



Immanuel Kant and the scientific method of economics

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For my father Dr. Horst Polleit

Introduction

Ladies and gentlemen,

I feel honored to be invited to the Immanuel Kant Baltic Federal University in Kaliningrad.

Please let me say thank you very much to Professor Alexander Barinov and Professor Natalia Borodavkina who made it possible that I can be with you today.

To be in Kaliningrad means a lot to me. It is the city where my father, Horst Polleit, was born on 14 May 1934.

Together with his parents, he left Königsberg in January 1945. Since then, he has never returned to his place of birth.

As his age prevents him from travelling, I decided to visit Kaliningrad on his behalf – and I would like to dedicate this lecture to my father.

The title of the lecture is “Immanuel Kant and the scientific method of economics.”

I will briefly introduce Immanuel Kant “the man”, and then turn to his work as far as his *epistemology* (the theory of knowledge) is concerned.

Against this backdrop, I would like to explore Kant’s influence on the scientific method of economics – in the tradition of the Austrian economist Ludwig von Mises (1881 – 1973).

Without further ado, let us begin with a brief look at “Immanuel Kant – the man”.

Immanuel Kant – the man

On 22 April 1724, Immanuel Kant is born in Königsberg, today called Kaliningrad, into a family of a craftsman with modest means.¹

At the age of 8, he starts visiting one of the best schools in Königsberg, the *Friederichskollegium* (1730 – 1740), supported by friends of his family.

His mother dies in 1737. Kant is 13, and it surely hits him hard.

¹ See, for instance, Kühn (2003), Kant; Höffe (2007), Immanuel Kant; Weigelt (2007), Introduction.

At the age of 16, Kant enrolls at the *Albertina*, the University of Königsberg.

From 1740 – 1746 he studies mathematics, natural sciences, theology, philosophy and Latin literature.

Martin Knutzen (1713 – 1751), professor for Logic and Metaphysics and scholar of Christian Wolf (1697 – 1754), has a strong influence on the young Kant.

After the death of his father in 1746, Kant leaves the university and becomes a private tutor in the outskirts of Königsberg.

In 1755 he is awarded a doctorate degree in philosophy, and successfully hands in his habilitation, making him a private lecturer (*Privatdozent*).

Kant enjoys his first regular income as a sub-librarian at Königsberg's royal library in 1766.

In 1770, aged 46, Kant receives the much desired post of Professor of Logic and Mathematics at Königsberg university.

In 1781, he publishes his *Critique of Pure Reason* – probably the single most acclaimed work in philosophy.

However, the first edition doesn't make much of an impression. Kant starts reworking it and publishes a second edition in 1787.

His effort pays off – his ideas begin to gain ground and eventually become a cornerstone of modern philosophy.

Important works follow such as *Critique of Practical Reason* (1788); *Critique of Judgement* (1790); and *Metaphysics of Morals* (1797).

On 12 February 1804, Kant dies in Königsberg.

What kind of person is Immanuel Kant? There are quite a few accounts about Kant the man.

Kant is of weak health. This is why he lives a rather disciplined life. This gives him the physical and mental strength to pursue his intellectual project.

He gets up at 5 in the morning, has a strict daily routine as far as lecturing and writing is concerned, and he goes to bed at 10 at night.

In his later years Kant becomes notoriously famous for his afternoon walk: It takes place at exactly the same time over a period of decades.

Some say that Kant's afternoon walk exhibited more precision than the local clock tower.

Kant is a social person, enjoying his daily lunch meetings with his friends and illustrious guests.

He doesn't travel much. In fact, he actually never leaves Königsberg and its surroundings.

His extensive knowledge of the sciences and real world matters comes from intensive reading, thinking, and talking with knowledgeable persons.

At the end of his life, Kant is somewhat of a celebrity in philosophy: He is the revolutionary thinker in the realm of reason.

When Kant dies, it is not just a conclusion of a private life but also a state affair.

Let us now turn to Kant's work on epistemology.

Kant's epistemological work

In Kant's days, the sciences, especially the natural sciences, are making great progress.

A key question in the scientific debate is: *Where does our knowledge about reality come from?*

The proponents of *empiricism* would argue that our knowledge traces back to sensory experience (observation).

