

The evolving concept of rationality in the work of Ludwig von Mises

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Abstract

Ludwig von Mises is best known for his development of a science of human action, praxeology, closely associated with his axiomatic approach to rationality. This article argues that we can find a more historical and institutional account of rationality in his early work including in his seminal article on the (im)possibility of economic calculation under socialism. This earlier notion considered rationality to be an outgrowth of the development of capitalist institutions and (economic) accounting methods, and the increasing social dominance of what Max Weber called ‘instrumental rationality.’ We contextualize this view in light of the early stages of the socialist calculation debate to demonstrate that proposed solutions by scholars such as Otto Neurath and Karl Polanyi were based on a related understanding of (calculative) rationality. We subsequently trace and contextualize how Mises early formulation of rationality gradually transformed into the praxeological formulation that is now primarily remembered. We argue that this evolution impacted his epistemology, his view of the relationship between theory and history, and what he believed to be the rational capacities of an individual. We also demonstrate that elements of the earlier view continued to play a role in his understanding of the impossibility of socialism and his capital theory. Hayek famously critiqued Mises supposed rationalism, but we suggest that Mises’ early view of rationality as historically and institutionally contingent, is compatible with Hayek’s later approach.

Keywords: Ludwig von Mises; Rationality; Praxeology; Socialist calculation debate; Capitalism.

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Introduction

In his foreword to the Liberty Fund edition of Ludwig von Mises *Socialism*, Friedrich Hayek claimed: “It is greatly to Mises's credit that he largely emancipated himself from that rationalist-constructivist starting point, but that task is still to be completed” (Hayek 1981, xxiv). This paper shows that the opposite is the case: Mises started with a historical evolutionary understanding of rationality, and over time adopted a more rational-constructivist position. We focus on the concept of rationality because it is a pivotal notion that shapes Mises' view on the relationship between theory and history, his theory of social and economic development, and how he thinks about human action. The evolution of his thinking about rationality is not merely important for how we understand Mises thought, but also for how we think about the continuity or discontinuity between him and earlier as well as later Austrian economists.

Our argument is based on a demonstration that there are two distinct conceptions of rationality in Mises's work. The first, widely recognized in scholarship on Mises, is associated with praxeology and his understanding of the a priori nature of the theory of human action (Machlup 1955; Rothbard 1957; Leeson and Boettke 2006; Hülsmann 2007). This praxeological understanding suggests that all human action is rational, that rationality is a universal concept, and that social and economic development has been primarily shaped by reason. However, there is a second view of rationality that can especially be found in Mises early work, even though some elements remain present in his later work. This historical and institutional understanding of rationality is associated with a monetary economy and is understood as *an outcome* of the institutional evolution of capitalism. Moreover, its content is substantive: rationality is opposed to irrational and romantic behavior. The historical and institutional understanding of rationality is closely related to the work of German economists such as Max Weber, Werner Sombart, and Georg Simmel.

While the aim of the paper is to contextualize and illustrate the evolution of Mises' views on rationality, this subject cannot be entirely separated from the question of the viability of Mises' praxeology and the question of contradictions between these two views of rationality. The literature on Mises from the past decades has focused on rational reconstructions which seek to reconcile the different elements of Mises work (Lavoie and Storr 2011; Braun, Lewin, and Cachanosky 2016a; Linsbichler 2017; Boettke 2019), although others have insisted on unviability and contradictions (Scheall 2015; 2017). We do not seek to adjudicate in these debates, but rather to provide historical and intellectual context to these efforts, in line with various recent contributions which have focused on Mises early intellectual development (Braun, Lewin, and Cachanosky 2016b; Krasnozhon and Bunyk 2018; Bunyk and Krasnozhon 2022; Braun 2023).

That being said, we are convinced that our contextualization can help correct a key misunderstanding about Mises. Hayek clearly distanced himself from what he perceived as Mises' rationalism, while others have praised Mises' social rationalism (Salerno 1990). This so-called constructivist rationalism suggests that Mises' methodology is at odds with the Austrian evolutionary perspective about institutional change as established by Menger and centered on. However, we will argue that significant elements of Mises' early work align with this evolutionary view, making his methodological approach less of an outlier than often assumed. If this interpretation is correct, Hayek's post-war work may not have departed from Mises but rather recovered an evolutionary perspective shared among his Austrian predecessors.

Furthermore, in Section 4, we illustrate that even Mises' praxeological framework, often regarded as purely a priori and detached from history, contains evolutionary elements. His discussion of praxeology hints that key concepts—such as causality—are not entirely static but may have been shaped by evolutionary forces, persisting because they proved useful (Mises 1962, 14). Moreover, in *Human Action*, Mises states that “the evolution of capitalist economic calculation was the

necessary condition for the establishment of a systematic and logically coherent science of human action” (Mises 1998, 232). Thus, we argue that the standard view of Mises as a rigidly praxeological thinker, detached from institutional and evolutionary considerations, may be overstated. Not only do his early works indicate an evolutionary and institutional influence, but even his later praxeology, when closely examined, appears to exhibit historical dimensions that complicate its conventional interpretation as strictly a priori.

1. The German context of the socialist calculation debate

The socialist-calculation argument is predominantly understood as a discussion in the context of the general-equilibrium framework pioneered by Léon Walras (Vaughn 1980; Lavoie 1985). The original work on economic calculation under socialism by Friedrich von Wieser and Enrico Barone was influenced by what we might call the Walras-Pareto understanding of the marginal revolution (Hayek 1935). In this perspective the economy is represented by a system of (simultaneous) equations representing the different goods and capital goods markets. In the ideal scenario these markets would clear together when all the prices would be set correctly by the Walrasian auctioneer, who would announce all these prices to buyers and sellers (Weintraub 1991). This intellectual lens on the debate was reinforced by the back-and-forth in the 1930s between Friedrich Hayek, and the market socialists such as Oskar Lange, Abba Lerner, Maurice Dobb, and Fred Taylor who adopted this framework to argue about the extent to which one might reach these market-clearing prices in the absence of markets (Lange 1959).

