

# The problem with praxeology

An Austrian take on Mises

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Thesis submitted with the aim of obtaining  
the degree of “Master en la Escuela Austriaca”  
from the Rey Juan Carlos University,  
Madrid

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### Abstract

The central claim of this paper is that the Misesian version of the Austrian method – that is: reasoning from the “apodictic” axiom of human action – has ignored an important paradox: the fact that if praxeology truly wants to be subjective, it must allow for its own denial. Through exploring what happens if we do deny that others act, a hitherto undiscovered non sequitur is laid bare: from the reflective understanding of ones own actions, it does not necessarily follow that one may impute humanity in others. By pursuing this point, it is demonstrated the Misesian system of thought is an example of a hermetically triangulated rationalization, rather than a realistic theory from first principles. An alternative view is given: the Austrian one.

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To my father, Bernard Arnaert,  
who taught me that to philosophize is to go  
to the core of the matter in a light, yet enlightening way.

## Acknowledgements

Entirely in line with the phenomenon of spontaneous order, it is a hard, if not impossible task to trace all the influences that have led me to the present thesis. As such, the reader will understand that my acknowledgments can never be exhaustive.

This intellectual child, in a most fundamental sense, could not have come to fruition without three people that have inspired my intellectual life: my father, to whom I dedicate this thesis, Ayn Rand, who is still underestimated as a philosopher, and last but not least: Dr. Jesus Huerta de Soto.

Though I did not quote him extensively – only once, to be honest – he has been the spark that made me re-think what I thought I knew about economics. He is the man who is responsible for bringing together some of the greatest minds in Europe, which I can now simply call friends.

One of those friends is without doubt Dr. Philipp Bagus. When it comes to methodology, he is not only Dr. Huerta's most loyal follower, but also my second greatest inspiration. I will never forget the many illuminating discussions we had in his class – they were world class.

Along the way, in this swirling vortex we call life, I have also had the honor of crossing the paths of two dear intellectual friends: Dr. Brian Ó Caithnia, with whom I talked more about metaphysics than about anything else.

The other one is soon-to-be Dr. Andreas Kramer, who, as a true Austrian – that is: both geographically and theoretically – keeps inspiring me to become not only a better theorist but also a more refined gentleman: Vienna is in his bones – it is visible in his every move.

A fourth friend must be mentioned: Ferre Clabau. This bright young theorist from the University of Ghent has been my main soundboard to check my sometimes-contorted lines of thinking. As a true philosopher, he sorted them out with amazing ease, contributing substantially to my progress.

And last but not least, I also want to thank my partner Ana-Belèn Vela Sanchez-Oro. This thesis is five years over due, because there always was “this little detail” that needed more substance, more proof, more nuance. She thought me that life is not perfect, so neither should I be, nor my theory.

And maybe without realizing it, she expressed the very essence of this thesis: excessive formalism kills explicatory power. Or, as wisdom has it: “The perfect is the enemy of the good.”

Brecht Arnaert,  
9<sup>th</sup> of June 2017,  
Villaverde Bajo, Madrid

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## Introduction

In the summer of 2009 I was selected to attend a five-day seminar of the Institute of Humane Studies at Clemson University, South Carolina. I had the pleasure of attending inspiring lectures given by Dr. Randall Holcombe, Dr. George Selgin and Dr. John Hasnas just to name a few. But one particular lecture struck me in a way I that I knew would have a lasting effect on my intellectual life. It was the lecture given by Dr. Edwin Thompson on the morality of capitalism, inspired by a writer of novels that went by the name of “Ayn Rand”. I had never heard such a clear and consistent defense of capitalism in my life. For the next two years I did little else but read all I could find that had been written by her, only to lament that she already passed away and could not teach us more.

A second decisive moment in my intellectual development occurred in the fall of 2011 when I went to Madrid to study with Dr. Jesus Huerta de Soto. After two years of reading Rand I came in as a convinced Objectivist: “ideas have consequences” (Richard M. Weaver), and “Man is the rational animal” (Rand). At first, Austrian Economics seemed like the logical economical extension of the Objectivist view on things. Mises also stressed that man acted rationally. But little did I know that his conception of rationality was something totally different than that of Rand: while she defined rationality as the volitional adherence to reality (implying that some actions are rational, and others are not), Mises dubbed *every* action rational that is aimed at pursuing ends with scarce means.

The clash of these two fundamental ways of looking at reality – objectivism versus subjectivism – profoundly confused me, and is the reason why it is only now, in 2017, that I can present my masters thesis. The Randian approach to reality was so straightforward, so simple, so elegant, that I could not imagine her being wrong. *“Existence exists—and the act of grasping that statement implies two corollary axioms: that something exists which one perceives and that one exists possessing consciousness, consciousness being the faculty of perceiving that which exists.”* That was the magical formula that I had learned by heart, and with which I had been stunning all subjectivists in the two years that I read into Objectivism, and debated anyone I could find.

Luckily, Dr. Huerta was patient with me. For nearly three years after semi-graduating from his masters program (semi, because it was lacking this thesis) I kept visiting his classes, hurling Objectivist arguments at him. With minor variations, every argument was in the end rebuked by the simple methodological observation that we cannot possibly know what is rational to another person. The only thing we can legitimately assume is that the other person would not take that action if it were not rational to him. Though I could not see how there could be several versions of being rational, slowly doubt about Rand’s system of thought did creep in. How could it be that the values that man needs were objective while at the same time market value is indeed entirely subjective?

I grappled with this problem for almost three years. At first, I took the position that the conflict could be resolved by strictly limiting Objectivism to its theory of concepts. To Rand, the solution of “the problem of universals” was the core of her philosophy. Her axiom was that existence exists, and that all else was to be derived from it. To my mind, even Mises could not have denied that existence exists, nor was there any indication that he would have disagreed with the notion that at least concepts have to be formed objectively. This solution was elegant; as it allowed me to both defend Objectivism when it came to concepts and subjectivism when it came to values, and I could switch from one paradigm to the other with marvelous flexibility.

One day however, I realized that deciding whether a proposition is true or not does in principle not differ from the decision to buy something or not: both are estimations of value. In the case where one is to spend money on a certain item, the estimation is ordinal: one compares the marginal value of ones money stock with the marginal value of the item under consideration, and if the latter is greater than the former, one buys the item. In the case where one is to judge a logical proposition as being true or false, the estimation is cardinal, be it a kind of cardinality with only two options: either one “buys” the theory, or not. As such, my neat distinction fell to pieces: subjective valuations take place, both on the epistemological and on the economical plane.

But where then, lies the nexus between the subjective reality of economics and the objective reality that epistemology purported to lay bare? Could it really be that even truth was subjective? I had never even considered the idea. It actually frightened me. One of the reasons I was so attracted to Objectivism was its outright condemnation of moral relativism, which I quickly understood to be a consequence of epistemological constructivism: the idea that truth does not really exist, and we make things up as we go. Logic, in this view, is merely a tool for the construction of a subjective worldview – one cannot claim that ones worldview is “really” true. But if so, then how do we combat socialist intellectuals advocating central planning? Is everything just an opinion then?

As such, for a very long time, my *logical* reasoning was informed by my *psycho*-logical fear for relativism. My fear was that if we could not arrive at a shared worldview, eternal strife would be the result. This is actually the very position of the postmodernist adherents of “discourse analysis”: that dialogue between people really only is about exerting power. As there is no “real” reality outside of interpretation, debate cannot have a goal higher than subduing the opponent. In colloquial language this line of reasoning could be expressed as such: “If it is either I imposing my view of reality on you, or you on me, it might just as well be me”. To me, this came down to the death of debate itself, which I always considered to be the collaborative effort of people trying to find *objective* truth.

At the time however, I did not realize the fact that my logical thinking was subservient to my psycho-logical condition: that of fear for the consequences of *true* subjectivism. If I would give in to this line of thinking – or so I feared – I would submit myself to this gruesome reductionist view on the function of logical reasoning. In my imagination, I saw myself being overpowered by philosophers who believe that the entire point of human categorization is power. I could not let this happen, and for the longest time, I adamantly refused to believe that debate was nothing more than a power game. I equated (total) subjectivism with relativism, and I needed the longest time to realize that the latter does not automatically follow from the former. It is a non sequitur.

