

# The Pretence of Knowledge

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In response to the rising tide of opinion in the early 20th century, that a centrally-planned economy would better serve the needs of a nation than markets, Ludwig von Mises wrote a pointed criticism in his native German called *Die Gemeinwirtschaft*. Reflecting word usage of the time, this title was translated into English rather loosely as *Socialism*,<sup>1</sup> although a more accurate rendering would have been *The Collectivist Economy*. Mises argued (among other points) that ownership and control of an entire economy would render the controllers blind by removing price signals, which function in a free economy to dictate what is more or less needed, and to point production where it is wanted. Oskar Lange responded in the late 1930s, suggesting that a centrally-planned economy (which he called “market socialism”) was perfectly feasible, with all the required information gathered and processed by experts.<sup>2</sup> By this time, the Great Depression had shaken confidence in market economies, while Soviet industrialisation appeared impressive to many contemporary observers. Lange’s suggestion was essentially state ownership of production, with managers instructed to imitate market pricing, raising prices in times of shortage and lowering them in times of surplus. This, in turn, prompted Friedrich Hayek to claim in a 1945 tract *The Use of Knowledge in Society* that it was impossible for all relevant information to be collected and acted upon in a timely manner by some all-powerful regulator.<sup>3</sup> Some knowledge, he argued, is inalienably local, and only local managers can deal with it appropriately. Mises expanded his own analysis into a broader development of his economic ideas in his book *Human Action*, published in 1949.<sup>4</sup> The debate became known as the *Socialist Calculation Debate*, and proponents of both sides continue to argue their case to this day. As computers become more powerful, and artificial intelligence of one form or another has hugely increased the analytical power of machines, the question has taken on a more individual form. The debate is much less about how many tractors a country should build this year, or how many tons of steel it should import, but whether each citizen should be tagged, monitored, and chided into forms of behaviour that society regards as beneficial.

Hayek believed any mathematical approach to economic policy was dangerous, because the problems a policy attempts to solve cannot be properly expressed in algebraic terms. The market way to set a price for red or blue paint is for consumers to decide how much of each they want, at given prices, and for manufacturers to meet this demand as best they can, by sourcing the relevant materials and paying other costs for labour, transport and so on. Consumers may of course change their value preferences at any time. This information must be gathered by a constant process of market research and monitoring, whereas central planning is based on an assumption that conditions will not change rapidly, making short-term adjustments unnecessary. Hayek made a point of emphasising the importance in all walks of life of knowledge of people, of local conditions, and of special circumstances. “Today”, he stated in 1945, “it is almost heresy to suggest that scientific knowledge is not the sum of all knowledge.” To Hayek, not all forms of information were of the same kind as that found written in books. Some is tacit, some dispersed, and some contradictory. A local manager might fix a broken factory lock long before a central planner could know repair was needed, and two different customers might have quite contrary “knowledge” of the best product for their needs.

In his speech on receiving the Nobel Prize in economics in 1974, Hayek returned to this theme, saying:<sup>5</sup>

It seems to me that this failure of the economists to guide policy more successfully is closely connected with their propensity to imitate as closely as possible the procedures of the brilliantly successful physical sciences - an attempt which in our field may lead to outright error. It is an approach which has come to be described as the “scientistic” attitude - an attitude which, as I defined it some thirty years ago,

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<sup>1</sup>Mises 1936.

<sup>2</sup>Lange 1938.

<sup>3</sup>Hayek 1945.

<sup>4</sup>Mises 1949.

<sup>5</sup>Hayek 1974.

*is decidedly unscientific in the true sense of the word, since it involves a mechanical and uncritical application of habits of thought to fields different from those in which they have been formed.*