This, however, is not the relevant intellectual context for Mises argument about the impossibility of economic calculation under socialism in 1920 (Becchio 2007). Instead, Mises wrote in response to, and in conversation with the later iterations of the German historical and institutional approach to

economics (O'Neill 1996). Recent research by Eduard Braun has recently traced the evolution of the calculation argument among authors in this tradition and its potential influence on Mises work. The significance of this context is easily underestimated, partly because the distinctive tradition of German political economy of that era did not persist in the postwar period.

Economists like Max Weber, Georg Simmel, and Werner Sombart occupied a central role in this debate within German economics, even though they have later been categorized as (economic) sociologists. They analyzed the impact of the rise of capitalism on culture, social relations, as well as economic organization in grand integrated theories of social change. The German Historical School had specialized in the analysis of the transition away from the feudal organization of agricultural production and the rise of industrial production (Grimmer-Solem 2003). The generation of Weber was more concerned with the transition towards large-scale markets, the rise of the modern firm, and the predominance of monetary exchange relations. Within that context 'economic calculation' (*Wirtschaftsrechnung*) became a topic of great interest because it symbolized both the process of rationalization, and the profit-orientation believed to be typical of capitalism. Around the time that Mises made his seminal contribution on economic calculation under socialism, the debate was already converging on the question of whether calculation was only possible in monetary terms, as Mises claimed, or whether alternative forms of economic calculation were preferable, for example calculation in-kind (*Naturalrechnung*).² The extent of rationalization is well illustrated by the fact that Weber associated the rise of modern bureaucracies with the rise of rationality in society. His understanding of markets and bureaucracies as two instances of rationalization suggested that both bureaucracies and markets could operate efficiently.

² In his response to critics of the impossibility argument the notion of economic calculation is absolutely central to Mises argument (Mises 1923).

But that does not yet fully explain why the specific issue of calculation came to occupy such an important place in the debate over the future of capitalism. This is best understood by the prominence of Werner Sombart's history of capitalism, which he first published in 1902 and significantly updated in 1916 (Sombart 1902; 1916). Sombart agreed with Max Weber that capitalism had brought in a new spirit and orientation into the world. He connected this new spirit to the discovery of the new form of economic calculation, double-entry bookkeeping, among merchants in late-Medieval Italy. Sombart's work gained additional prominence because he was willing to mobilize his arguments in the form of WWI propaganda, in which he defined the German economic system of heroic (sacrificial) acts in opposition to that of the coldly calculating British merchants (Sombart 1915).

The monetary mode of economic calculation, or more specifically accountancy, was not merely a technique according to Sombart, but it enabled the orientation of merchants toward profit, it facilitated transparency, and it provided a more precise calculation of costs and benefits associated with various projects (in this sense it facilitated thinking in terms of opportunity costs). This innovation enabled a precise accounting of capital (accumulation), and one could thus claim that for Sombart, double entry bookkeeping had put the 'capital' in capitalism. Sombart situated the significance of economic accounting in the way it had been enabled by the modern impersonal business form, the corporation, which could outlive the individuals who established it (Chiapello 2007). Quantification and the rational mode of thinking was connected by Sombart to related innovations in urban planning, the introduction of public clocks and the increased reliance on statistics for public administration. In this sense double-entry bookkeeping had even prefigured the quantification associated with modern science (Ehrenfreund 2024, 122). It was economic calculation that had originally inspired the rational scientific worldview, he believed.

Double entry bookkeeping as a particular type of economic calculation is, of course, dependent on the existence of money. Georg Simmel provided the most extensive analysis of the role of money in modern societies. He argued that money provides a universal, abstract, measure of value which reduces qualitative relationships to quantitative differences. Money also changed relationships between individuals, making them more impersonal and goal-oriented thinking. The associated “cognitive ideal is to conceive of the world as a huge arithmetical problem” (Simmel 2011, 481). For these German thinkers’ rationalization was a historical process, directly associated with capitalism, in which quantification as well as means-ends thinking were central elements.

This means-ends thinking is most famously associated with Weber’s idea of instrumental rationality. Max Weber’s work, which is acknowledged to have been a formative influence on both various Austrian economists, including Ludwig von Mises (Kolev 2020), worked on similar themes as Sombart. His concept of a capitalist spirit overlaps with Sombart’s understanding of the essence of an economic system. But it is in Weber’s later work, collected in ‘Economy and Society,’ (1921/2019) that economic calculation came to occupy an absolutely central role. In discussing economic action Weber laid out the logic of instrumental action aimed at minimizing the means to attain a particular end and he connected this directly to what he calls ‘the rationality of monetary accounting.’ His discussion lays out the essential function of money and the techniques of business accounting in the modern economy, which are contrasted with calculations in kind, a discussion which sets the stage for his treatment of market and planned economies. As Ehrenfreund concludes in his recent dissertation on economic calculation: “[Weber] claimed that capitalism, and the rational forms of science, technology, and law associated with it, were uniquely European phenomena. This was in part because ‘our rational corporate bookkeeping as well as our legal separation of corporate and personal property’ were absent on other continents (Ehrenfreund

2024, 143).³ In other words, capitalism and economic accounting were specific and contingent historical phenomena. It was this perspective that Mises adopted and adapted in his early work.