The worst part, before taking my intellectual leap of faith, was that my opponents *seemed* to be right. In refusing to accept the thesis that debate was nothing more than a power game, I was actually confirming it. This is the diabolic pleasure non-transcendent minds harvest from people who believe – even though they feel trapped in a strange paradox – truth with a big T exists, even though they cannot prove it. It is in such moments that one even starts doubting the validity of logic: by refusing to accept their premise, I refused to accept their power, and thereby, strangely and ironically, I was accepting their thesis about the nature of debate, and thus also their power. It felt like a diabolic stranglehold on my psyche.

The conundrum grew larger as months passed by, and it reached a point whereby I stubbornly refused to discuss the matter any further. I put the whole issue on a side-track, pursuing other intellectual ventures. I felt (but could not confirm) that somewhere in this line of reasoning a crucial element was being overlooked. For the longest time, I could not pinpoint what it was. And then, all of the sudden, when doing something completely different, a new hypothesis dawned before my mind's eye, shining in perfect beauty: what if the objective is the logical (that which has an explicit meaning for others), while the subjective is the psycho-logical (that which only has an implicit meaning for ones self), and the whole matter is not a matter of power, but a matter of choice?

And then, in an unexplainable way, I suddenly saw the flip-side of the epistemological argument used by the “discourse analysis”-theorists. I came to the insight that my denial of total subjectivism was the very thing preventing me from choosing my own, non-nihilist version of it. If all is indeed wholly subjective, we might as well inter-subjectively agree on a version of subjectivism that could be called transcendental, in the sense that one can commonly *agree to believe*, even though there is no proof for it, that some elements in all subjectivity are “common” or “essential”, the abstraction of which can lead one to the aforementioned truth with a big T. If subjectivists are truly what they say they are, they cannot exclude *any* version of truth, and certainly not this one.



This idea is not a light one. It basically is an intellectual aikido-move, where the energy of the opponent is used against him. Instead of trying to reason from a firm and undeniable basis from which to fend off critics of the theory – among which nihilists are the most ardent ones – one starts from a premise that is fully deniable. One admits, upfront, that it is a subjective view, and one does not measure the success of one's theory in terms of its capacity to defend some ultimate truth – which is an easy position to attack – but rather in its capacity to explain observations, plain and simple. No grand methodological debates are necessary: the pure profitability of a theory, the measure in which it explains more observations than another competing theory, is the only criterion.

Having understood for myself how such a theory might work – in fact it is Popperian and even Lakatosian in a sense – my gaze turned to Austrian theory. I quickly realized that the Misesian defense of praxeology as a method – that is: deductive reasoning from the axiom of human action – did not rest on the view of full deniability I just described but on Mises' stringent admonition that his axiom was (and could only be) “apodictically” true. Mises did not start from the overt subjectivity of his belief, neutralizing possible nihilist attacks *ex ante*, but repeated and stressed, time and again, that the axiom of human action could not be refuted without engaging in a performative contradiction (Mises, 1998, p. 39 & p. 67 among many)

The theorist that fortified and expanded on this maxim – the logically unassailable nature of the axiom of human action – was Dr. Hans-Hermann Hoppe. In his *“Economic Science and the Austrian Method”* (Hoppe, 1995, pp. 93) he elaborated the Misesian argument to its fullest extent, showing how no logical argument could ever be made to refute it. His defense of this axiom, which became something of an instant classic, can be summarized like this: (1) Man acts, and this category includes all actions, including the action of denying (2) As such, the act of denying, and especially the act of denying the axiom, defeats its own purpose. (3) Conclusion: the *logical* validity of the axiom of human action is unassailable.

For decades, this line of reasoning has been the standard defense when staving off mainstream methodological critiques. Whenever the praxeological method was questioned, it sufficed to repeat that man acts, and that from this undeniable fact all else follows, including the impossibility to deny that man acts. The axiom was safe and sound, and the impression arose that Mises had achieved what his predecessors – primarily Böhm-Bawerk and Menger – could not: to put economics on a firm methodological point of departure. Even Antal Fekete, a staunch critic of Mises, does not doubt that human action comes down to “the purposive action of humans to remove felt uneasiness through producing goods and services, and then trading them in the market” (Fekete, 2016, p. 23)

Nevertheless, the question why Mises did not depart from the humble yet powerful meta-subjective viewpoint described earlier is a valid one. What is his defense, namely, towards the nihilist brand of subjectivism? What is his defense against a discourse-analyst claiming that his methodology is not universal, but a subtle way to enforce the praxeological viewpoint on others? Does his position allow him to admit that he indeed is 100 % subjectivist, even so much so that within this sea of subjectivism he has chosen a very specific version, namely the one that *believes* that the ultimate objective truth exists? In other words: can he defend his version of subjectivism in the sense that he never claimed to have the monopoly on truth in the first place, but merely one specific view on it?

The truth is that he cannot. Mises, both in his reasoning and in his wording often expresses disdain for the idea that praxeology might not be the final methodological truth. Yet disdain is not a form of argumentation, and in my experience a polemic style is not seldom an indicator of a hidden theoretical weakness, that is seeking compensation through psychological inflation. In his choice to ground praxeology on a logically unassailable axiom, namely, Mises has lost the ability to tackle the critique that the way in which he defends his methodological position is inconsistent with that position itself. That this critique is valid cannot be doubted: if Mises truly is a subjectivist, it is a plain contradiction to want to ground it on an apodictical and therefore “objectivist” truth.

This is what I have come to call the paradox of praxeology: if praxeology wants to be the true and final method, it must allow for its own denial. This is a truth that has not been acknowledged by the Austrian research community, let alone applied in further praxeological research. This paper wants to be an exploration of that paradox. What lies at its basis? Can we learn something from an inquiry into that basis? What induced Mises to overlook this paradox and base the praxeological outlook, not on this paradox, but quite contradictorily, on an objectivist foundation? What was missing from his analysis of the theoretical legacy that Menger and Böhm-Bahwerk had left behind? In short: was it really necessary to revise their principles?

As such, my original intention in writing this paper – to show that the Objectivist theory of concepts could be made subservient to Austrian Economics by pointing out that it was really only a subjective one – got superseded by a reality I could not have surmised at the outset: even the Misesian system still holds a lot of objectivist thinking. The next question I tried to answer was if the Misesian Method could actually be derived from the Mengerian one. Did Menger have a certain axiom to start from? And if he did, was it an apodictical one? And if not, how could he have achieved such brilliant results? Or could it be possible that he achieved such brilliant results, precisely because he did not have such stringent methodological requirements?

I soon found that when trying to grasp a problem in its essentials, Mises predecessors did not have any philosophical predilections or methodological restrictions preventing them from pursuing any venue of research. Their only criterion was if the method employed resulted in a more comprehensive understanding of the phenomenon, or not. It was a time when Eugen von Böhm-Bahwerk could say: “We may obtain the facts of experience which serve us as foundations from economic history, or we may gather them from statistics, or we may try to get them directly in our common daily life by simple informal observation. No one of these three methods has any monopoly: each of them has its separate and peculiar sphere.” (Böhm-Bahwerk, 1889, p. 41)

Menger, too, had no fixed method. He contrasted the subjectivism *possible* in the social sciences with the objectivism was *necessary* in the natural sciences, but from this insight he did *not* draw the same conclusions as Mises and Hayek did. He did *not* think that a basic distinction existed between the methods used in both branches of science. He never ceased to stress that both the search for empirical laws regularities (induction), leading to laws a posteriori on the one hand and the derivation of maxims from theoretical principles (deduction) leading to laws a priori on the other, are methods used in both fields of inquiry (Menger, 1985, p. xiii). He had a nuanced view on method, and was free to use any that lead to a better understanding.

Much of that nuance seems to have been lost on Mises: “The sciences of human action differ radically from the natural sciences. All authors eager to construct an epistemological system of the sciences of human action according to the pattern of the natural sciences err lamentably.” (Mises, 1998, p. 39) We could imagine Menger rebuking this position by saying: “That depends on how those authors conceive the natural sciences. It is a myth to think that those sciences are any more exact than the social sciences. They too, have ignored the fundamental uncertainty that lies at the basis of any scientific inquiry.” Or, in Menger’s own words: “The number of natural sciences which absolutely comprise strict laws of nature is also small” (Menger, 1985, p. 52)

I was determined to investigate what happened in the meantime. How did Austrian Economics go from the methodological flexibility of Menger to the stringent limits put on it by Mises? And what has been gained by doing so? Could it possibly be that we have actually lost explicative power? And if so, how could we even measure such a thing? It became clear to me that I may have struck gold in a theoretical sense, but had to be careful not to break my back trying to mine it in a practical sense. In other words: the next thing I needed to do was to limit my field of research. What was the essence of what I was trying to prove? For the longest time, the core of the matter eluded me, and then all of the sudden I saw it: my fear for nihilism might have been what also frightened Mises.