Hayek's point was that Newtonian mechanics can offer us very good predictions of the motion of the planets around the sun, but a society made of individual citizens is rather more complicated, and statistical aggregates of supply and demand make a much weaker basis for computational forecasting. The Soviet and Chinese systems were still, of course, very much in existence at the time, but other attempts at creating societies organised along scientific or technical lines had already come to grief around the world. The best known of these is technocracy movement founded in the US by Howard Scott, a man of limited education who believed in an energy theory of value. His ideas gained traction in the early 1930s as the Great Depression took hold, but opposition grew and his American movement, broken by factionalism, came to nothing. Neither Hitler nor Stalin tolerated fraternisation with American technocratic societies, despite in some ways sharing the same autocratic outlook. Soviet engineers involved in the technocracy movement faced trial for anti-government conspiracy, and the communist party firmly retained political power, assigning technicians to technical roles. Scott, for his part, criticised communism for not being radical enough to abolish the price system. His predicted failure of the price-based economy never materialised, and the post-war American boom saw his movement fizzle out. The fundamental idea though never entirely vanished, that society could be built and optimised by scientific controllers using objectively measured energy costs and benefits, just as any machine with numerous inputs and outputs may be operated. Management by technical experts, it was believed, would do away with politics and politicians, just as energy certificates would do away with money.

Shortly after the collapse of the Soviet Union, in 1992, the film-maker Adam Curtis produced for the BBC a series of videos called *Pandora's Box*.<sup>6</sup> The first documentary in this series, called *The Engineer's Plot*,<sup>7</sup> explored technocratic Soviet central planning by the organisation known as Gosplan. This involved production quotas for industries. Not a bad idea in itself, but even the KGB was given a quota of arrests. Since there were incentives to use more materials, chandeliers and sofas grew in size far beyond practical requirements. Trains took products for long unnecessary journeys to increase the measured tonnage carried. Prices fixed by Gosplan committees were compiled into huge books, and towards the end of the Soviet Union distributed on floppy disks. Computerisation of the system began in the 1960s, but could not save it. Curtis's interviewees were charming - many clearly believed absolutely in the system they were part of. But the compilation of fixed prices for everything was simply unworkable. Fraud and corruption became rampant as factory managers prioritised political directives for production, instead of meeting market demand. Failures of the system could result in brutal punishment for local management, so the incentives to fabricate productivity statistics was considerable. The rigid price structure also created opportunities for management to accept bribes to provide products desperately needed by downstream factories, themselves in peril if they failed their own quotas. From the beginning of Stalin's rule, gluts and (more commonly) desperate shortages were a feature of the economy. The famine in Ukraine, the breadbasket of the Soviet Union, killed millions and has a profound influence on the politics of the region to this day.

Soviet central planning was not entirely a failure. After all, the creation of a huge steel factory at Magnetogorsk in the middle of the Russian steppe in the 1930s gave Stalin the basis for manufacturing the weapons needed to repel Nazi Germany after the invasion of 1941. Central planning worked for a wartime economy, but it completely failed to meet the consumer needs of ordinary citizens once the war was over, despite the enormous commitment and faith of many Russians, at least in the early years. In the 1930s, many American engineers came to help build and run Magnetogorsk, which was modelled on Gary, Indiana. Periodic purges, however, ensured that political power was retained by the Party, and Stalin ordered the politically faithful to be trained as engineers good enough to run the machines. Khrushchev tried to make the system more workable by including prices in the mechanism, but his reforms ultimately failed and he was replaced by Brezhnev in the mid-1960s. The economy was in deep crisis by the late 1970s, and finally collapsed in 1990, after more failed reforms by Gorbachev.

While some viewers might see *The Engineer's Plot* as a slanted anti-Communist view of Soviet planning (despite giving interviewees a free chance to talk about their experiences), the second video in the

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<sup>6</sup>Curtis 1992a.

<sup>7</sup>Curtis 1992b.

*Pandora's Box* series focused on how cybernetics and game theory came to dominate American think-tanks such as the Rand Corporation, which studied how best to confront the Soviet Union in the nuclear age. Central planning led to a huge American arsenal of nuclear missiles, and the idea of a controlled nuclear war. People who claimed to be entirely scientific and rational created policies which (fortunately) senior politicians such as President Kennedy could see were quite mad. To outsiders, scientific futurists such as Herman Khan and Alfred Wohlstetter (who claimed nuclear war was winnable) were megalomaniacs intent on power. By the time the US fought the Vietnam war under President Johnson, a "systems and numbers approach" had come to dominate entirely the strategists at the Pentagon. Since that war was not fought for territory, other data were needed to apply statistical methods to, and so the US armed forces measured how many of the enemy they killed, how many missions were flown, how many tonnes of bombs they dropped, and how many tonnes of food they captured from the enemy. Data massaging was not unknown, and deaths of unarmed civilians might be recorded as deaths of armed combatants by the time reports reached Washington. It was perverse and illogical, but it was all done by numbers. Robert McNamara, the former president of Ford Motor Company, was US Secretary of Defense from 1961 to 1968, and oversaw the increasing American military involvement in Vietnam. When he resigned, the think-tanks and analytical strategists lost much of their influence. Much later, in 1995, he published a memoir called *In Retrospect: The Tragedy and Lessons of Vietnam*, expressing regret and stating that "We were wrong, terribly wrong."