In contrast, adherents of *rationalism* – which goes back to René Descartes (1596 – 1650) – argue that our knowledge is grounded in reason.

Kant realizes that rationalism is actually in retreat in scientific debates, while empiricism is on the rise.

Who was (and is) right, the empiricists or the rationalists? Kant takes on the challenge to come up with an answer.

Why does he do this? Well, it is fair to say that Kant is actually quite in love with *metaphysics*.

Metaphysics is concerned with the fundamental nature of reality; that is with what is outside objective experience.

Metaphysics plays an important role for Kant: He is in support of *enlightenment* (by which he means *man's emergence from his self-imposed nonage*).

Kant's ideal is man's *autonomy of reason*, which, in turn, rests on three *metaphysical assumptions*:

(1) *God* is the ultimate cause of the universe; (2) humans have a *free will*; and (3) humans have an *immortal soul*.²

However, empiricists deny that there is something like a science of metaphysics. They reject any metaphysical assumption as *unscientific*.

From their viewpoint things which we cannot experience (as in metaphysics) are not open to scientific inquiry.

Rationalists, in contrast, take a different view. For them, reason does not have a limit, thereby opening up the *possibility* of something like metaphysics.

As we will see in a moment, Kant will not simply reject empiricism and rehabilitate rationalism.

He will go beyond both viewpoints, putting forward in his *Critique of Pure Reason* which is called *transcendental idealism*.

In his *Critique of Pure Reason*, Kant performs a truly revolutionary step – which became known as the “Copernican revolution” in philosophy.

Just as a reminder: It was Nicolas Copernicus who has shown that the earth is moving around the sun, not the other way round.

Copernicus had put the sun at the center of our solar system, thereby having refuted the hitherto held geocentric world view.

In a similar fashion, Kant makes the case that our knowledge of objects (of the real world) does *not* depend on the objects themselves.

He argues that our knowledge of empirical objects depends on *principles contained in our reason*.

² See Tetens (2006), Kants “Kritik der reinen Vernunft”, p. 18 – 22.

In fact, we do not see reality objectively, but empirical objects *conform* to the way our reason deals with them.

This insight is well captured in Kant’s words: “But although all our knowledge begins with experience, it does not follow that it arises from experience.”³

You may ask: What are these principles contained in our reason? Kant says that our mind possesses *a priori* knowledge.

A priori knowledge denotes *self-evident* knowledge: We cannot deny its truth claim without causing self-contradiction.⁴

Kant contrasts *a priori* knowledge (which is *independent* of experience) with *a posteriori* knowledge.

A posteriori knowledge is empirical knowledge: knowledge that is acquired through observation.

Metaphysical knowledge must therefore be *a priori*.

In addition to the distinction between *a priori* and *a posteriori*, Kant makes a distinction between *analytic propositions* and *synthetic propositions*.

An example of an *analytic proposition* is “All bodies are extended”.

The predicate (*extended*) says something that is already contained in the subject (*bodies*): Bodies are, by definition, extended.

“All bodies are heavy” is an example of a *synthetic proposition*. It puts together (or *synthesizes*) different concepts, in our example *bodies* and *heavy*.

With these two distinctions, we end up with a matrix showing four fields.

Foundations of our knowledge		
	a priori	a posteriori
Analytic	(1)	(2)
Synthetic	(3)	(4)

Analytic a priori propositions (1) do not cause any problems for our understanding: They are true by definition. (“Bachelors are unmarried.”)

³ Kant (2007), Critique of Pure Reason, BI, 2, p. 37.

⁴ The laws of thought are *a priori*. Take, for instance, the following example: “Things which are equal to the same thing are equal to each other”. Or the law of contradiction: “Nothing can both be and not be.”

Synthetic a posteriori propositions (4) mean that experience makes possible to expand our knowledge of a subject. (“Water freezes at zero degree Celsius.”)

Analytical a posteriori propositions (2) are impossible by definition.

Synthetic a priori propositions (3) suggest that we can expand our knowledge about reality without taking recourse to experience.⁵

Metaphysical knowledge must be synthetic a priori: A true proposition the predicate of which is not logically or analytically contained in the subject.