This was not an easy suggestion. Mises had clearly said that no psychological argument could ever invalidate praxeological statements (Mises, 1998, p.11). But how can we be sure that this is not a form of immunization? It is understandable that Mises wants to limit the field of praxeology to the study of action as such, and not hinder the analysis by wandering into speculations about the motivations of the subjects we study. But what about the motivation of Mises to put praxeology in general and economics in specific on an axiomatic basis of the apodictical kind? Is that question off-limits too? It would certainly seem so: “There is no means to expose a faulty theory other than to refute it by discursive reasoning and to substitute a better theory for it.” (Ibid, p. 79)

While that may be true, it is entirely thinkable that Mises’ fear for nihilism – the same fear I felt – led him to a theoretical construction *he* thinks is reasonable, while at the same time it is truly only a psychological rationalization. How to prove such a thing is a whole debate in and of itself, but at least this possibility cannot be excluded. As a matter of fact, I even entirely agree with Mises when he talks about disproving theories: *“If it is proved that the theory concerned is untenable, the notion of rationalization is a psychological interpretation of the causes which made their authors liable to error. But if we are not in a position to find any fault in the theory advanced, no appeal to the concept of rationalization can possibly explode its validity”*. (Ibid, p. 79)

Where to go from here? I had three things to construct a hypothesis with: (1) Mises’ methodological theory, (2) the possibility that this theory was a rationalization and (3) the requirement that while this may be true, no appeal to the quite common act of psychological rationalization itself would be enough to refute his theory. This seemed only reasonable to me. I would have to pinpoint the “fault in the theory advanced” if I wanted to say anything intelligible about the purported hermetic nature of the Misesian system. But then another question popped up: what if I was to say something about the Misesian theory of the psyche? Would I still be pointing out a fault in the theory advanced? Or would I already be engaging in “appealing to the concept of rationalization”?

The answer to this question is no. Pointing out a flaw in one’s psychological theory is not the same as saying that one’s theory is a psychological rationalization. This difference is a subtle one, but also a very important one. The act of “psychologizing” the action of other people, namely, is the act of attributing motivations to their actions, the act of making an intention process. For instance: “You are merely saying that because you do not want to tell the truth” is not an analysis of the theory one may hold about the psyche, but an analysis about one’s psyche. These are two strictly different things. The first is a regular theoretical debate that happens to have the psyche as its subject. The second is unscientific poking into the motivations of another person.

The latter is not only vulgar; it is also highly unscientific as well. As we have learned from Rothbard, the only thing we can talk about when analyzing an individual's behavior is his "demonstrated preference" (Rothbard, 1997, p. 211), which we could paraphrase as "the resulting, visible action of internal motivations". Whatever those may be. I am convinced that it was this what Mises had in mind when he fended off praxeology from psychological criticisms. In his day, due to a Freudian psychological framework, it was very popular to explain the psyche in terms of supposed motivations. This way, *all* reasoning was seen as a form of psychological rationalization. If Mises had allowed such psychological arguments into the debate, *there would even be no debate possible*.

Nevertheless, the possibility I mentioned – that the Misesian system could be a psychological rationalization to deal with his fear of nihilism – still is a valid hypothesis. The Freudian take on the psyche, for instance, might be an entirely faulty theory. It might just be that the positivistic nature of that theory – the arrogance of being able to explain man in his entirety – was what incited Mises to shut out psychological explanations. However, it is not because one theory about the psyche is invalid, that all theories necessarily are. The Jungian theory, for instance, is not positivistic at all, but departs precisely from the axiom that the trouble of man is to come to his proper individuation in a world of uncertainty, contradiction and paradox. That sounds quite Austrian, doesn't it?

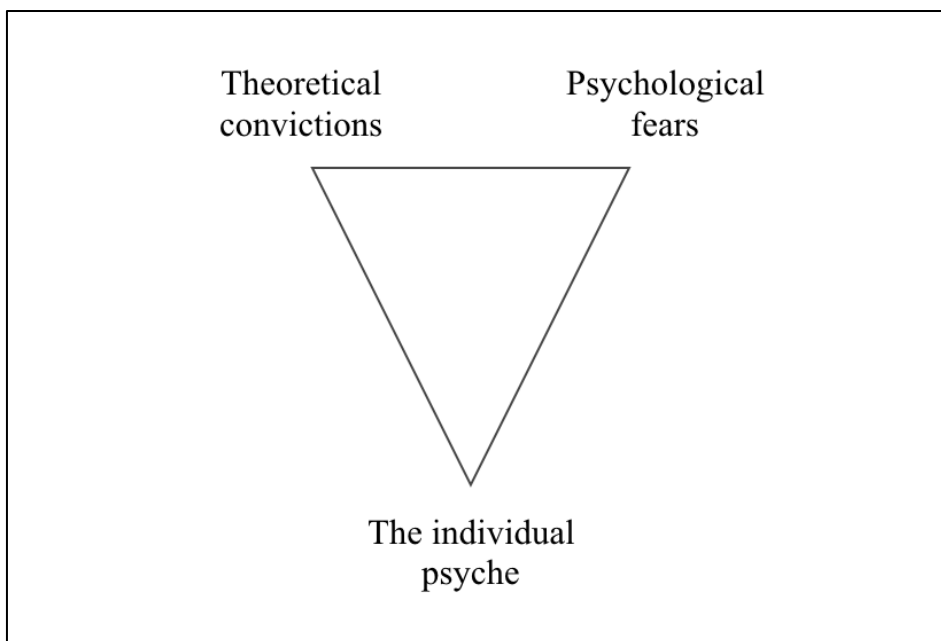
As such, it is entirely possible that Mises, precisely because he had a wrong theory about the psyche, took the unwarranted decision of shutting out psychological arguments. And as we may assume that a theorist will believe in his own theories – including those of the psyche – we may validly assume that the Misesian theory of the psyche – which was indeed Freudian – will also have an effect on his own demonstrated preference. That demonstrated preference, in the case of a theorist, is of course his writing. Without having to poke into the soul of Mises, then, we must be able to lay bare some psychological fears, and this merely by analyzing the gap between his stated intentions and his demonstrated preference.

The stated intentions of Mises are clear: to exclude psychological arguments from the debate. The demonstrated preference of Mises, however, diverges from this point. On many occasions, Mises does engage in intention processes. On Marx, he says: "His only intention was to destroy the reputation of economic teachings which he was unable to refute by means of logic and ratiocination." (Mises, 1998, p. 78) On contradictory government communication, he says: "Then the program, the publicized plan, is self-contradictory; but the plan of its authors who wanted to attain a definite end through the endorsement of incompatible aims and their public announcement, is free of any contradiction." (Ibid. p 104)

Are these Freudian slips? Or is there more to it? Maybe a passage concerning psychologists is the most illuminating of all: “Competition, it is true, may sometimes or even very often evoke in the competitors those passions of hatred and malice which usually accompany the intention of inflicting evil on other people. Psychologists are therefore prone to confuse combat and competition.” Here, Mises engages in a double intention process: (1) he seems to be able to know the passions of competitors that lead them to inflict evil on other people (provided that their action really is evil to start with, yet another imputation that cannot be validly made) and (2) he even seems to be able to know the psychological predisposition of psychologists to be confused about this matter.

Surely, if psychological arguments cannot form part of any praxeological analysis, Mises could have been more consistent. On managerial theories, he says: *“It is a serious mistake to identify entrepreneurship with management as in the popular antithesis of “management” and “labor.” This confusion is, of course, intentional. It is designed to obscure the fact that the functions of entrepreneurship are entirely different from those of the managers attending to the minor details of the conduct of business.”* (Ibid, p. 305) Or take: “All costs of production are expended with the intention of increasing demand.” (Ibid, p. 319) Oh really? I can perfectly imagine an investment in new machines, merely for the goal of having a bigger production.

