through his mail. He came to a letter from the London School of Economics, opened it, and found the invitation for the position as the Tooke Professor of Economic Science and Statistics. Not saying a word, Hayek handed the letter to Morgenstern, and they looked at each other in a chilled silence. I must have looked incredulous after being told this story, because Morgenstern said to me with dead seriousness, 'It happened just that way.'
 13. See the excellent discussion of this period of Hayek's intellectual life by Hansjoerg Klausinger, in his introduction to volume 7 of Hayek's *Collected Works* (Hayek, 2012).
 14. Mises' influence on Lionel Robbins, who had invited and brought Hayek to LSE, was no less of note at this time. In the preface to his *An Essay on the Nature and Significance of Economic Science*, Robbins had acknowledged his 'especial indebtedness to the works of Ludwig von Mises' (Robbins, 1932, pp. viii–ix). But this was made even clearer in the letter that Robbins enclosed with the copy of the book that he sent to Mises on 20 May 1932, just after it was published: 'I send you herewith a copy of my modest attempt to popularize for English readers the methodological implications of modern economic science. I hope you will not mind my especial mention of your name in the preface. I have no wish to make you in any way responsible for my crudities of exposition, but if there is anything of value in what I have said it would be most unjust that your name should not be associated with it. It is not easy for me to put into suitable words the magnitude of my intellectual debt to your work.' Mises replied on 18 June 1932, expressing his thanks and complete agreement with Robbins's contribution: 'Only today, I have

the time to thank you for the pleasure that I found in having received your book. I have read it with great interest. It is needless to say that I fully agree with your arguments. I only regret that you did not expand your book to include the treatment of a number of other important problems. I am, however, convinced that your latest work will prove to be very successful.' And as Hayek later pointed out, 'Robbins' own most influential work, *The Nature and Significance of Economic Science*, made what had been the methodological approach to microeconomic theory established by the Austrian school the generally recognized standard [within the wider economics profession]' (Hayek, 1992, p. 53).

15. In conversation in 1977, Hayek said to me that when he wrote this article, the real comparison that he had in mind was between Lionel Robbins and himself. Robbins, Hayek stated, was the epitome of the 'master' of his subject, who seemingly had read everything in economics, who could restate and explain every theory, and could easily express the ideas of others in their own words almost verbatim. Hayek saw himself as the 'puzzler' who had to recast his ideas every time a problem arose, and never was sure how it all might hang together until long after, when a mental glance backwards made him see connections and relationships among his own ideas that he had not seen when first thinking them through. This 'puzzler' aspect to Hayek's own thinking process was implied in the forward to Gerald O'Driscoll's, *Economics as a Coordination Problem: The Contributions of Friedrich A. Hayek*, in which Hayek said, 'It is a curious fact that a student of complex phenomena may long himself remain unaware of how his views of different problems hang together and perhaps never fully succeed in clearly stating the guiding ideas which led him to the treatment of particulars. I must confess that I was occasionally myself surprised when I found in Professor O'Driscoll's account side by side statements I made at the interval of many years and on quite different problems, which still implied the same general approach' (O'Driscoll, 1977, p. ix).
16. See Hayek (1992, p. 128): 'During these years, the 1920s and early 1930s, Mises was extraordinarily fertile, and in a long series of monographs on economic, sociological, and philosophical problems built up the comprehensive philosophy of society that he first expounded in a German work [*Nationalökonomie*] and then summed up in his *magnum opus* by which he is mainly known to his American readers, *Human Action*.'
17. See Mises (1933, p. 157): 'Insomuch as money prices of the means of production can be determined only in a social order in which they are privately owned, the proof of the impracticability of socialism necessarily follows. From the standpoint of both politics and history, this proof is certainly the most important discovery made by economic theory . . . It alone will enable future historians to understand how it came about that the victory of the socialist movement did not lead to the creation of the socialist order of society.'
18. See Mises (1933, pp. 12–35) and Wieser (1914, pp. 8–9).
19. In his review of Mises' *Human Action*, Ludwig Lachmann made a point of emphasizing that, 'In reading this book we must never forget that it is the work of Max Weber that is being carried on here' (Lachmann, 1977, p. 95).
20. A peculiar missing element in Hayek's discussions of the subjectivist approach in social and economic analysis is the seemingly total absence of any explicit references to the fact that one of the leading influences in the development of methodological subjectivism was Max Weber. This is peculiar since Mises, especially, emphasized Weber's significance in this area for the social sciences, and even published in 1929 a lengthy essay on Weber in the form of a 'eminent criticism' of Weber's ideas for economic theory (Mises, 1933, 68–129). Weber's theory of 'subjective meaning' and 'ideal types' was also a frequent discussion topic in Mises' private seminar, where Hayek was, of course, a regular participant.
21. Another impetus for Mises to articulate more clearly his theory of how men use interpretive 'understanding' of the 'facts' of the market settings in which they find themselves to form expectations and adapt to unexpected outcomes and events very likely was the appearance of Alfred Schutz's, *The Phenomenology of the Social World* (1932). Schutz

- applied Max Weber's 'ideal type' concept to develop a theory of how men interpret and anticipate the actions of others when looking to the future. Schutz, like Hayek, was an active member in Mises' *Privatseminar* in Vienna, and remained one of Mises' closest friends after they both had moved to the United States. On Schutz's relationship to the Austrian economists, see Ebeling (2010a, pp. 332–47).
22. For a more detailed explanation and analysis of the uses of the 'ideal type' for constructing an 'Austrian' theory of expectations and expectations formation, see Ebeling (1986, 1987, 1994, 1999).
 23. Differences that may be found in Mises' and Hayek's approaches to economics in general and Austrian economics in particular have been emphasized by Salerno (1993). However, I think a stronger case can be made that the similarities are greater than the differences, if one keeps in mind the common 'Mengerian' starting point for both: methodological individualism and subjectivism; the market as a dynamic process through time, rather than a focus on end-state market equilibrium; attention to capital complementarity and the time structure of production; and many social and market institutions as the cumulative result of unintended societal evolution. For an interpretation that focuses more on the 'complementarities' of their contributions within the Austrian tradition, see Kirzner (1992, pp. 119–36).
 24. See Hayek (1992, p. 158): 'I must admit that often I myself did not initially think his arguments were completely convincing and only slowly learned that he was mostly right and that, after some reflection, a justification could be found that he had not made explicit.'

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