2. Rationality in early Mises

Mises first grapples directly with the questions of social evolution and rationality in his ‘Nation, State, and Economy,’ his book reflecting on WWI. There it is clear that he accepts the understanding of capitalism as it was developed by Weber and his contemporaries: “Rational economy first became possible when mankind became accustomed to the use of money, for economic calculation cannot dispense with reducing all values to one common denominator” (Mises 1919/1983, 195). It illustrates our argument that Mises’ early view of rationality was historical, associated with social institutions like money, and intimately connected to the notion of calculation. In this section we will analyze his early work and demonstrate how it was continuous with the German discussions we analyzed in the previous section. At least three characteristics stand out in this early work: first, the specific emphasis on economic calculation, second, the historical understanding of capitalism and the association of rationality with the capitalist system, and third, the emphasis on the limits of individual knowledge.

Let us start with economic calculation as Mises laid it out in his famous article on the impossibility of socialism. Mises argued that every choice involves what he calls an act of valuation or a value judgment. In simple instances this can happen by simply comparing two (consumer) goods, but in

³ Weber’s mature theory of capitalism is based on accounting concepts, and his definition of capital is an accounting definition. Indeed, he considered, and rejected, qualifications of this definition. For example, he conceded that actual business practice might not rely exclusively on meticulous bookkeeping. Yet this did not alter his conclusions: “That a really precise calculation and estimation is not carried out – that conduct is based purely on guesswork or simply on tradition and convention – occurs in every form of capitalist enterprise even today, wherever circumstances do not require precise calculation. But these points only affect the degree of the rationality of capitalist acquisition” (Weber quoted in Ehrenfreund 2024, 155).

any situation that is more complex, this would require some form of economic calculation. So far his argument is completely non-controversial within the debate we have sketched out. But the controversial question is which unit works best, and here Mises makes the familiar argument that labor hours cannot fulfill this function because they are heterogenous (some labor is more productive than other labor). The alternative in a market economy is the reliance on what he calls 'objective exchange-value' which has three advantages: "it renders it possible to base the calculation upon the valuations of all participants in the trade," secondly it provides a clear signal to every producer whether they are producing more or less efficiently than others, and thirdly it provides a clear unit which could be a particular good, but "in a monetary economy it is money that is chosen" (Mises 1935, 97–98).

His opponents, such as Otto Neurath, believed that monetary calculation could and should be superseded by superior forms of economic calculation such as calculation in kind. Neurath considered profits to be an unreliable indicator of increased efficiency, and therefore looked for alternative modes of measurement and calculation that more directly captured increases in output, or reductions in inputs (Neurath 2004). He invoked modern management techniques such as Taylorism but could also develop ideas in Weber. After all, Weber argued that modern bureaucracy was another instance of the rationalization of society, and exemplified instrumental reasoning. Although Weber agreed with Mises on the impossibilities of socialism, his work on rational bureaucracies also provided elements that could be developed in the opposite direction. In significant ways this is exactly what Neurath did in his promotion of calculation-in-kind. He presented this new form of calculation, which he famously presented in his pictorial statistics that become known as ISOTYPE, as a tool for further rationalization This rationalization is presented in

productivity terms,⁴ including an accounting tables to demonstrate the improvements achieved by the rationalization process (Ehrenfreund 2024, 188ff.).

Mises, like Neurath, fully accepted that there was no ideal unit of economic calculation (Linsbichler 2021). In an explicit reply to Neurath's work on calculation in-kind, Mises however argued that in-kind calculations cannot move beyond the valuation of consumption goods which can be directly compared to each other in terms of desirability. When capital goods have to be valued there are no grounds on which to do so, the: "decision would depend at best on vague estimates; it would never be based on an exact calculation of value" (Mises 1935, 109). But he did not argue that monetary calculation is perfect, instead he pointed to three advantages *and* three disadvantages of monetary calculation. The first disadvantage is that the value of money in terms of purchasing power of goods is not stable, both due to changes in production methods, but also because of monetary policy. Second, exchange value is different from subjective use-value so that by relying on money prices actors are relying on the valuations of others, rather than their own. Third, there are so-called 'extra-economic' goods for which no money prices exist yet, so they cannot be taken into account in a calculation based on money prices. But when used within its proper domain: "monetary calculation fulfills all requirements of economic calculation. It affords us a *guide* through the oppressive plenitude of economic potentialities" (Mises 1935, 101, our emphasis). Mises clearly made a comparative argument between monetary calculation and its alternative, not an argument about the absolute superiority of monetary calculation.⁵

⁴ The contrast between technical efficiency and market efficiency was drawn by many authors, a famous instance in the United States is Thorstein Veblen's work on engineers (Veblen 1921).

⁵ For instance: "Admittedly, monetary calculation has its inconveniences and serious defects, but we have certainly nothing better to put in its place, and for the practical purposes of life monetary calculation as it exists under a sound monetary system always suffices" (Mises 1935, 109). A more extensive analysis of such shortcomings can be found in his *Theory of Money and Credit* (Mises 2007, 203–6).

Given Mises' later work, it is important to emphasize that monetary calculation facilitates rationality regarding the selection of means: "The real task of rational economic direction [is] to place the means at the services of an end. That can only be done with some kind of economic calculation. The human mind cannot orientate itself properly among the bewildering mass of intermediate products and potentialities of production without such an *aid*" (Mises 1935, 103). We will return to metaphors of 'guide' and 'aid' later, but here it is worth emphasizing that Mises clearly adopts the Weberian idea of instrumental rationality, where rationality concerns how means are used to pursue a particular end. From this perspective, when Mises stated that 'socialism is the abolition of rational economy,' his intended meaning is that there is no way to rationally determine the most economic means to achieve the ends of socialism.

The institutional contingency of rationality is directly related to the importance of money for economic calculation. Money is not the only requirement for Mises, it functions in an interdependent set of institutions which includes private property in the factors of production, and the associated competition between producers. This will ensure that money prices for capital goods reflect the valuation of the consumption goods that can be produced with these higher order (capital) goods. The gradually increasing rationality in society is a result of the evolution and increasing dominance of these institutions.