How could we possibly find synthetic a priori propositions? Kant answer is: by reflecting upon ourselves, by understanding ourselves as knowing subjects.⁶

A priori synthetic propositions must actually meet two requirements:

First, it must be possible to demonstrate that the judgements are *not derived from experience* (observational evidence), as the latter can only reveal things as they happen; there is nothing in it that would indicate why things must be the way they are – observational evidence cannot establish universally valid laws (*necessity requirement*).

Second, reflective understanding must yield judgements as *self-evident material axioms*. What makes a self-evident material axiom is the fact that no one can deny its validity *without self-contradiction*, for attempting to deny them one already presupposes its validity (*universality requirement*).

Exploring the *conditions of the possibility of a priori synthetic propositions* is what Kant calls *transcendental*.

To this day it is still debated whether or not synthetic a priori propositions in the Kantian sense are possible.

The answer to this question is by no means a small matter: It decides the fate of *metaphysics* as a science – and therefore about Kant’s ideal of there being (the possibility of) *autonomy of reason*.

At this juncture, I do not want to go into the discussion about the possibility of synthetic a priori propositions.⁷

⁵ “Synthetic a priori propositions are those whose truth-value can be definitely established, even though in order to do so the means of formal logic are not sufficient (while, of course, necessary) and observations are unnecessary.” Hoppe, (2007), *Economic Science And The Austrian Method*, p. 18.

⁶ Hoppe (2007), *Economic Science And The Austrian Method*, p. 19.

Instead, let us move on to the next chapter, which deals with how Kant's work contributes to the *scientific method* proper of economics.

Praxeology: Mises's scientific method of economics

The Austrian economist Ludwig von Mises (1881 – 1973) has devoted great effort to identifying and justifying the *scientific method* proper of economics.⁸

The term scientific method denotes the approach taken by the scientist to acquire and validate knowledge.

According to Mises, economics is *not* an empirical science like the natural sciences.

It is a science *sui generis*: It is the *science of human action* – and it is this view that sets Mises's thinking apart from all other current economic schools.

Mises argues that economics must use a *scientific method* which is different from the scientific method used in natural sciences. Why?

In *natural sciences* knowledge is acquired and validated by empirical experience such as laboratory experiments.

For instance, you start with a *hypothesis* in the following form: If I mix chemical *A* with chemical *B*, chemical *C* will be the result.

In a second step, you start *testing* the hypothesis, namely you mix *A* with *B* – and see whether or not the result will be *C*.

If the result is *C*, you may want to perform more tests to see whether *C* will *always* result from mixing chemical *A* with *B*.

In natural sciences we can indeed test the same hypothesis over and over under the same conditions in an attempt to validate its truth value.

⁷ See, for instance, Greenberg (2001), Kant's Theory Of A Priori Knowledge. For the rejection of the criticism of positivism see Mises (1962), The Ultimate Foundation of Economic Science, p. 5: "The essence of logical positivism is to deny the cognitive value of a priori knowledge by pointing out that all a priori propositions are merely analytic. They do not provide new information, but are merely verbal or tautological, asserting what has already been implied in the definitions and premises. Only experience can lead to synthetic propositions. There is an obvious objection against this doctrine, viz., that this proposition that there are no synthetic a priori propositions is in itself a—as the present writer thinks, false—synthetic a priori proposition, for it can manifestly not be established by experience." See also Puster (2014), Dualismen und ihre Hintergründe, Eine Hinführung zu Ludwig von Mises' «Theorie und Geschichte», pp. 7 – 50, esp. 20 – 28.

⁸ See Hoppe (2007), Economic Science And The Austrian Method.

Such an approach, however, is impossible in the field of human action. Why is this so?

In the field of human action there are no repeatable events of the same kind. You do not have *protocol sentences*, as Karl R. Popper (1902 – 1994) calls them.

Human actions are fundamentally different from all the objects investigated by natural science.

In fact, it is impossible to run laboratory experiments as far as acting man is concerned for two reasons. *First*, human action is a complex phenomenon.

You cannot isolate one factor influencing human action and keep all other factors constant (which is possible in natural science experiments).

Second, in the field of human action there is no such a thing as “constant behavior”.

Man has preferences, adopts new values and goals (sometimes from one second to the next), and he learns.⁹

As Mises says: “The same external events produce in different men and in the same men at different times different reactions.”¹⁰

In other words: Human actions are unique, non-repeatable events which cannot be lumped together and be used for testing hypotheses.