Quantification is not always meaningful. Assuming non-quantifiable concepts can be counted or added makes up much too large a topic to cover in this essay, but one more example from economics is important to touch upon before returning to the theme of the title. This hypothesis is called the "labour theory of value", and was first enunciated by Adam Smith in his famous 1776 treatise *The Wealth of Nations*. The basic idea of "man-hours" is simple and reasonable. A workman making a product of some kind may produce more in more time. Smith simply postulated that the value of the work is proportional to the time expended. A tailor may make two shirts in twice the time taken to make one. If taken no further than such simple examples as tailors and bricklayers then no harm is done. Unfortunately, the idea was extrapolated by Marx and Engels to all forms of labour at all times, comparing not the same worker's production over different time periods, but the production of anyone in the economy. Skilled labour can produce more in a given time than unskilled labour, but, according to this strong form of the theory, there is an absolute relation between the two. Just as the power output of a mechanical engine can be measured in watts, labour can (according to the theory) be quantified, summed and multiplied.

Engels clearly thought that matters of economic calculation would be simple if one removed the subjective element of value. He wrote:<sup>8</sup>

As soon as society takes possession of the means of production and applies them to production in their directly socialised form, each individual's labour, however different its specific utility may be, becomes *a priori* and directly social labour. The amount of social labour invested in a product need not then be established indirectly; daily experience immediately tells us how much is necessary on an average. Society can simply calculate how many hours of labour are invested in a steam engine, a quarter of last harvest's wheat, and a 100 yards of linen of given quality ... To be sure, society will also have to know how much labour is needed to produce any consumption-good. It will have to arrange its production plan according to its means of production, to which labour especially belongs. The utility yielded by the various consumption-goods, weighted against each other and against the amount of labour required to produce them, will ultimately determine the plan. People will make everything simple without the mediation of the notorious "value".

Marx himself considered all exchange value of a product to derive from nothing but human labour, and all human labour, mental or physical, to be of the same kind.<sup>9</sup>

Skilled labour counts only as intensified, or rather multiplied, simple labour, so that a smaller quantity of skilled labour is equal to a larger quantity of simple labour. Experience shows that skilled labour can always be reduced in this way to the terms of simple labour. No matter that a commodity be the product of the most highly skilled labour, its value can be equated with

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<sup>8</sup>Engels 1943, p. 335.

<sup>9</sup>Marx 1928, p. 13 ff.

that of the product of simple labour, so that it represents merely a definite amount of simple labour.

In his best known work, *Capital and Interest*, Böhm-Bawerk strongly criticised this view, suggesting it was astoundingly naïve.<sup>10</sup> He further showed in a later detailed and direct critique<sup>11</sup> that while Marx asserted the labour theory of value with great emphasis (but no proof) in Volume I of *Das Kapital*, he took a quite contrary position in Volume III. (Böhm-Bawerk considered his analysis of Marx so water-tight, because it showed Marxist philosophy to be self-contradictory, that he called his refutation *Karl Marx and the Close of his System*.) It is in fact a matter of common experience that goods do not only exchange according to the labour involved in their manufacture, as Volume III of *Das Kapital* acknowledges. Following Böhm-Bawerk, Mises was profoundly opposed to the labour theory of value, and this underpinned a second criticism he had of a highly centralised, planned economy. He finished the third chapter of his 1920 book<sup>12</sup> (again with the word socialist better translated as collectivist) with the words:

In the main socialist production might only appear rationally realizable, if it provided an objectively recognizable unit of value, which would permit of economic calculation in an economy where neither money nor exchange were present. And only labor can conceivably be considered as such.