The fact that the examples I cited are not the only ones, but just a selection from many. (See Mises, 1998, p. 496, p. 532, p. 570, p. 572, p. 598, p. 651, p. 692, p. 734, p 740, p. 776, p. 814, p. 830 and p. 840) lead me to the conviction that the hypothesis of a fundamental flaw in the Misesian system of thought is at least validated. This has led me to construct the following diagram:



**Figure 1: The triangulation of the Misesian psyche**

This is my hypothesis: (1) Mises has a faulty theory of the psyche, which he fears to be powerful enough to recuperate praxeological insights (2) *Precisely because* he believes in this faulty theory he prevents any psychological arguments from entering the debate. (3) And *precisely because* he exempts psychology from being either a subject of praxeology, let alone a part of it, this nihilist theory of the psyche has power over him. None of this, however, is *necessary*. If Mises could have been shown that his theory of the psyche is flawed – this comes down to proving that Freud was wrong – he would have been able to understand that his extra theoretical defenses (mainly: no psychological arguments allowed) are not only superfluous, but even hinder his own intent.

Proving that Freud was wrong, however, would take us too far afield for present purposes. I must therefore ask the reader to take this assumption for granted. Though this is a big favor to ask, it does not impair any theorist from showing that I am wrong in this preliminary judgment on Freud, the consequence of which would be that this whole ratiocination of mine would fall to pieces. But then at least the initiative for such a debate must come from Freudian psychologists, an advantage which actually enables me to take sides with Mises in his demand that faulty theories – including faulty theories about the psyche – be refuted by discursive reasoning and not by attributing motivations to the act of not wanting to accept Freudian theory – a thing Freudians seem to be prone to do.

To wit: I am not alone in my aversion of Freud. Even Hayek, a man who can hardly be accused of being polemical in any regard, lashed out with unusual severity against him: “After having lauded earlier my Viennese friends Popper, Lorenz, Gombrich, and Bertalanffy, I am afraid I must now concede that the logical positivism of Carnap and the legal positivism of Kelsen are far from the worst things that have come out of Vienna. Through his profound effects on education, Sigmund Freud has probably become the greatest destroyer of culture. . . . If our civilization survives, . . . I believe men will look back on our age as an age of superstition chiefly connected with the names of Karl Marx and Sigmund Freud.” (Quoted in: Ebenstein, 2003, p. 161)

With this, I submit that I am legitimized in asking for the favor of assuming that Mises had a faulty theory of the psyche. This point can be proven later, and in full separation from the thesis I want to prove here: at the basis of the Misesian system of thought lies a fundamental theoretical error (1), which enables a certain belief to remain valid in the eyes of Mises (2), a belief which in turn is enables a fear to remain powerful (3), a fear so powerful that Mises gets the impression that a certain (faulty) methodology is needed – which leads us back to (1). What we have here – if I can prove that there indeed is such a fundamental theoretical error – is a triangulated illusion of fear, belief and theory. I have come to call this “The Misesian Triangle”.

The only true question remaining, then, is what this fundamental theoretical error may be? There is no beating around the bush about it. The fundamental philosophical error Mises made is to assume that from the reflective understanding of ones own actions, it does not necessarily follow that one may impute humanity in others. This error may seem trivial, but it holds a universe of difference when it comes to methodology. It enables a relativist in taking the position that he can deny the human action axiom without any reprisals as long as he maintains that he is not human. Is this position absurd? Of course it is. But absurd action is human action too. And as we will see, the position of the relativist is not even as absurd as it would seem at first glance.

This is my main critique on Mises: his lack of what we could call psychological realism – as opposed to mere logical realism. His inability to capture action that is entirely human yet entirely irrational, even when analyzed from the perspective his own definition of rationality. His inability, even, to understand that this definition radically conflicts with other parts of his theorem. His reduction of man to an acting object, even though this was clearly not his stated intention. His inability to see that it is precisely his own faulty – Freudian – theory that prevents him from describing true man in stead of theoretical man. Not all of these themes can be dealt with in the short span of this thesis. All I want to point out is that these themes are valid subjects of inquiry.

Having said this, I have come to a point in this introduction where I must leave the rest of the paper to do the talking. I think I have situated the subject precisely. All that is left is a description of how I will structure the thesis: in three chapters and a conclusion.

In the first chapter, I will discuss the philosophical error that lies at the basis of the whole of Misesian thought: to infer that from ones own experience of purported humanity, one is legitimized in assuming that others are human too. After this chapter, it will have become clear that this is not a universally valid and logical conclusion, but rather a contingently valid and psycho-logical projection: Mises can never prove others are human. But I will not linger long on this subject. More important is that he can neither disprove it. Through an analysis of Misesian and Knightian probability theory and a demonstration of the validity of the Humean problem of induction, we will come to the ultimate reality Mises did not understand: the paradox of radical uncertainty.

In the second chapter, I will proceed to show that under these circumstances of radical uncertainty any claim of apodictical certainty is unwarranted. I will show that Mises does not merely think that the laws that can be derived from his axiom are apodictically sure, but even that he thinks his axiom to be apodictically sure – an error that is easily illustrated: all I have to do is to show that one can factually deny human action. Furthermore, and more importantly, I will show that rebuttals like “this is absurd” cannot be made from a Misesian point of view: to him, all action is rational, as it



serves the purpose of attaining a goal. Having illustrated why Mises cannot see his own bias, we will come to a second paradox Mises clearly was unaware of: the paradox of total ignorance.

In the third and last chapter, I will investigate the relation between these two paradoxes, and reveal that it must necessarily be one of indeterminacy: there is no way one can logically link radical uncertainty with total ignorance. I will show how this reveals a third and final paradox: that of necessary indeterminacy. Having illustrated this paradox, I will then demonstrate how a fourth and Supreme Paradox is infusing this trinity: the existence of infinity. I show that the denial of infinity is the fountainhead of nihilism and I will show that believing in the existence of infinity is the quintessential human action. It is by believing in infinity that a radical difference is made between the believer and infinity itself – this difference validates logic.

In the conclusion, I will make a summary of my findings, but also indicate why I think this subject needs further research. In the short span allotted to this assignment, namely, I have not been able to fully achieve what I set out to do. But this does not mean failure: I have at least proven that the Misesian take on reality cannot yield true results in the sense that if not even a single paradox that has been laid bare is respected, his theory can be called anything – except realistic. In the “envoi” I will therefore outline what I see as the best guarantee for the future success of Austrian Economics: a return to the descriptive method wielded by Menger: no fixed axiom, no theoretical exclusives, and yet a very powerful perspective starting from the essence of Austrian Economics.

That essence is not method – it is a fundamental respect for spontaneous order.

# Chapter I: Mises' philosophical error

## **1. The unwarranted imputation of humanity**

The philosophical error that lies at the basis of Misesian thought – and what reduces his the bulk of his writing to psychological rationalization rather than philosophical ratiocination – is to think that from the experience of ones own action, purportedly human, one is legitimized in assuming that the actions of others are human too. While this idea comes natural, it does not mean that the conclusions we could draw from it are necessarily valid. Logical validity exists where an inference can be made from a valid premise (1) without a flaw in the process of deduction (2) leading to a conclusion supported by facts (3). If one of those three elements is lacking, there is no way (3) can ever serve as input for (1), which means the scientific process comes to a grinding halt.

In that regard, Mises cannot be blamed for faulty deduction. He is right when he emphasizes that with regard to the results obtained by logical ratiocination “only two attitudes are possible: either one can unmask logical errors in the chain of the deductions which produced these results, or one must acknowledge their correctness and validity.” (Mises, 1998, p. 67) However, when stressing that “praxeology and economics proceed step by step by means of discursive reasoning” he seems to gloss over the fact that when it comes to “precisely defining assumptions and conditions” his own reasoning is not as sound as he perceives it to be: though it is true that his logic is “unassailable”, it can be quite easily be demonstrated that he does not depart from an “unshakable foundation”.

To begin our demonstration, let us recall the elaboration of the argument as offered by Hoppe: (1) Man acts, and this category includes all actions, including the action of denying (2) As such, the act of denying, and especially the act of denying the axiom, defeats its own purpose. (3) Conclusion: the *logical* validity of the axiom of human action is unassailable. (Hoppe, 1993, passim) Though Mises has never been able to comment on this elaboration, it is safe to say that he would have agreed with the Hoppean fortification of his position. And to the best of my knowledge, there is no theorist in the Austrian research community who has denied human action to be the all-explaining axiom on which the science of praxeology is to be built.

Yet, the assumption that there are other objects that look like us and which perform action that we generally categorize as human is in itself not proof that these objects really are human. Even Mises was dimly aware of this possibility when he wrote: “But it is beyond doubt that the principle according to which an Ego deals with every human being as if the other were a thinking and acting being like himself has evidenced its usefulness both in mundane life and in scientific research. It

cannot be denied that it works.” (Mises, 1998, p. 24) The former sentence, that thinking of other objects as human has proven to be useful, is true. The latter sentence however, that it cannot be denied that this view works, is a pragmatic argument, not a logical one.