The scientific method which has become commonplace in the natural sciences, *cannot* be applied – for logical reasons – to the field of human action.

This is why Mises calls for a *methodological dualism*:¹¹

Acting man must be analyzed in a way that differs radically from, say, the analysis of stones, atoms and planets.

⁹ See in this context Hoppe (1983), *Kritik der kausalwissenschaftlichen Sozialforschung*, pp. 25 – 26. In *Nationalökonomie*, Mises notes (p. 46): „Wir vermögen nie mit jener — freilich auch nicht absoluten — Sicherheit, mit der wir die physikalischen und chemischen Gesetze zu erkennen imstande sind, im Voraus irgend etwas über das künftige Handeln der Einzelnen auszusagen, das über den Bereich dessen hinausginge, was uns die apriorische Wissenschaft vom Handeln lehrt. Wir können nicht im Voraus wissen, wie sich der Einzelne einer gegebenen Situation gegenüber verhalten wird. Die Menschen reagieren verschieden auf dieselbe Situation (denselben Reiz), und Art und Stärke der Reaktion ändern sich mit der Zeit auch bei demselben Menschen.“

¹⁰ Mises (1962), *The Ultimate Foundation of Economics*, p. 37.

¹¹ By doing so, Mises rejects the idea of there being a “unified science”.

Now you may ask: What does Mises propose as far as the scientific method of economics is concerned?

Mises argues that economics is the *science of human action*, and that the whole body of economics can be given a *rigorous logical justification*.

Mises's *point is departure* is the proposition that *humans act*. At first glance, this appears to be a rather trivial sentence.¹²

Upon closer inspection, however, it becomes obvious that the sentence “humans act” is of a very special nature.

It represents non-hypothetical, irrefutably true knowledge. For we cannot deny the truth claim of the sentence “humans act” without self-contradiction.

If you say “Humans do *not* act”, you act – thereby denying what you just have said. In other words: You cause a *performative contradiction*.

The knowledge that humans act is a priori in the Kantian sense. It denotes a self-evident truth, a truth that is necessarily and universally true.

To emphasize the special status of economics as a part of the science of human action, Mises proposes the term *praxeology*:

„Praxeology is a theoretical and systematic, not a historical science. ... Its statements ... are not derived from experience. They are, like those of logic and mathematics, a priori. They are not subject to verification or falsification on the ground of experience and facts.“¹³

Against this backdrop, we can also speak of the *axiom of human action*. Some philosophers consider the axiom of human action as an *analytic a priori*.¹⁴

Others – like, for instance, Hans Hermann Hoppe – think that the axiom of human action is a *synthetic a priori* proposition.

I do not want to go into the debate about what *epistemological* status Mises's axiom of human action has.

¹² See Mises (1998), *Human Action*, pp. 11 – 142; also Rothbard (2009), *Man, Economy, and State*, pp. 1 – 77.

¹³ Mises (1998), *Human Action*, p. 32.

¹⁴ For instance, Puster, in his *Hamburger Deutung*, argues in this way. See Puster (2014), *Dualismen und Hintergründe*, esp. pp. 22 – 28. Rothbard considers the axiom of action as a „law of reality“ rather than a law of thought. See Rothbard (2011), *In Defense of “Extreme Apriorism”*, esp. pp. 108 – 109.

All I wish to say here is that Mises's action axiom provides us with an unassailable *point of departure* of economic thinking.

For the knowledge that humans act can, and actually *must*, be taken as an *ultimate given* ("Letztbegründung"): We cannot go beyond it.

The knowledge that humans act is knowledge which cannot be traced back to other knowledge.

The a priori of human action is the *ultimate foundation* upon which Mises (re-)constructs economics.

Unfolding some categories of human action

With the help of *logical deduction*, we can unfold other truths from the apodictically true axiom of human action in the following way:¹⁵

- (1) Assert the true proposition *A*, the *axiom of human action*.
- (2) If *A*, then *B*; if *B* then *C*; if *C*, then *D*, etc.
- (3) Therefore, we assert the truth of *B*, *C*, *D*, etc.