Mises went much further in *Human Action*, in which he argues that people act purposefully to improve their circumstances, and markets built on such behaviour will allocate resources more efficiently than any central planner. He dismantled the idea that the behaviour of human beings in complex societies can be calculated; not only, for a very trivial example, may two different people otherwise alike have different preferences for chocolate or strawberry ice-cream, but the same person may at different times have different preferences, on the slightest whim. Other schools of economic thought preserve an affection for the labour theory of value. Marxists hold it implicitly, as the central pillar of their system; it is fundamental to Marx's argument that any wage-earner is exploited by any employer. Much writing in the West on the political Left (democratic socialism rather than collectivism) is imbued with such thinking, although it is not always elevated to a fundamental principle. Social welfare programmes, after all, may be advocated without recourse to abstract economic theory.

History has largely proved Mises right about command economies. Like the Soviet Union, countries such as Venezuela have experienced economic collapse under state-directed planning, despite considerable resource wealth. Vietnam liberalized its markets after an extended period of dire poverty under communist rule. Maoist China too suffered widespread shortages, resource misallocation and famine. After Mao, Deng Xiaoping introduced market reforms into China, leading to very strong economic growth and reduction in poverty, but the Communist Party has maintained a strong grip on power to this day. China is a fascinating example of an economy that grew from a poor agricultural backwater to the world's premier manufacturing centre, but it is not free of central control, with all the political influence and corruption that entails. Such problems are endemic in the West as well, but there they are not fuelled by such centralised totalitarian power, and the absence of a free press to expose wrongdoing by bureaucrats. The recent collapse in 2021 of the home-builder Evergrande is currently an enormous test for the Chinese system. Millions of Chinese have been left homeless or in poverty after paying for homes that were never built, and taking on mortgages they struggle to pay as wages have fallen and unemployment has risen sharply. The banks and builders responsible for this disaster provide a horrific example of the misallocation Mises wrote about. While China's rise from poverty was remarkably swift, taking a couple of decades from the early 1990s, the descent into a deep depression is presently proving even faster. In April 2026, the founder of China Evergrande Group, Xu Jiayin, pleaded guilty to multiple charges including fundraising fraud, embezzlement and bribery. With the Evergrande debt now estimated at \$300 billion, it will be years before the affair is resolved. Hundreds of high-rise construction projects across China remain unfinished, with little prospect that they will ever become habitable.

The Evergrande story has many threads to it. The company's auditor PriceWaterhouseCooper failed to report the massive financial irregularities. In September 2024, PriceWaterhouseCooper's China unit was

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<sup>10</sup>Böhm-Bawerk 1959, p. 299.

<sup>11</sup>Böhm-Bawerk 1898.

<sup>12</sup>Mises 1920.

fined a record \$62 million and suspended for six months for hiding Evergrande's fraud, which included inflating revenue by \$78 billion between 2019 and 2020. Evergrande relied on pre-selling unfinished homes to fund new projects and debt payments, a business model that worked only as long as property prices kept rising and credit remained easily available. When sales slowed and credit tightened, the scheme collapsed. Perhaps central to all of this is the fact that Xu was very well-connected politically. The investigation following his arrest exposed an extended network of corruption, involving numerous high-ranking officials. Since real estate accounted for up to 30% of China's GDP, and households held roughly 70% of their wealth in property, it is also possible that the failure of regulators to intervene was not entirely due to bribery, but stemmed from fear of a broader economic crash if credit became more restricted.<sup>13</sup>

With such a dismal record generally, is central planning about to take centre stage again? The economic situation remains absolutely dire across Europe and the US, with ordinary wage-earners struggling to meet basic living costs to keep fed, housed and warm. Western countries are carrying unbelievable levels of debt, casually built up while interest rates were suppressed to historic lows by central banks. Now interest rates are rising, many countries' budgets are severely stressed. The elevated oil price and fertilizer shortage due to the current US-Iran conflict could well precipitate some form of crisis, and war is certainly possible. There are many historical precedents of governments assuming wartime powers to bring down public debts (by default, restructuring or simply inflation). Unemployment can be reduced by taking control of strategic industries and imposing a military draft. And of course, in a crisis, a government may also introduce censorship, restrict civil liberties, and engage in widespread surveillance of the population. All of these measures may be invoked in the name of national security, and Hayek saw them as potentially very dangerous. He repeatedly argued that emergencies expand state authority, and that powers granted to deal with a temporary crisis have a tendency to become permanent. As an Austrian economist living in London from 1931, Hayek observed Hitler's rise to power in Germany, and he took British citizenship in 1938, shortly before the annexation of Austria. In *The Road to Serfdom*,<sup>14</sup> published in 1944, Hayek explained how a free society may gradually surrender its traditional liberties, with increasing centralisation of power eventually making totalitarian dictatorship possible.