What Mises argued about the historical contingency of rationality clearly suggests that he accepted the major tenets of the work of the German economists we discussed in the previous section. This is most evident in the rhetorical question he poses in his discussion of the nature of economic calculation: "Historically, human rationality is a development of economic life. Could it then obtain when divorced therefrom?" (Mises 1935, 105). This clearly implies the evolutionary view of capitalism

that we find in Sombart and Weber, in which the rise of a particular type of rationality, calculative instrumental rationality, is directly associated with the development of capitalism.

Mises also explores what would happen if the institutions of capitalism—those that enable rational calculation—were to disappear. He argues that, in such a scenario, "the remembrances of the experiences" of the past would still provide some guidance for the future. However, over time, as the knowledge and production methods of the past fade, and circumstances change, rationality would gradually decline (Mises 1935, 105).⁶ Interestingly Mises did not restrict this argument to calculation but also to psychological orientations. When he addressed the idea that government planning would be led by industrial leaders and commercially-minded entrepreneurs – Walther Rathenau great industrial, founder of AEG, and head of German planning in WWI was the exemplar at the time – Mises claimed that such attitudes are not transferable. Instead: "the entrepreneur's commercial attitude and activity arises from his position in the economic process and is lost with its disappearance" (Mises 1935, 120).

In the book *Socialism* (Mises 1921/1951) which complemented the calculation argument with a critique of the political and social dimensions of socialism, Mises provided a related historical analysis of the system of law. He presented it as a system that gradually developed to avoid violence and to secure the stability necessary for economic growth. He contrasted this historical account of the development of law with accounts suggesting that law was a result of human rationality or design. He argued that such a-historical accounts of law are a misguided form of rationalism. And although he did not use the term rationalization in his account of the historical growth of law, it is clear that

⁶ Mises does not reference it, but in *Nation, State and Economy* he had provided a more detailed analysis of the changes that resulted from war socialism (Mises 1919/1983, 206–10).

Mises regarded these (spontaneous) historical developments in a positive light, speaking of previous systems as ‘immature’ and ‘backward’ (Mises 1951, 47).

Hayek would later often speak of the triptych of spontaneous orders, law, language, and money. We have already seen that Mises in his early work relied on a historical and evolutionary understanding of money and law, so it is not surprising, but still worth noting that he held similar beliefs regarding language. In the historical evolution of human society it occupies a crucial role: “it conditions thought and will and how, without it, there [can] be no thought but only instinct, no will but only impulse” (Mises 1951, 322). In relation to his earlier discussion of the way in which monetary accounting allows for exactness it is striking that he uses similar terminology when he discusses the importance of language for facilitating human cooperation: “it is by the Word that [the human mind] first breaks through from the obscurity of uncertainty and vagueness of instinct to such clarity as it can ever hope to attain” (Mises 1951, 322). Just like rationality is enabled by monetary accounting, so clarity in thinking and action is enabled by language, so that humans here too rely on historically evolved social institutions for their own thought and cooperation with others.

Braun in his discussion of the continental origins of Mises calculation arguments has rightly drawn attention to the fact that many contributors of the German Historical School believed that the cognitive capacities of the individual mind, absent scaffolds, was limited (Braun 2023, 580; Adair-Toteff 2024, 24). This implied that they were skeptical of the human ability to rationally design laws, a point also extensively developed in Menger’s work on legal evolution (Menger 2009). This skepticism about the limits of human knowledge naturally aligned with critiques of central planning. Braun connects this more historical understanding of rationality to other parts of Mises’ early theoretical work, especially his work on capital.

These views were important not merely for Mises understanding of history, but also for economic theorizing. Capital is typically understood as a physical magnitude in economic theory. But in the historical understanding of capital dominant in the German literature capital is understood as an institution, intimately connected with how entrepreneurs and firms *understand* capital. Sombart, for instance argued, that a physical understanding would have to accept that a child saving some berries for tomorrow was engaged in capital accumulation. But in the historical comparative work that was central to the historical approach, he wanted to argue that capital accumulation was specific to a particular orientation of economic activity, the legal status of the firm, and its development over time, an understanding that only became dominant under capitalism. Braun demonstrates that Mises relies on the same institutional concept of capital, with as we have seen the same implications for his broader understanding of capitalism. Mises — following Menger — describes capital as the organizing structure of capitalism. According to Mises, “capital is not a universal production factor but a historically specific concept” (Braun 2023, 583).

We emphasize these points, because they all reinforce what might be the core of Mises understanding of decision making in his early work: individual rationality is dependent on scaffolds (Dekker and Remic 2024). The individual mind, absent these historically evolved institutional scaffolds, is groping in the dark, overwhelmed by uncertainty, and lost in the face of an overwhelming number of options. Institutional scaffolds, such as language and monetary calculation, have historically developed as social systems which facilitate cooperation as well as rational thought, primarily understood as the efficient use of *means* to obtain economic ends: “The mind of one man alone—be it never so cunning, is too weak to grasp the importance of any single one among the

countlessly many goods of a higher order” (Mises 1935, 102).⁷ To sum up, in Mises early work rationality is a property of a specific economic system, not of the individual mind.⁸

It might be objected that there are already more rationalist elements in Mises’ early work. The two pieces of textual evidence in *Socialism* most directly at odds with our interpretation are: “Human society is an issue of the mind. Social co-operation must first be conceived, then willed, then realized in action” (Mises 1951, 509), and a passage quoted by Hayek in the context of the claim that opened this article: “[Liberalism] regards all social co-operation as an emanation of rationally recognized utility, in which all power is based on public opinion, and can undertake no course of action that would hinder the free decision of thinking man” (Mises 1951, 463). But both claims are from the final part of Mises’ book, from sections that are concerned with political strategy and the contemporary battle of ideas, rather than with (historical) social analysis. They are meant, by Mises, to make clear that the battle of economic systems is one in the realm of ideas, rather than in the realm of material forces. In the second quote it is clear that Mises argues that liberalism has to win in a free competition of ideas, because it would be contradictory to rely on coercion to establish it (see also Mises 1919/1983, 242, 246ff.). In fact, Hayek and Mises agree on this point of political strategy, as Hayek