The essence of pragmatism, in intellectual affairs, is to cling to the maxim: “true is what works”. In a sense, this is actually true, but the biggest disadvantage of this position – for an objectivist – is that you cannot use it in a philosophical framework that purports to be *universally* true. And this is precisely what Mises does: he claims that his axiom is “apodictically” true, but legitimizes this by saying that the imputation of humanity onto the actions of others has proven to be “useful”. Mises, however, has to choose: either he takes a full-fledged subjectivist position and then pragmatism nor even consequentialism is off-limits. Or he takes a position of apodictical, final certainty, but then he has to legitimize this position in *anything but* contingent arguments. *Tertium non datur*.

As such, the Misesian argument is confused. If it looks like a duck, swims like a duck, and quacks like a duck, then it *probably* is a duck. That much is true. But probability does not equal certainty: we are not *fully* sure that it really is a duck. It might be a highly sophisticated robot, with synthetic feathers (or even real ones), high quality audio sampling and a behavior programmed to exactly look like one. This is radically unknowable. Even if we catch such a duck, and open it to see what is inside, we still cannot know if it is a duck. If we find electrical circuits inside, what we have established is that our initial perception was wrong: it was not a duck. But even if we only find flesh and blood inside, what we have is not a duck, but a dead duck.

The argument might seem silly, but it goes to the core of a deep philosophical problem: that of not knowing if there is a noumenal reality behind the phenomena we observe. This problem is radical, in the sense that any epistemological approach already influences the object of inquiry. We could call this “the problem of the fridge”. How do I know that the light inside the fridge is out when I close the door? There really only is one way: to open the door. But by opening the door, I invalidate my own methodology: the light goes back on. Of course, one could install a sensor with an outside light indicating if the inside light is really out. But even that is to no avail, because we do not know if the sensor is not broken. However you toss and turn it, the problem truly is fundamental.

Likewise, we are not *fully* sure that the object we perceive as human is not something totally different. This can be illustrated by taking the case of Mr. Data, one of the main characters in the sci-fi television series “Star Trek”. The series, taking place in a remote future, displays all kinds of technological improvements, such as a teleporter, allowing people to travel instantly to any place of their choosing, a holodeck, allowing people to experience virtual reality, and also Mr. Data, who is an android: a highly perfected robot, looking like a human being. Mr. Data walks like a man

and talks like a man, yet is not human. His humor is strange, he does not sleep, and when it comes to outer appearance, he has yellow eyes and a somewhat strange “fond de teint” for skin color.

This Hollywood-production seems to be a nice fiction. But from a philosophical point of view, it poses a deep problem: how can we be sure that the people that surround us are not highly perfected androids who have been given blue eyes and a normal skin color? Is that entirely impossible? How can we be sure that the highly rationalist behavior of Mr. Data – for instance his inability to make normal jokes and laugh about them – has not been improved by some smart algorithm, to the extent that it has truly become impossible to distinguish an android from a normal human being? What if all people that surround us are actually all separate Mr. Data’s, with programmed characters, produced to perfection? How, in short, can we prove that others are human?

The answer is we cannot. Claiming that technology has not even evolved so far as to produce such androids cannot dismiss the issue. This argument is not even an argument in the true sense of the word, for it does not eliminate impossibility. It is a mere remark about the degree of what is perceived as possible, which is not the same thing. It is not unthinkable, for instance, that this kind of technology does exist, but that we are just not aware of this. We could imagine a malevolent government having perfected this technology to such an extent that we are not even able to detect it, and as such neither the power structure behind it. Whatever psycho-logical reaction such a far-fetched view might elicit, from a purely logical point of view they cannot be excluded.

## **2. Misesian uncertainty as too certain**

Mises, in short, is too certain about his claims regarding the humanity of other people’s actions. If the axiom had been “objects act”, no problem would have arisen. Under that assumption, the action of other objects we are inclined to identify as human could be treated just like objects in the physical sciences: we describe their motion, draw essences from the patterns we see, and we make theoretical predictions. But because Mises is afraid that such a course of theoretical action might lead to scientism – that is: applying the methods of the natural sciences into the social realm – he advocates methodological dualism: strictly separating the social sciences from the natural realm. Physics might be about action – economics is about *human* action.

As we have seen, however, there is no proof that others indeed are human. To assume that others are just like we are is not a necessary logical conclusion, but rather a contingent psycho-logical projection. As such, even the very first sentence of Human Action – “Human action is purposeful behavior” – is already a bridge too far. (Mises, 1998, p. 11) Mises cannot even be sure that the action of others is purposeful in the sense that he means it: “*conscious* adjustment to the state of the

universe.” (Ibid) They might just as well be automatons, executing actions that seem very human, but are actually programmed into a complex algorithm of an object acting as man. His axiom, therefore, that *man* acts – and this even without ever defining humanity – is a very bold statement.

Ironically, this false sense of certainty is nowhere evidenced better than in Mises probability theory. In his line of thinking, a distinction must be made between case and class probability: *“There are two entirely different instances of probability; we may call them class probability (or frequency probability) and case probability (or the specific understanding of the sciences of human action). The field for the application of the former is the field of the natural sciences, entirely ruled by causality; the field for the application of the latter is the field of the sciences of human action, entirely ruled by teleology.”* (Mises, 1998, p. 107) As such, the methodological dualism of Mises even deepens to the metaphysical level: probability is different for each class of science.

Mises describes the two kinds of probabilities as follows: “Class probability means: we know or assume to know, with regard to the problem concerned, everything about the behavior of a whole class of events or phenomena; but about the actual singular events or phenomena we know nothing but that they are elements of this class.” (Ibid, p 107) “Case probability means: we know, with regard to a particular event, some of the factors which determine its outcome; but there are other determining factors about which we know nothing.” (Ibid, p 110) In short: about classes of events we only know with certainty that these events are part of the class, but about the events themselves we only know some of the factors that determine its future.

According to Rothbard, Mises got this theory from his brother, Richard von Mises, who was a “distinguished mathematician” (Rothbard, 1973). But nowhere in the book that Rothbard is referring to does Richard von Mises make the distinction his brother Ludwig makes. He does not, for instance, tie case probability to the social sciences, nor does he tie class probability to the natural sciences. He does not even speak about class probability. To him, there is only one kind of probability: “We state here explicitly: the rational concept of probability, which is the only basis of probability calculus, applies only to problems in which either the same event repeats itself again and again, or a great number of uniform elements are involved at the same time.” (Mises, 1957, p. 11)

In this vein, Ludwig von Mises is right: from the study of one element no patterns of prediction can be derived, for it is unique in its historical occurrence. But from this it does not follow that there would exist such a thing as “case” probability as opposed to class probability. A case, qua case, has no probability at all. Or, as his brother Richard aptly observes: “in order to apply the theory of probability we must have a practically unlimited sequence of uniform observations”. (Mises, 1957, p. 11) If Ludwig von Mises wanted to make the point that each individual is unique, he could have

done so, simply by stating this as an axiom. But to divvy up a distinction between two forms of probability when in fact there is only one, seems like a ratiocination of an over-active mind.

But the problem runs deeper. Mises seems to assume that class probability – or, as his brother would see it: probability proper – is somehow only connected to the natural sciences. While it is true that the experience of man with the probability of material phenomena is greater, this does not necessarily imply that all use of probability theory in social science has to be illegitimate. It is perfectly thinkable, for instance, that a survey is made with one thousand Germans, asking them how they feel about fractional reserve banking, and to draw conclusions about the probable outcome of the same survey, one year later. The probability that the results will not match the predictions, namely, is just as great as that of any prediction made in the natural sciences.

This is clearly not understood by Mises. He thinks that probability calculus is a tool that is exclusive to the realm of the natural sciences. He even tries to illustrate this by working out an example that only concerns human action, but fails miserably: *“Two football teams, the Blues and the Yellows, will play tomorrow. In the past the Blues have always defeated the Yellows. This knowledge is not knowledge about a class of events.”* (Mises, 1998, p. 111) The truth is, however, that it is: the class of events we are talking about can be called “games played by the Blues and the Yellows” and as far as Richard von Mises is concerned, this is a valid subject for probability theory: it is about a “sequence of uniform observations” in which we try to find regularity.