Let me give you some examples of what kind of true knowledge we can unfold from the axiom of human action.

To start with, human action means that man *substitutes a more satisfactory state of affairs for a less satisfactory state of affairs*.

Human action implies that there is some kind of *uneasiness* in acting man's life – for this is what makes him to take action.

If man was entirely satisfied with his state of affairs, he would not act – but this is, as we have seen already, impossible to think for *logical reasons*.

We cannot imagine a state of human affairs where there is no uneasiness (or *perfect happiness*, for that matter).¹⁶

However, there is much more we can learn (or logically deduce) from the indisputable truth that humans act.

¹⁵ See Rothbard (2009), *Man, Economy, and State*, p. 72.

¹⁶ In fact, the three prerequisites of human action are (1) uneasiness, (2) imagination of a more favorable state of affairs, and (3) the expectation that action has the power to remove, or at least reduce, uneasiness. See Mises (1998), *Human Action*, pp. 13 – 14.

In what follows, some categories (*pure* concepts of understanding) of human action will be outlined:

- Human action is *purposeful*. Whatever the motives that make someone act, whether the actor will be successful in achieving his goal or not, he will always act purposefully.

We as acting beings cannot deny that human action is purposeful without running into a logical, or performative, contradiction. If we say “human action is not purposeful”, we act purposefully and thus contradict what we have just said.

- Human action means that only *individuals act*, not groups or collectives as such. Group or collective action can always be traced back to individual action.
- Human action means pursuing *ends* – as human action is purposeful action.
- To achieve his ends, acting man must employ *means*. Means are those things (“goods”) which acting man views appropriate to achieve his ends.
- Means are always *scarce*. For if they were not scarce, they would not qualify as means – and would not be subject to man’s economizing action.
- *Causality* is also implied in the axiom of human action. It means that *every effect has a cause*.
Acting presupposes causality: Man must be in a position to understand his world in the light of causality, otherwise he couldn’t act. Ends and means presuppose causality.
- Human action takes place under *uncertainty*. If man knew the future, he could no longer act, as his action could no longer change the course of things. But *not acting* is impossible to think, as we have already learned.¹⁷

¹⁷ I should rush and add that I am not saying that all things are uncertain. For if there is uncertainty, there must be, for a logical reason, (the possibility of) uncertainty. See in this context, for instance, Jevons (1888), *Elementary Lessons in Logic*, p. 26.

- *Time* is a category of human action. Action takes place in time. There is no timeless action.
If action wouldn't take time, ends would be achieved instantaneously. This, however, would mean that humans cannot act – which is impossible to think.
- From the fact that human action always takes time, and that time is a means to achieve ends, we know that human action *always* takes place under *scarcity*.
- Scarcity makes us understand the universal fact of *time preference*.
Time preference denotes that man prefers an earlier satisfaction of his wants over a later satisfaction of his wants.
As means are scarce (including time), acting man values *present goods* more highly than *future goods*. Time preference is always and everywhere positive.
- The value differential between present goods and future goods is the *originary interest rate*.
As a category of human action, the originary interest rate is always and everywhere positive. It cannot be, or become, negative.
- As a final example, *private property* is a category of human action.
By the very fact that I *argue* (saying: “Private property is a category of human action”), I presuppose (at least) *self-ownership* of my personal body.
By arguing with you, I also implicitly assume that *you* have self-ownership of your body.
This follows from the so-called *a priori of argumentation* – which is a priori true: One cannot argue that one cannot argue. In other words, private property is a priori.

Some applications

So far I have pointed out a couple of categories implied in the irrefutably true proposition that humans act.

Now you may ask: What can we do with this knowledge as far as economics is concerned?

The answer is: By using Mises's scientific method of economics (praxeology), we can decide whether or not economic theories are correct or false.

We do not have to put into practice and test an economic theory to see whether it will deliver on its promise or not.

We do not have to try it out to know what its consequences will be – we can do this basically while sitting in an armchair.

The categories of human action are essentially (in the Kantian sense) the *conditions for the possibility of correct economic theories*.

Let me give you some examples of a priori true economic statements.

Example #1: A voluntary free market exchange between Mr A and Mr B is mutually beneficial. Mr A surrenders something he considers less valuable against something he considers more valuable. Likewise, Mr B receives something he considers more valuable against surrendering something he considers less valuable.