Hayek argued, then, that free societies are in constant danger of falling into the grip of some brutal authoritarian regime that demands control of the economy, and that centralised administration of production can never match the efficiency and output of the original free state, which is characterised by private property, free exchange and a free press. *The Road to Serfdom* and *The Use of Knowledge in Society* are the essays in which he laid out these views. While some of the tendencies Hayek identified are visible today, and growing stronger, the arguments of the latter are coming into question. Floppy disks could not save Gosplan, but can artificial intelligence and hyperscale data centres bring about a command economy in the West?

The arguments are strong on both sides. Hayek's original contention has yet to be disproved, but computers today have a power and subtlety far beyond what anyone imagined in the 1940s. Today's smartphone is beyond the science-fiction of the 1960s. Nor did anyone at that time predict that a large majority of ordinary citizens would make publicly available, for the entire world to peruse at any time, their opinions on everything from household products to music to holiday destinations. Devices such as Alexa and mobile phones listen to us all day. With so much of our personal information freely given away, and such enormous computational capacity, it is becoming ever more reasonable to believe that a government could, if it wanted, know each citizen's life in horrific detail. The indications are that governments do indeed want to; data infrastructure is being built at an enormous pace, far beyond the possible needs of the private citizenry, and we are left to wonder why.

As I write this essay, the US has over three thousand operational "data centers" and is in the process of building 1500 more.<sup>15</sup> The numbers are truly staggering. Project Sail in Georgia, USA, for example, is a proposed \$17 billion AI data centre covering 830 acres (including 9 buildings with a footprint of 4.3 million square feet). Its power demand would be about 900 megawatts, and its clean water demand

<sup>13</sup>In 1951, Mises suggested that all periods of government-induced credit expansion must end in an economic crisis.

<sup>14</sup>Hayek 1944.

<sup>15</sup><https://www.pewresearch.org/short-reads/2026/04/13/most-new-data-centers-in-the-us-are-coming-to-rural-areas/>

up to 9 million gallons a day, about a third of the current water allocation of the entire county.<sup>16</sup> Most shockingly, people are being evicted from their homes to make way for these centres by use of *eminent domain* laws to annul property ownership rights.<sup>17</sup> Such thoroughly Draconian measures are generally reserved for wartime use among democracies, and to apply them to allow *private* enterprises to take control of land already in private possession seems utterly contrary to the spirit of the American Constitution, if not indeed the actual law. It seems insane that thousands of acres of private land might be confiscated in peace-time today by government *diktat* for the benefit of a corporation, but the drive to acquire the land for these data centres in America at the moment apparently overrides all other logic and legal force.

Sadly the EU and the UK are following a similar path, with increasing numbers of AI centres, and government declarations regarding the importance of AI to the economy. A digital ID for each citizen would allow the government to collate all records for a person into one easy-access file. Such systems are in place across Europe. Unlike a cash-based payment, in which a traveller purchases a paper ticket with physical tokens, almost every transaction and movement of a citizen becomes automatically recorded. China has already gone a step further, and assigned to each citizen a “social score” based on observations of their behaviour. If a Chinese citizen behaves badly enough, then booking travel may become difficult or impossible. Official Chinese statistics show that tens of millions of citizens were banned from travel by air or train in 2018. In Western countries with deeply embedded digital ID systems, the technology is already present to do the same. Could citizens of the UK or the EU in the future face similar bans on travel or purchases, if their social media activity is deemed inappropriate, or if they have refused a vaccination? The EU produced a digital COVID-19 vaccine certificate in 2021, and this led directly to the current European Vaccination Card (EVC), which is being rolled out across the continent. While organisations such as ID2020 have argued strongly in favour of digital ID from a human rights perspective,<sup>18</sup> for others the entire concept remains highly sinister. The Dutch attorney Meike Terhorst (among many others) has argued strongly that the motive behind the EVC is to assert control over vaccination, travel, and ultimately over money. “The threat is that anybody objecting to vaccination ... perhaps your bank could say, well, then you cannot have access to your bank account,” she said.<sup>19</sup> It seems clear that a very dystopian control-grid is becoming evermore technically possible through the convenience of smartphones and similar devices, and also that a new generation of would-be planners has arisen that believes itself to be “super-Hayekian” - having the data and data-processing power to break the knowledge barrier.