Can we prove that from regularities in the past regularities in the future must follow? No. But this is not what probability theory pretends to say or ever has pretended to say. It merely makes a prediction. It does not follow that the prediction has to be true. As such, it has hard to see what harm can be done by allowing social scientists to make predictions about human action, even if it is a prediction about one single individual, based on some of its features. As long as these probabilities are merely contemplated, and not misused as legitimization for political action, there can be no question that they are at least useful as an orientation. The political decisions made on the basis of perceived probabilities are one thing, the outcomes of probability theory itself is another.

Mises does not seem to make this distinction. To him, all probability theory about human action is suspect, even when it is about human action that can truly be called repetitive. It would seem that in order to mitigate his fear for the misuse of probability theory in politics, he did not simply think it was sufficient to condemn this misuse, but to do away with the subject as a whole and even invent *“two entirely different instances of probability”* (ibid, p. 107): case probability (sic) would be for the social sciences what class probability would be for the natural sciences. From this, we can

validly derive that Mises also thought only human action to be unique in a historical sense, while events in the natural sciences would somehow be less unique.

This assumption, however, is not proven at all. There is no reason to assume that the automated action of a machine putting lids on bottles would be less unique from a historical perspective than the conscious action of a man marrying a woman. The first might be considered as trivial and the second as important, but that does not render the first a-historical. Every lid, on every bottle, has been put in a historically unrepeatable context: one after the other. The differences might be small, but, theoretically, big and small doesn't matter. Even a small difference allows us to identify one historical action from another. As a matter of fact, even on the lids themselves, this small difference is often printed as a time stamp. In short: even the most automated action is historical.

As such, the whole of Misesian probability theory is essentially flawed. Firstly, it assumes that there are two definite kinds of probability, one of which would be applicable to the social sciences, and another that would be exclusively reserved for the natural sciences. This distinction, however, is untenable. Case probability does not exist, and the other purported kind of probability – class probability – is even possible in the realm of human action, provided that the human action studied forms a sequence of uniform observations. Secondly, Mises seems to assume that human action is uniquely historical while action in natural science would be somehow less historical. This is not true either. It would seem that Mises is too certain about what probability theory can and cannot do.

### **3. Knightian uncertainty as too certain**

To Mises, the choice of using his brothers' probability theory must have been evident. However, in economics, the standard work on the issue in his day was undoubtedly Frank H. Knight's "Risk, Uncertainty, and Profit." In this work Knight makes a distinction, not between two kinds of probability, but between three: "a priori probability", "statistical probability" and "estimates" (Knight, 1921, p. 113). Furthermore, an important distinction is made between risk and uncertainty: *"It will appear that a measurable uncertainty, or "risk" proper, as we shall use the term, is so far different from an unmeasurable one that it is not in effect an uncertainty at all. We shall accordingly restrict the term "uncertainty" to cases of the non-quantitative type".* (Ibid, p. 15)

Unfortunately, in Knight the same problem can be surmised as in Mises: his probability is too certain to be useful in economic analysis. Though Knight spends a great deal of attention to what he calls "true uncertainty" – that is: uncertainty of the unmeasurable kind – and rightly links profit to the mitigation of this "kind" of uncertainty, he fails to see that his distinction between measurable and unmeasurable uncertainty is mistaken: no kind of uncertainty is actually measurable. All we

have is indeed estimates, and those are always based on necessarily vague intuitions, rather than exact mathematical measurement. Probability is so uncertain that even a theory about probability can only be probable. This is the paradox of uncertainty we will come to later.

Let us start with an analysis of the three kinds of probability Knight envisages. To illustrate what he calls “a priori probability” he uses the example of a perfect die: *“If the die is really perfect and known to be so, it would be merely ridiculous to undertake to throw it a few hundred thousand times to ascertain the probability of its resting on one face or another. And even if the experiment were performed, the result of it would not be accepted as throwing any light on the actual probability. The mathematician can easily calculate the probability that any proposed distribution of results will come out of any given number of throws, and no finite number would give certainty as to the probable distribution.”* (Ibid, 108)

A priori probability, in short, is the kind of probability that is inherent in things themselves. It is the kind of probability that is implied in dice, balls, cards, the wheel of the roulette game. From what we know about the nature of those things – “if the die is really perfect and known to be so” – it is possible to calculate in advance the proportion of distribution among the different possible outcomes. On a philosophical level, it could be equated with what is called an analytical statement: a statement that is true by virtue of the meanings it contains. Within the thing under scrutiny, or so it is assumed, a limited range of possibilities is contained, and on this limited range, probability theory can make “real” predictions about possible outcomes.

Statistical probability, then, is the kind of probability that is not inherent in the things themselves. There is no reason, for instance, to assume that it is more inherent to a newly constructed building than an old wooden shack that it someday will burn. The factors that determine this outcome are not contained in the thing itself, but rather in the context surrounding the thing. The wooden shack, for instance, might be treated with less respect than a newly constructed building in which people live, and as such might fall prey to vandalism more easily than the building. But this too depends on the cultural environment in which both buildings are located. It might just be that a large wave of vandalism in the past has been met with severe criminal persecution in the past. All is contingent.

This distinction, which we could call the probability of things versus the probability of contexts, has a certain intuitive appeal. The probability that is implicit in things can be measured by an a priori calculation of possibilities, and the probability that is implicit in contexts can be measured by an a posteriori counting of frequencies – hence the designation of this method as “statistical”. As such, each kind of probability seems to have not only its own subject but also its own method. In this regard, Knight rightly asserts: *“It would be as ridiculous to suggest calculating from a priori*



*principles the proportion of buildings to be accidentally destroyed by fire in a given region and time as it would to take statistics of the throws of dice” (ibid, p. 108)*

However, things are not that easy. The implied assumption, namely, is that the thing can be separated from its context. The throwing of a perfect dice, for instance, might be influenced by factors outside of the dice that we are not even aware of. And the burning of old buildings, for instance, might be influenced by inherent properties of matter that are not yet discovered. From a methodological point of view it is entirely understandable to make such a distinction, but as long as it cannot positively be excluded that either in throwing the dice an element from its surrounding context has an influence “a priori” calculation is much less a priori than we would like to believe. It takes the immutability of matter as a given.

For those who would think that this is a far-fetched critique, I must stress that the estimate of what is “far-fetched” or “evident” is precisely ruled by impressions of probability. It is not because we have thrown a die hundreds of times that it can be excluded that at our next throw the die will break in half, lose a piece, or, why not: fall upwards. It stretches the imagination to think of such cases, but whatever cannot logically be excluded must be seen as having at least *some* probability. The day the two-split experiment revealed (or seemed to reveal) that a particle only forms when we look at it nobody wanted to believe the experimental results. But ever since that discovery, the results of repeated experiments have changed the estimate of what is far-fetched in a most profound way.

The same thing can be imagined with the die. When doing a priori calculation, namely, the mathematician pre-supposes that the substance out of which the die is made, is constant. But what if the die breaks in half? Has this been included in the probability equation? If the die is indeed “really perfect and known to be so” then it does follow that its proportion of distribution can be calculated. But the true philosophical question is whether or not perfection exists in the first place. All that can be meant by claiming that a die is perfect, namely, is that its shape is so evidently smooth and clean that when throwing it no distortions in the distribution of outcomes takes place. It does not mean, however, that the die would be invulnerable as a whole. Anything can happen to it.

As such, the implicit assumption of a theorist dividing probability in an “a priori” or a posteriori kind is the idea that a set of factors can ever be analyzed in perfect isolation. That is possible, in other words, to analyze a thing without giving due credit to factors outside of that thing, which might influence it profoundly at any given moment. This might seem like a nitty-gritty argument, but it truly isn’t. The assumption of perfection, namely, does not merely suggest that the die is perfect in shape, but that it is “really” perfect, implying that nothing can even happen to the shape

as a whole. Whether this more profound meaning is explicit or not, is irrelevant. The point is that only under that most stringent of assumptions the “a priori” kind of probability can really be exact.

The same goes, vice versa, for the a posteriori or statistical kind of probability. There the focus is not on a thing, but on a thing in its context. Probabilities for what will happen to things in the future are assumed, based on the relative frequencies of whatever has occurred to those things in the past. If there seems to be a tendency for old wooden shacks to be put ablaze in poor neighborhoods, then one can validly infer that in the future, *ceteris paribus*, a number of incidences of the same kind and in the same context will occur. However: *ceteris paribus*. That is: if all else remains the same. And this, precisely, is not guaranteed. There are an infinite number of factors that can be imagined, influencing past probabilities.