On a priori grounds we know that if and when people (in our example Mr A and Mr B) engage in a voluntary exchange, they both benefit from it (compared to a situation where there is no voluntary exchange). Otherwise they wouldn't engage in such a transaction.

Example #2: Disrupting trade between countries by imposing protectionist measures is – from a pure economic viewpoint – harmful to *all* parties concerned.

The division of labor between country A and country B increases overall productivity and material well-being.

If country A imposes protectionist measures on country B (like, for instance, trade restrictions), *both* countries will suffer.

Both countries will enjoy less employment and a lower material standard of living – when compared with a situation of no sanctions.

What is more, sanctions make mutually beneficial trades between people difficult, even impossible, reducing the possibilities for peaceful cooperation.

All this we can know a priori – that is without having to put into practice and test the consequences of restricting free trade.

Example # 3: If a minimum wage is decreed at a level which is *above* the market clearing wage, involuntary unemployment will result.

We *can* know that imposing such a minimum wage does not – in contrast to what politicians may promise – increase employment or benefit lower-income people.

Example #4: If the quantity of money is increased, the exchange value of the money unit (its purchasing power) falls – when compared to a situation in which the quantity of money had remained unchanged.

We also know a priori that an increase in the quantity of money will *never be neutral*. A drop in the purchasing power will benefit the early receivers of the new money over the late receivers (and those who don't receive anything).

Example #5: Imposing taxes leads to less investment and more consumption, reducing an economy's material prosperity (when compared with a situation in which there is no taxation).

We know that by imposing taxes, we do not increase the material well-being of the people. It only benefits some at the expense of others.

Example #6: As a final example, capitalism (the system of private ownership of the means of production) is the only viable form of economic and social organization.

We do know on a priori grounds that *socialism* (the public ownership of the means of production) must fail. The collapse of socialism in, say, Eastern Europe at the end of the 1990s, or more recently in Venezuela, was inevitable. All this was inevitable, as socialism is a violation of a priori economic laws.

Two critiques

What I have just outlined stands, of course, in sharp contrast to the scientific method being pursued by today's mainstream economics.

Technically speaking, it follows the lines of *positivism-empiricism-falsificationism*.

The underlying idea is to form, in a first step, a hypothesis such as: *If the quantity of money is increased by X%, incomes rise by Y%.*

In a second step, the hypothesis is tested by using past data: relating changes in nominal GDP to changes in the quantity of money in a given time span.

As we have already noted, however, such a procedure is inappropriate, for there is simply no repeatable, homogenous data in the field of human action.

At a more fundamental level, the very idea of empiricism suffers from some severe *logical inconsistencies*.¹⁸

To see this we have to remind ourselves that empiricism makes two claims:

- (i) We must acquire and validate knowledge from experience; and
- (ii) there is no a priori knowledge. Knowledge is hypothetical and can never be validated once and for all. At best we succeed in not falsifying it.

What do we make of these two claims of empiricism? Let us look at the empiricist claim that all knowledge about reality is only hypothetically true.

Think about it, and you will see that this claim is contradicted by the message of the empiricist proposition itself.

For if this empiricist proposition is regarded as itself being merely hypothetically true, it would not qualify as an epistemological pronouncement.

Empiricism would not provide any justification whatsoever for its claim that a proposition cannot be a priori true (that is non-hypothetically true).

However, if the empiricist claim is categorically true, it would belie its own thesis: namely that there is only hypothetically true knowledge.

These arguments may suffice to make clear that empiricism is a logically contradictory and self-defeating doctrine (at least in the field of social sciences).

We cannot really accept empiricism as a logically convincing foundation for the scientific method of economics.

In this context I would also like to briefly critique the use of *mathematical concepts* in the field of human action.

When it comes to human action, the mathematical concept of “function” is, as Mises pointed out, inappropriate.

¹⁸ See Hoppe (2006), On Praxeology and the Praxeological Foundation of Epistemology.

Any mathematical function implies a definite, mechanical regularity and determination. In human action, however, there is no such thing.

On the one hand, there are simply no “behavioral constants” as far as human action is concerned.