As Francis Bacon pointed out in 1597, knowledge itself is power. It follows that boundless knowledge within some sphere of human activity may become a great power, and some form of restraint or self-restraint is then required to prevent its misuse. With the introduction of digital ID comes the question - where does freedom of the citizen end, and freedom of the government begin? What sort of society do we want to live in, and, if our government knows all about us, will we be free to choose? Will an abundance of data about each citizen allow a central planner to predict behaviour on the individual or group scale? The COVID-19 period showed that the then UK government was not at all above “nudge” policies to drive social behaviour. With the predictive modelling of AI advancing so rapidly, a similar situation in the future would probably afford the authorities even greater control. Even if we remain nominally free in such a system, is surveillance capitalism really a world we want to live in? If personal liberty is ultimately protected by individual privacy, the focus of the Fourth Amendment to the US Constitution, then extreme government surveillance must make some form of a command economy much more likely to appear, however inefficient and soul-destroying for the average citizen. I would hope that Hayek’s proposition is safe for the moment, but with the recent enormous strides by data technology this is increasingly uncertain. Websites such as Amazon clearly learn customer behaviour very quickly, and can propose purchases we may buy that otherwise we would not have. If governments can predict and modify our ideas and behaviour as easily, then a strongly controlled culture must be a likely result. If governments establish central bank digital currencies using digital ID, and therefore monitor all financial transactions, then we will surely end up living in an absolutely centralised and controlled society.

<sup>16</sup><https://www.wabe.org/data-centers-use-a-lot-of-water-georgia-counties-and-conservationists-are-looking-for-solutions/>

<sup>17</sup><https://www.ajc.com/business/2026/05/the-data-center-boom-is-transforming-georgia-some-residents-could-lose-their-land/>

<sup>18</sup><https://id2020.org/assets/pdf/ID2020-Alliance-Manifesto.pdf>

<sup>19</sup><https://childrenshealthdefense.org/defender/meike-terhorst-eu-vaccination-card-control-access-banking-services-digital-id/>

## References

- Böhm-Bawerk, Eugen von (1898). *Karl Marx and the Close of His System: A Criticism*. Trans. by Alice M. Macdonald. London: T. Fisher Unwin.
- (1959). *Capital and Interest*. Trans. by George D. Huncke and Hans F. Sennholz. South Holland, Illinois: Libertarian Press.
- Curtis, Adam (1992a). *Pandora's Box*. BBC Television. URL: <https://www.youtube.com/playlist?list=PLez3PPtncSsGAbjCIT-ATOFjiDAGk>.
- (1992b). *Pandora's Box: The Engineers' Plot*. BBC Television. URL: <https://www.youtube.com/watch?v=4oOPgUZkwM4>.
- Engels, Friedrich (1943). *Herr Eugen Dühring's Revolution in Science (Anti-Dühring)*. Trans. by Emile Burns. London: Lawrence and Wishart.
- Hayek, Friedrich A. (1944). *The Road to Serfdom*. London: Routledge.
- (1945). "The Use of Knowledge in Society". In: *The American Economic Review* 35.4, pp. 519–530.
- (1974). *The Pretence of Knowledge*. <https://www.nobelprize.org/prizes/economic-sciences/1974/hayek/lecture/>. Nobel Memorial Lecture.
- Lange, Oskar (1938). *On the Economic Theory of Socialism*. Minneapolis: University of Minnesota Press.
- Marx, Karl (1928). *Capital: A Critique of Political Economy. Volume I*. Trans. by Eden Paul and Cedar Paul. London: George Allen and Unwin.
- Mises, Ludwig von (1920). "Economic Calculation in the Socialist Commonwealth". In: *Archiv für Sozialwissenschaften*. English translation published by the Mises Institute.
- (1936). *Socialism: An Economic and Sociological Analysis*. London: Jonathan Cape.
- (1949). *Human Action: A Treatise on Economics*. New Haven: Yale University Press.