⁷ Mises make a very similar argument in his first book *Theorie des Geldes und der Umlaufsmittel*, translated as *Theory of Money and Credit*: “It would be absolutely impossible for the individual, even if he were a complete expert in commercial matters, to follow every change of market conditions and make the corresponding alterations in hi scale of use- and exchange-values, unless he chose some common denominator to which he could reduce each exchange ratio (...) The whole structure of the calculations of the entrepreneur and the consumer rests on the process of valuing commodities in money. Money has thus become an aid that the human mind is no longer able to dispense with in making economic calculations” (Mises 2007, 48–49). The reference is to the widely available English translation of the second edition, but the argument is unchanged from the first German edition.

⁸ It is worth noting that Mises is not solely subjectivist in *Socialism*, much like Menger he believed that individuals could be mistaken about their own interests, and he even accepted government action to correct such mistakes: “But society cannot always trust the individual to see which are his true interests. If it left everyone to judge of his own it would expose itself to the caprice of every foolish, sick, and weak-willed person (...) thus imperiling the continuity of development. This is what led to the creation of powers of social coercion” (Mises 1951, 398).

would make similar arguments about the need for liberalism to win the battle of ideas (Hayek 1967; 1960).

3. Rationality debates in the 1930s

Our purpose in this section is to analyze the context for a shift in Mises thought between his work in the early 1920s and his views around 1930 when he first formulated his view of economics as praxeology, and the a priori theory of human action. But the relevant context is complex. On the one hand Mises was engaged in an ongoing debate with remnants and reformulations of the position of those of the historical school, for instance Sombart's final methodological pronouncement on the three types of economics (Sombart 1930) as well as with more radical Marxist opponents who condemned marginal utility theory and theoretical economics more broadly as a mere rationalization of the logic of capitalism. These debates drove Mises to adopt more polemical positions, thereby creating starker contrasts with many of his contemporaries.

One of us has written about the changing context in some detail, especially how the continued rise of totalitarian ideologies such as socialism and fascism undermined Mises belief in the historical progress of rationality and peaceful cooperation (Dekker 2016). In response to these challenges, Mises reoriented his work, seeking to formulate an answer to the problems posed by theorizing about history and, more specifically, the place of theory in the human sciences. This is most visible in *The Epistemological Problems*, his book from 1933 which sought to establish the existence of: "universally valid knowledge in the sphere of human action" (Mises 1978, 5). In the original preface to that book Mises made clear that for him epistemological problems and political ideas are directly related.

But next to such contextual factors, Mises was also engaged in a rethinking of the relationship between theory and history in terms of earlier philosophical and methodological debates. He

presented his epistemology as an extension of the Neo-Kantians of the so-called Baden School of Wilhelm Windelband and Heinrich Rickert (Kinzel 2021) and of Max Weber.⁹ Both developed arguments critical of historical approaches in the social sciences in the final decades of the nineteenth century, in debates with central figures in the German Historical School. Mises mobilized these arguments to combat various forms of positivist social science that were emerging around 1930, including the new program of logical positivism formulated by the Vienna Circle, the methodology of behaviorism in psychology, and systematic programs of economic planning advanced by Marxist authors.

So let us have a brief look at the Baden School of Neo-Kantianism. One remarkable characteristic of the Baden school of neo-Kantianism was its anti-psychologism. When Kant introduced his notion of the ‘a priori,’ some of his readers interpreted him as suggesting that the a priori could be investigated through scientific psychology. But those who were part of the Baden school argued that Kant’s a priori categories were not psychological, but epistemological conditions for the possibility of experience (Anderson 2005, 300).¹⁰ Windelband presented this critical epistemology as the opposite of the genetic, or what might be called the historical method, in which the emergence of epistemological categories would be studied (Windelband 1907, 318–54).¹¹ It has struck many readers of Mises as odd that he claimed that the categories of praxeology were self-evident, but Windelband similarly suggests that these a priori categories are ‘immediately evident’ to our consciousness. They are, in both Mises’s and Windelband’s views, necessary for the possibility of thought rather than being the product of historical evolution. In the context of the 1880s, when

⁹ He sometimes added Wilhelm Dilthey to the list of authors who had understood the importance of theoretical knowledge in the human sciences.

¹⁰ Linsbichler (2017, 79–80) analyzes why Mises’s a priori is not a ‘genetic or psychological a priori’ which dovetails with our argument here, he does not make the historical link to Windelband or Rickert.

¹¹ We would argue that Menger draws from both registers in his *Principles of Economics*. His analytical economics is more compatible with Mises’s praxeological approach, but the theory of money is explicitly (causal)-genetic (Cowan and Rizzo 1996).

Windelband developed these arguments, his critique was aimed primarily at ‘Völkerpsychologie,’ which attributed much greater importance to the continuity between scientific and everyday categories of thought.

Another relevant aspect of the Baden variant of neo-Kantianism is that Windelband and Rickert distinguished between the natural and the historical sciences, based on the different epistemic goals of each. Whereas natural sciences aim at regularities and laws, the historical sciences aim at understanding ‘the unique and non-repeatable,’ a phrase that Mises also used. This distinction between the natural and historical sciences, and the resulting methodological dualism, was influential among social scientists of the period, it, for example, inspired Weber’s phenomenological methodology of *verstehen* (Oakes 1988). But this dualism also implied for Windelband and Rickert that no universally valid knowledge was possible in the historical sciences. To counter this implication, neo-Kantians in Baden sought to identify a domain of knowledge in the historical sciences, that was more general, an idea that Mises would pursue, particularly after the 1930s (Renz 2021).