On the other hand, we cannot know what *external factors* systematically determine human action.¹⁹

Mathematical logic might be appropriate in natural science, as it deals with causal analyses in which the ultimate reason is unknown.²⁰

In human action, however, we know the *ultimate given* – and that is the fact that humans act. We cannot go beyond that.

As the action axiom is true and meaningful, each verbal step-by-step deduction is also true and meaningful.

Verbal logic rather than mathematical logic is proper method in the field of human action and economics.

Human action as the foundation of epistemology

There is a complaint that Immanuel Kant is *idealistic*: It is said that Kant would claim that reality conforms to the principles of our mind.

How can reality conform to, say, the principle of causality if this principle has to be understood as one to which the operation of our mind must conform?

Wouldn't this imply that reality is actually created by our mind? How can it be that our mental principles fit reality?

Mises's praxeology provides the answer.²¹ We have to understand our mind as the mind of a human actor.

Our mental principles have to be understood as ultimately grounded in categories of action.

And as soon as this is recognized, all idealistic suggestions immediately disappear.

¹⁹ See Mises (1957), *Theory and History*, pp. 3 – 4, also 10 – 12.

²⁰ See also Rothbard (2011), *Praxeology: The Methodology of Austrian Economics*, pp. 62 – 65.

²¹ See Hoppe (2007), *Economic Science and the Austrian Method*, pp. 18 – 21; Hoppe (2007), *On Praxeology and the Praxeological Foundation of Epistemology*, pp. 64 – 82.

For then there is no longer a gap between the human mind and real world matters.

In fact, an epistemology claiming the existence of true synthetic a priori propositions becomes a realistic epistemology.

Mises's axiom of human action does not only provide a logically rigorous foundation for economics.

It turns out that it is also the foundation of *epistemology* – the branch of philosophy that is concerned with the theory of knowledge.

In that sense, Mises has actually moved beyond Kant's epistemology, providing rationalist philosophy with a rigorously foundation of human action.

Hans-Hermann Hoppe notes:

„Mises, in addition to his great achievements as an economist, also contributed path breaking insights regarding the justification of the entire enterprise of rationalist philosophy.“²²

Takeaways

Ladies and gentlemen,

I think we have come full circle.

Immanuel Kant argues that our knowledge about reality could never come to us through experience alone. It is derived from our mind's a priori principles.

Mises understands economics as a science of human action, and that the knowledge that humans act is *a priori* (in the Kantian sense).

That said, economics provides theoretical propositions whose validity does not depend on observation but can be established prior to any experience.

Understanding economics as *a priori theory* has, of course, important practical consequences.

Perhaps most important, it reveals that many political-economic programs, which are said to be beneficial to society, are harmful.

²² Hoppe (2006), *On Praxeology and the Praxeological Foundation of Epistemology*, p. 266. “Mises wrote philosophy as an economist. ... [F]or Mises ... economics determined philosophy.” Gordon (1994), *The Philosophical Contributions of Ludwig von Mises*, p. 95.

Take, for instance, the idea of a state sponsored central bank increasing the quantity of money.

A priori theory tells us that any such increase in the quantity of money does not, and cannot, make an economy richer.

It just benefits some people at the expense of other people. But it can certainly not raise peoples' material well-being.

On the positive side, economics (understood as a priori theory) opens our eyes to what we as a human race can do to improve our lives. For instance:

We need free markets, free trade and an unconditional respect for private property to make possible productive and peaceful cooperation among men.

Free markets, free trade and an unconditional respect for private property are economic and ethical concepts implied in the axiom of human action.

In that sense, we must work to demystify all ideologies and political programs that undermine the logic of human action as counterproductive and destructive.

Immanuel Kant has explained to us the importance of human reason as far as our knowledge is concerned.

Ludwig von Mises has followed Kant and realized that economics has an unassailable a priori foundation.

Immanuel Kant ranks among the most acclaimed philosophers who have ever lived.

Despite his outstanding contribution to economics and epistemology, Ludwig von Mises has not risen to greater prominence in the scientific debates.

In particular, Mises's scientific method of economics, which builds on Kant's work, has made remarkably little impact.

Perhaps my talk reinvigorates your interest in the importance of Kant's work for the scientific method of economics – as developed by Ludwig von Mises.

Thank you very much for your attention.

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