The latter kind of probability is closer to our daily experience, but it is important to understand that the difference with the a priori kind is untenable, precisely because *all* things have a context; no thing exists in isolation. As such: if there were one “kind” of probability that we intuitively feel to be closer to the truth, it would probably be this kind. Though sure we are not. And cannot be. For it might just be that the number of factors that can influence a thing are indeed limited, while the number of factors that can influence a context, on the other hand, are unlimited. The mass a thing contains, for instance, could be assumed to be limited, thus limiting its possibilities, while a context, on the other hand, could be assumed as unlimited, depending on how big one wants to take it.

Knight must have realized this difficulty, because he devotes ample attention to the presence of “simplified conditions” when dealing with matter, even in the natural sciences: *“Thus, in physics, the model and archetype of an exact science of nature, a relatively small and workable number of laws or principles tell us what would happen if simplified conditions be assumed and all disturbing factors eliminated. The simplified conditions include specifications as to dimensions, mass, shape, smoothness, rigidity, elasticity and properties generally of the objects worked with, specifications usually quite impossible to realize in fact, yet absolutely necessary to make, while the “disturbing factors” are simply anything not included in the specifications, and their actual elimination is probably equally impossible to realize, and, again, equally necessary to assume.”* (Ibid, p. 7)

Knight continues: *“Only thus could we ever obtain “laws,” descriptions of the separate elements of phenomena and their separate behavior. And while such laws, of course, never accurately hold good in any particular case, because they are incomplete, not including all the elements in the case, yet they enable us to deal with practical problems intelligently because they are approximately true and we know how to discount their incompleteness. Only by such approximations, reached by dealing analytically with the more important and more universal aspects of phenomena, could we*

*ever have attained any intelligent conception of the behavior of masses of matter in motion and secured our present marvelous mastery over the forces of nature.” (Ibid.)*

As such, Knight is entirely aware of the fact that our conceptions of physical matter are only “approximately” true, or, in other words: leave room for probability. And from the moment there is some probability “left” in a thing, there is theoretically nothing contained in a die that could not come out. Not even a cow with blue horns playing the trumpet. Given our experience, the probability of this happening will be estimated as very low, but low is not something one can attach to nothing: it is still the estimate of something. As such, this scenario is not impossible. It stresses our imagination – who would dare think such a thing – but even the most stringent logician will have to admit that anything is possible as long as probability cannot be fully ruled out.

In short: the distinction between the probability-contained-within-things (the a priori kind) and what we could call probability proper (that of contexts) follows the same scheme we could also observe in Mises: Knight is too sure about probabilities in that he thinks of them as existing in kind. They do not. There is no way to prove that the probability of throwing a die can be calculated with more certainty than the probability of wooden shacks being put to flames. Anything can happen. Any factor can intervene, and this in both cases. In the case of the die, the laws of physics that govern it are only “approximate truths”, holding the possibility that anything can happen. In the case of the wooden shack, past statistics do not yield any more certainty either.

As such, Knight is mistaken when he thinks that risk would be about “measurable uncertainty”, and uncertainty would then be about ... unmeasurable uncertainty, or, as he calls it: “cases of the non-quantitative type”. This distinction cannot be made. As far as can be ascertained, all is uncertain, even the probability of things we consider to be entire and whole. The very idea that uncertainty can be measured – and that that then would be risk – is flawed. In other words: uncertainty cannot be measured in any way. It is all-pervasive, across the board uncontainable and unlimited. As such, the only valid approach to the distinction between risk and uncertainty is to define risk as the perception of uncertainty – a perception, furthermore, of which we radically cannot know if it is true.

#### **4. The induction problem of Hume**

To show just how uncertain uncertainty is, it is worth taking the discussion to the philosophical level, and to scrutinize the arguments that have been raised by David Hume when it comes to theorizing about observed regularities. In his famous “Enquiry concerning Human Understanding” (Hume, 1748) he posits the argument that it is not because we have always observed that two phenomena appear together, that we may validly assume that they are somehow causally related. To

Hume, the idea that phenomenon B is caused by phenomenon A, just because it always follows phenomenon A, is only attributable to the experience of this “constant conjunction”. Our trust in causality and induction results from custom and mental habit. Logically, it is not necessary.

To a great extent, this is reminiscent of the logical error Mises commits when he assumes that others are human, merely because he thinks he himself is. The status of the imputation of humanity is, as we have seen, not that of a necessary logical conclusion, but that of a contingent psychological projection. It is a non sequitur. The argument Hume raises, then, is the generalization of that critique against Mises. As such, not only are we not sure that the action of others is human or not; we are not even sure causality exists. The impression that it does is very strong – although experimental findings in quantum physics have duly made us doubt – but we can never prove that it does: all we have is correlations, and these might just be randomly the same every time.

To illustrate this, Hume uses the example of "a billiard ball moving in a straight line toward another." (Hume, 1748, paragraph 4.1) We can see the two balls colliding and imagine a variety of effects: the first ball bounces back with the second ball remaining at rest, the first ball stops and the second ball moves, the first ball jumps over the second, etc. There is no reason to exclude any of these possibilities over the others. Only through the induction of a probability based on previous observation can it be predicted what will most likely happen. But at the same time, it is not necessary that purportedly causal relations of the past hold true in the future. It might just be coincidence that the first ball always bounced back with the second ball remaining at rest.

The natural question that follows, then, is why induction would be a valid method at all? If it cannot validate causality, then all might be based on coincidence. To make this problem explicit, Hume has challenged other philosophers to come up with a deductive reason for the presumed causal connection between observed events. If such a reason cannot be found – and up until this day nobody has been able to deliver it – the only way induction can be validated is ... by induction, a line of thought which is tantamount to circular reasoning. As such, the problem of induction is much bigger than the uncertainty of conclusions arrived at by induction: it doubts the very process by which these conclusions have been reached.

The importance of this problem cannot be underestimated. It is not only the case that causality cannot be validated inductively: it is even impossible to find a deductive reason for its validity. Hence, the conclusion is as simple as it is devastating: if causality cannot be validated, neither deductively, nor inductively, then no logical basis for any “logical” reasoning can be found. Is there any problem more critical to philosophy than this? As such, it would seem that the philosophical error Mises made in assuming a non sequitur is merely an instance of a far bigger problem: how can

we even be sure that any “logical” conclusion is actually more than a non sequitur? For all we know, all reasoning might be psychological projection.

How deep the crisis in modern philosophy is becomes evident when we contemplate that the very conclusion by which we arrive at the insight that logical reasoning cannot have a logical basis, has been obtained by a process that is ... logical in nature. In other words: if we accept our conclusion, we cannot even arrive at it. Behold: the grand idea of modernity – that truth can be discovered using reason – falls flat on its face. What we identify, using reason, is without doubt a certain reality. But whether or not it is the true reality, we do not know. It seems that truth is something that escapes any logical ratiocination. As such, every claim that purports to be “apodictically” true can only be such within a logical context. It does not mean that this logical context maps the true territory.

This is the problem that lies at the root of Mises’ error, and to correct it, we will have to go back in time, and up a couple of analytical levels. To find the point in time and space when philosophy went astray, it will be important to first grasp the root of the illusion. It is only when we find that point that we can repair the damage done. In later chapters, I will suggest that the problem starts with the egocentric philosophy of René Descartes. It was his thinking that installed the illusion that truth is something that can be discovered using reason. It will take serious effort to understand why only reality can be discovered, while truth simply ‘is’. But for now, that does not need to concern us. What we first must try and understand is the paradox of uncertainty.

## **5. The paradox of uncertainty**

Knightian uncertainty is not the only kind of uncertainty in the realm of probability theories. There are many other takes on probability, of which the Bayesian is the most famous one. In his 1763 “Essay towards solving a Problem in the Doctrine of Chances”, published posthumously, reverend Thomas Bayes (1701–1761) suggests that probability is not so much about a priori calculation of probabilities nor about what Knight would call statistical probability (based on frequencies in the past) but more about epistemic confidence – the strength of belief in a certain theory. Based on prior data about distribution, the acceptance of Bayes’ theorem allows mathematicians to calculate a new probability of the distribution of outcomes when a new factor is added.

Take for example the frequency of death caused by cancer. In and of itself, this is a probability. But if it can be established that cancer is related to age, then, using Bayes’ theorem, a person’s age can be used to more accurately assess the probability that they have cancer, compared to the assessment of the probability of cancer made without knowledge of the person's age. By performing many such try-outs with factors, the probability of a hypothesis can progressively be updated as more evidence

or information becomes available. As can be surmised, this inference of factors commonly called “Bayesian inference” has been very successful in a wide range of fields. It allows researchers to insert factors in a statistical model, and reach higher probabilities.