Rickert’s solution, about which Mises expressed admiration, was to ground the historical sciences in universal values. One of the aspects of Kant that the Neo-Kantians sought to reinforce was the idea that (some) categories were prior to perception. When the historical scientist knew these categories, it could ensure that the human world could be studied scientifically. But whereas Kant had held that categories were common to all thinking individuals, the neo-Kantians were more skeptical about this (Ehrenfreund 2024, 108–12). A solution like Rickert’s thus sought to establish a special kind of category or set of concepts that was prior to perception and universal, something that Mises would develop.

These are the two problematics that Weber addressed in the first decades of the twentieth century: the role of values in social science and the possibility of universal theory to interpret history. The interpretive debates over Weber's idea of values in social science is only partially settled, but it is clear that one decisive argument he made is that values are commitments that are made at the individual level (Hennis 1994; Bruun 2007). The individualization of values and value judgments was a crucial move in Weber, which departed from the idea that values could be universal as Rickert had suggested.

On the question of the role of theory in history Weber also took an intermediate position (Hennis 1991). He developed his ideal types as the theoretical tool for historical analysis but denied that they could have universal validity. In an excellent comparison of the methodological position of Weber and the praxeological Mises, Crespo demonstrates that Weber remained unconvinced that an abstract-theoretical approach based on 'intuitively evident' laws was feasible (Crespo 1997, 46).¹² In the early 1930s Mises continued to present his work as a continuation of the project of the Neo-Kantians and Max Weber. tradition. Praxeology is easily (mis)taken for a formal or axiomatic system inspired by efforts like that of Hilbert in mathematics, or even that of Carnap in philosophy. Mises did not understand or present his work as such, instead he regarded it as a continuation of the work of the neo-Kantians, and therefore a continuation of the philosophical and epistemological question of theory and history. But even as a continuation of that project, it broke in important ways with his early work.

¹² It has been suggested that Weber was thinking of Menger when he wrote his critique of the abstract-theoretical method (Hennis 1988, 143).

4. Rationality in the praxeological Mises

Mises first developed his praxeology in a series of articles around 1930, which were published together as *Epistemological Problems* (Mises 1933/1978). There he provided a significantly different account of rationality. In this section the shift in Mises' thought is demonstrated by focusing on the same three elements that we covered in section two: his account of rational action, Mises' analysis of the origins of rationality, and finally the epistemological underpinnings for his theory of rationality in society.

The starting point for this analysis is Mises' critique of Weber's account of rational action. Weber had distinguished between four kinds of human action: (1) purposive-rational action, guided by anticipations of external events and other people's behaviors; (2) valual action, guided by a conscious belief in the inherent worth of a particular conduct; (3) affective or emotional actions and (4) traditional action based on habit. The rationalization of society was believed to crowd out actions of the second kind (*Wertrationalität* or value-rationality), while favoring actions of the first kind (*Zweckrationalität* or instrumental rationality) (Callison 2022). These four types were ideal types that allowed Weber to theorize about society, while being able to understand historical changes. Mises' early critique of socialism was based on the idea that in a socialist economy rational actions of the first type would be impossible.

In his praxeological work Mises argued that all action is aimed at some purpose and therefore involves a choice between alternative ends. When actors pursue what Weber called 'valual action,' they are similarly engaging in rational behavior. They simply place values like beauty or honor, not priced in markets, above other ends. Consequently, "an action directed at their realization must likewise be termed rational" (Mises 1933/1978, 91). Mises extended this reasoning to emotional and

habitual actions; they were also purposeful actions. Habits would be dropped if they were no longer valued highly. And when an actor engaged in emotional behavior, their “rank order of ends shifts, and one more easily yields to an emotional impulse that demands immediate satisfaction” (ibid., 92). Importantly, rational action in this new conception was no longer defined by the fact that it used means efficiently, but rather by the fact that it was purposeful. This broader definition makes it difficult to argue against the rationality of any socio-economic system, as rational action is defined independently of context.

Unsurprisingly Mises did not want to give up his argument against the impossibility of economic calculation under socialism. Therefore, he required a distinction between the praxeological realm of rational action, and the analysis of particular actions, or what he typically called history. To do so Mises distinguished between the a priori realm of praxeology, and the empirical realm of thymology (Lavoie and Storr 2011). Roger Koppl (1997) has helpfully analyzed how Mises thought of what we could know about human action in these two realms; in the a priori realm we can conceive of action, and in the empirical realm we can understand the actions of others. ‘Conceiving’ is cognition of universal categories in the a priori realm that the neo-Kantians of the Baden School sought to mark off. ‘Understanding’ is the cognition of ‘the unique and non-repeatable,’ including the motives of others.

It is also worth noting how Mises reconfigured the different elements in Weber and the Baden School of Neo-Kantianism. Whereas the Baden School had argued that values were universal, Mises argued that *the act of valuation* was universal. Weber had argued that value commitments had to happen at the personal level, an argument that Mises developed into an argument about the inherently subjective and individualistic act of valuation. In Mises system, it was the individual who ordered ultimate values unique to the individual and not necessarily stable over time. In the process Mises altered the meaning of rationality, it was no longer a property of a social system, but now of individual

actions. The anti-psychologism of the Baden School is evident in the fact that Mises argued that we cannot inquire further into where individual valuations come from, as he stated: “Economics begins at the point at which psychology leaves off” (Mises 1933/1978, 3).

The resulting tension lies mainly in the question of the assumed agency of the individual. The historical analysis of capitalism had suggested that rationality was enabled by institutional scaffolds and grew increasingly instrumentally rational as capitalistic competition gradually replaced other social relations. Now Mises assumed a rational individual, a priori valuing and acting based upon their own ends. Although he was careful to argue that in empirical analysis the ends of the individual could be shaped by a variety of social influences, this could only partially bridge the resulting tensions from the sharp distinction between the realm of ‘a priori’ theorizing and historical analysis.

A good example of this tension is in the way that Mises presented his arguments against calculation under socialism in *Human Action*. The basic presentation remains unchanged from that which we encountered in *Socialism*. Mises continued to emphasize the importance of institutional scaffolds such as private property and stable money, to facilitate monetary calculation. He insisted that “the concept of capital cannot be separated from the context of monetary calculation and from the social structure of a market economy in which alone monetary calculation is possible” (Mises 1998, 262). He still presented accountancy as the result of a long process of social evolution and makes sure to emphasize that capital and monetary accounting are not categories of all human action (they are not praxeological categories). Entrepreneurs, he argued, eager to make profits rely on it in formulating their plans. In a passage that fits right into the debates of the 1910s Mises contrasted the rationality of the calculating and computing mind, with that of the daydreamer and the ecstatic visionary (*ibid.*, 231). It is as if monetary calculation, in Mises words ‘method of thinking’ and ‘a tool of action,’ has remained the hallmark of rational action.

Yet, his praxeological theory of action suggests that what really matters are future valuations, not data from the past. Or to put it differently, Mises' gradual emancipation away from historical institutional analysis to his system of praxeology, means that he increasingly argued that the past was of limited relevance for the future course of events, including for the rational decisions of future-oriented actions of economic actors. As he put it: "It is not the task of economic calculation to expand man's information about future conditions" (ibid., 212). Future conditions and their anticipation is the task of entrepreneurship and Mises therefore presented entrepreneurial action in contrast to calculative action: "What distinguishes the successful entrepreneur and promoter from other people is precisely the fact that he does not let himself be guided by what was and is but arranges his affairs on the ground of his opinion about the future" (ibid., 582).

The distinguishing feature of entrepreneurial action is not calculation, but rather speculation and the anticipation of the future, what Mises called 'provision.' Here it is important to note that Mises regarded provision, the anticipation of the future, as a praxeological category and a characteristic of all human action. This forward-looking orientation is expressed in the time preference, the act of valuation of the present against the future. This theory of the time preference lies at the basis of Mises theory of capital, and the choice of production methods. The actual decisions in this domain are, however, not purely based on time-preference but: "controlled by capital accounting, the acme of economic calculation in monetary terms" (ibid., 488). To be clear, there is no inherent contradiction here, but the supposed universal time-preference is itself influenced by the evolution of the economic system, as Mises emphasized (ibid., 480–85). Weber would, most likely, have claimed that the future orientation of entrepreneurs and other economic actors is itself an outcome of the historical evolution of the economy, rather than a human universal. Mises navigated this issue by suggesting that time-preference itself was universal, but that changes in time-preference were a process of historical evolution.

This tension also shows up when Mises elaborated how entrepreneurs form expectations about the future. Although ‘provision’ is never equated with ecstatic visions, it can also not be done on the cool and precise basis of monetary calculation. The entrepreneurs and promoters are described by Mises as being able to better deal with uncertainty, through speculative ventures. At one point they are described as ‘superior in mental power and energy,’ but Mises also worries about their ‘moods of deceptive optimism’ (ibid., 333 and 581). Entrepreneurs, in other words, use their individual reason and imagination to form expectations about the future and the likely effects of their actions.¹³ When economic calculation is only a very partial guide, and entrepreneurs’ exercise provision in the absence of institutional scaffolds, the critique of the impossibility of socialism is severely weakened. For what sets entrepreneurial action in capitalism apart from that in socialism?

It is therefore unsurprising that when there was a revival of interest in the socialist calculation debate among a new generation of Austrian economists in the 1980s, they stressed the more dynamic aspects of the market process. Rather than emphasizing the rationality of individual entrepreneurial plans, they highlighted the role of competition and rivalry in weeding out the bad entrepreneurial ideas and in allowing the good ones to flourish (Vaughn 1980; Lavoie 1985). By shifting the focus to the market process, and its institutional preconditions, they strengthened Mises’ arguments, in a place where he had left significant ambiguity between his early and later work.

After noting the tension between the speculative entrepreneur and the calculating economic actor, Ehrenfreund (2024, 227) rightly notes that Mises’ later work is marked by a constant interplay between a depiction of capitalism that is either a gradually evolved set of institutions, or an open-ended and man-made system. We have seen that in his early work Mises assigned the greatest role

¹³ Mises also contrasted the mind of the entrepreneur with that of the worker: “The worker lacks precisely the nimbleness of mind that the entrepreneur must have if he is not to succumb to his competitors. The worker is unable and often is even unwilling to adapt himself to the new and to meet the demands that it makes upon him” (Mises 1978, 2).

in human history to the gradual institutional evolution, in the form of money, law and language, which had enabled an increasing degree of rationality in society. But in later writings, particularly in *Human Action* and *Theory and History*, he increasingly emphasized the individual's capacity to escape societal forces and shape them at will.

In *Theory and History*, Mises challenged deterministic doctrines such as materialism, which he criticized for overstating the influence of external conditions. Instead, he argued that the course of history is shaped by ideas. This point of view is also on display in *Human Action*. Whereas he had earlier argued that it was in the present historical struggle that the triumph of liberalism was the result a battle of ideas, he now came to partly embrace the idea that this had also been historically true for liberal institutions: "The market economy is a man-made mode of acting under the division of labor" (Mises 1998, 266). It is important to emphasize that his arguments remain ambivalent in various places. In this instance, he suggests that the market economy is the outcome of a 'long evolutionary process,' in the same paragraph, so that man-made *could* refer to an unintended consequence of human action.

The context is less ambiguous when Mises argued: "In striving after his own – rightly understood – interests the individual works toward an intensification of social cooperation and peaceful intercourse. Society is a product of human action" (ibid., 146). Mises does so in a chain of reasoning in which he stressed that the benefits from peaceful cooperation are immediate, recognizable, and universal, so that it appears that a rational individual would always design or adopt such institutions when possible. This idea contrasts starkly with a process of spontaneous orders in which the results of individual actions and institutional changes are unlikely to be immediate and obvious. That would be true for the emergence of social institutions such as the division of labor, but it would also be true for the decline of such institutions. But Mises is adamant that the fate of civilizations is determined by ideas and their adoption, not by historical contingencies or unintended consequences (Mises

1957, 224–25).¹⁴ The account of history seems to be dominated by what might be called a ‘reconstructive rationality,’ providing a post-hoc explanation of the rationality of various social institutions.¹⁵

In *Socialism* he had critiqued the rationalism of the eighteenth century. For instance, social contract theory which suggested that individuals came to a rational agreement to establish society, but in his later work he comes close to making exactly such an argument when he claims that society was formed by mutual agreement, based upon ‘rightly understood self-interest.’ In *Theory and History*, for instance, he distances himself from the very historical tradition of thinking that his work build on, and he claimed that: “eighteenth century classical rationalism was defective only in the treatment of some subordinate and merely incidental issues” (Mises 1957, 269).

In our view the tension between his appeal to rationality and the gradual evolution and discovery of an understanding of society applies more broadly to Mises later work. Whether it is the division of labor, capital, monetary accounting, or the orientation of individuals toward the future, it appears that all these have been shaped by historical institutional evolution. A similar argument would apply to the categories of praxeology: are they not themselves the result of the historical evolution of human thought? If they are ‘immediate and obvious’ then why did they not appear to earlier theorists?

A close reading of Mises makes clear that he was aware of such problems. He subtly shifted his defense of the origin of the praxeological concepts. The ‘immediate and obvious’ defense of *Epistemological Problems* was replaced by an evolutionary argument in one his final works *The Ultimate Foundation of Economic Science* (Mises 1962). His argument is no longer that praxeological

¹⁴ It is worth noting that explanations based on unintended consequences are marginal in *Human Action*, Menger’s work on this subject is only invoked once in a discussion of money, but is never more broadly invoked (Mises 1998, 402–4). Mises presentation of Menger’s argument stands out for underplaying the unintended dimensions of the emergence of money and overstating the immediate benefits of improved means of exchange.

¹⁵ We would like to thank Richard Sturn for the idea of ‘reconstructive rationality.’

categories are universal, but that the epistemologist must assume them to be constant. To this he added that the human mind had *necessarily* evolved in such a way to rely on concepts like causality, if it hadn't it would have been unable to survive natural selection (Mises 1998, 33 and 86; 1962, 14–16). That argument clearly lets history and psychology in through the backdoor. Hayek would later develop a conjectural evolutionary psychology to explain the origins of human morality (Hayek 2021; 1988). Hayek's theory accepts the idea that the natural history of human beings, especially the long evolutionary history with the small group, significantly shaped the mind, so that this (contingent) history was relevant to contemporary social science. Mises at the same time does not fully give up the idea that the development of capitalist institutions and monetary calculation made possible the emerge of modern economics and even praxeology. In *Human Action* he claimed: "The evolution of capitalist economic calculation was the necessary condition for the establishment of a systematic and logically coherent science of human action" (Mises 1998, 232). As a result, one cannot but conclude that the claims of praxeology were added to several of his earlier ideas, and that he never reconciled the resulting tensions.

Conclusion

This paper has traced the shift in Mises's thought from a historically contingent and institutionally embedded view of rationality to a universal, axiomatic approach epitomized in his praxeological framework. We have shown that understanding Mises's early writings requires situating him within the German intellectual context and the debates of the time. His early views were congruent with the terms of the debate about the historical evolution of capitalism by authors such as Max Weber, Werner Sombart, and Georg Simmel. During the 1910s and 1920s, particularly in his book *Socialism*, Mises understood rationality as a product of capitalism's institutional framework,

including monetary calculation, private property, and competition. Mises argued, that without these institutions rational action was impossible.

From the 1930s, Mises shifted toward a rationalist-constructivist way of thinking. In response to the rise of totalitarian ideologies, the challenges of central planning, and contemporary methodological debates, he embraced an aprioristic conception of rationality. In doing so, he adopted a Neo-Kantian stance, particularly drawing on the Baden School. In this later phase, he argued that the fundamental categories of human action—choice, means-ends reasoning, and time preference—were a priori, independent of history, and universally applicable. This shifted his definition of rationality from the efficient use of means to the purposeful pursuit of ends. It disconnected rationality from the historical evolution of capitalism and he increasingly understood historical evolution as the result of rational action, rather than as a spontaneous order outcome. Despite these different foundations key parts of his theoretical work on the impossibility of economic calculation under socialism and his capital theory remained unchanged, creating significant tensions within his magnum opus *Human Action*.

This evolution of Mises thought remains highly relevant for understanding the Austrian School of economics and its epistemology. There have been two latent methodologies in the Austrian School since its inception, which could be described as the evolutionary Humean approach and the rationalist, Kantian approach. We have demonstrated that Mises early work is fully compatible with the former Humean approach, an approach that Hayek would also follow in his postwar writing. But Mises later commitment to praxeology moved Austrian economics away from historical analysis and toward a more rationalist-constructivist approach to the social world, and therefore made Mises' epistemology somewhat of an outlier with Austrian economics.

Hayek's critique of Mises's rationalism, as expressed in his famous foreword to the English-language edition *Socialism*, must therefore be qualified. First, it wrongly suggests that Mises gradually emancipated himself from the rationalist approach. Instead, he gradually adopted a more rationalist approach. Second, it is a mischaracterization of Mises understanding of rationality, in that very book. In fact, *Socialism* is Mises' work that is most congruent with Hayek's postwar understanding of rationality, institutional evolution, and the epistemology of economics.

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