However, as one may already sense, the fact that it is indeed possible to update a statistical model A by trying out new factors and seeing if the probability values in model B are higher does not preempt the possibility raised earlier: that all is based on coincidence. The Gaussian distribution in statistics, for instance, has been called the “normal” distribution for no other reason than that whenever a set of elements is sufficiently large the values of its variables tend to converge to the mean. In a football team of eleven people, the average height of the player may be 1m81. In the football stadium where the team is playing, the height of the average supporter may be 1,79. But in both populations the value of the variable “height” tends to center around a certain number.

There is no proof, however, that this distribution of values is a necessary fact of reality. It might just as well have been coincidence, each and every time. The natural reaction to such a claim is the countervailing claim that this is very improbable. But as can be readily understood, this claim is just as much subject to probability as the measurement of probability itself. In other words: if all is probable, then probability theory itself must be too. The idea that one can limit uncertainty by modeling it – by adding or subtracting factors – is attractive yet essentially flawed: it assumes that uncertainty comes in degrees, where the number zero stands for total uncertainty and the number one for total certainty. The latter, however, is entirely non-existent. Or at least: we don’t know.

This then, has been the main critique on the Bayesian theorem from a philosophical point of view: the very idea that there can be degrees of probability “implies omniscience about deductive logic” (Talbot, 2016). It would imply that we know what complete certainty is. However: if it were possible to know what complete certainty is, probability analysis would be an empty subject. It is precisely because we do not know what the limits of uncertainty are, that we engage in theorizing on how to limit it. We might argue that even though we knew what complete certainty really is, probability calculus would still be useful to predict the outcome of some trivial issue, but this argument is invalid: if certainty exists somewhere, it must exist everywhere.

It would seem that uncertainty is so radical that we cannot even be sure that uncertainty exists. It might just be that uncertainty does not exist, and the universe is entirely regular. But we just don’t know. We can never be sure that a series in which we think to observe regularity really are regular. It might just as well be “randomly regular” in the sense that even the regular repetition of a pattern of observations is random. Vice versa, we can never be sure that a series in which we think no regularity is to be found actually is only part of a true regularity, be it one with a sequence that is so

large that the repetition of it falls outside the scope of one human life. It might just as well be that such a pattern repeats itself every one billion years, and in the meantime seems random.

An illustration of the fact that man has the greatest trouble of even conceiving randomness can be found in the complaint the technology company Apple received from its users shortly after the launch of its portable media player iPod. It was alleged that the Shuffle-function – that is the function purportedly starting a different song every time – did not work because it happened too often that songs were repeated twice. However, if results are truly random, even a straight sequence of one hundred repetitions of the same song is entirely within the possibilities. It was speculated that true randomness – whatever that may be – was “likelier to produce repetition than is a chain of totally unrelated selections”. (Janet Maslin, New York Times, 19<sup>th</sup> October 2006).

As a result Apple instructed its engineers to program randomness. Mr. Jobs, the company’s CEO at that time, has been quoted as saying “we’re making it *less* random to make it *feel* more random”. However, from a philosophical point of view this statement is entirely meaningless. As there is no standard by which to measure randomness – that, namely, is the essence of randomness – any idea of improving an algorithm in a non-deterministic way is necessarily flawed. It is this relation – that between the contingency of any determination and the necessity of uncertainty – that is mind-boggling to most people. Without maybe even realizing it, Mr. Jobs makes the same error as the Bayesian mathematicians: they assume that planning randomness is even possible.

Then how do iPods shuffle, one may ask? By programming a number generator, of which it is known, a priori, that its output is so different that it will be experienced by its users as random. Theoretically, the constituent elements of such a number generator are entirely discoverable. All that is needed – ironically – is an application of the Bayesian theorem. By setting up a number of factors in an explicatory model (1) and by checking if those factors explain more observations than other combinations (2), the original constituent elements can be reverse engineered. This, however, does not mean that probability is calculable. The design, namely, was logically certain from the start. The only thing that happens is the elimination of impossibilities.

The latter aspect is one of the main reasons why probability calculus has acquired such fame: logical settings are often confused with mathematical ones. When Alan Turing built his decoding machine at Bletchley Park to crack the Enigma machine during World War II, he used probability theory to try and limit the amount of possibilities his own machine had to check. But this does not mean that probability theory can exclude logical impossibilities. The moment it is sure that the system to be discovered is logical – for instance: a *definite* set of German ciphers – any possibility

that has been eliminated raises the *probability* that the logical solution will be found faster. It does not exclude the *possibility*, however, that the moment of discovery is exactly the same.

As such, probability and possibility must be understood as operating on two fundamentally different planes: the first is mathematical and depending on the second, while the second is logical and determining the first. That is: if the setting at least is finite. Infinite settings – such as reality itself – are not even logical in the sense that regularity cannot even be decisively determined. It belongs to the essence of infinity that we can never know if an observed regularity is indeed regular, or stops being regular somewhere beyond our epistemic reach. It is only by accepting the absurd premise of Frege – the idea that logic can be reduced to mathematics – that theorists such as Cantor have been able to “prove” – or so they claim – that infinities (sic) can be calculated.

This discussion, however, would lead us too far for present purposes. It will be taken up in later chapters. For now it suffices to observe that the paradox of uncertainty – we are so uncertain about uncertainty that we are not even certain if uncertainty exists – stands in stark contrast to any claim of certitude in human affairs. The logical derivations we can make from the axiom of human action may be “apodictically” certain, but only in a strict logical sense. We are not certain that they actually apply to the world we observe. If existence would be finite, it could be treated as a logical set, and this latter kind of certainty – true certainty – would be possible. All we have, however, is a kind of certainty that is all too real: that the paradox expressed as “nothing is certain” ... is true.



## Chapter II: Mises' psychological bias

### **1. The apodictical nature of the Misesian axiom**

The paradoxical nature of radical uncertainty is mind-boggling. On the one hand, it seems to acknowledge a truth – nothing is certain – but on the other hand it seems to harbor a contradiction: if really *nothing* is certain, then how can we even be certain that the paradox is true? The answer is that we cannot, but this actually demonstrates that there is no contradiction. This answer, namely, is entirely consistent with what the paradox claims: nothing is certain. And yet, somewhere along the way, we feel that our mind has flipped sides, not once, but twice: from a logical analysis to a factual analysis, and back. A paradox seems like a contradiction on first (logical) inspection, but then, after a second (factual) look, it reveals that its logic does hold, though we cannot precisely pinpoint why.

This remarkable quality of paradoxes is due to a curious conjunction of a logical reality and a factual reality: the fact that the person that is checking the validity of the paradox is included in its formulation. If really nothing is certain, namely, this also holds true for the individual that is checking the validity of this very statement, making the paradox not just self-referential, but even auto-legitimizing. A pure tautology – an “evening sunset”, for instance – does not include the observer. There is no creative tension emanating from it. A true paradox, on the other hand, always has a psychological side to it. As such, even the mere theoretical analysis of such a statement already produces fertile notions, which can then be put in a continuum of analysis.

The Misesian axiom clearly does not pertain to this class of statements. It is not a paradox. It is an (unproven) assertion about the nature of observed actions, combined with the (unproven) assumption that these actions are purposeful in the sense that the object performing them (for instance, a human being) is doing them because he or she (in the case we believe these objects to be human) is trying to achieve a goal. If *and only if* the combination of this assertion (humanity) and this assumption (purposefulness) is accepted, then *and only then* a body of theory follows. It requires human acceptance to be true. This is not the case with paradox: the mere analysis of its validity – whether accepted or not – is enough to produce a fertile theoretical continuum.

Instead of respecting the paradox of radical uncertainty, however, Mises has posited an axiom he deemed to be “apodictically certain”. Man acts, and the denial of that axiom is an action too – hence the axiom is “logically unassailable”. Any theorist who would deny this would be engaging in a performative contradiction, and as such, he would remove himself from any serious debate. But what about radical uncertainty then? Has Mises suddenly overcome this reality, merely by staking

his claim? Or has he built a logical system that is indeed impregnable, but at the same time also irrelevant? Asking the question is answering it: the goal of this chapter will be to show that what Mises sees as an objective logical system is in reality only a subjective psycho-logical system.

We need not repeat the basic philosophical error that lies at the heart of the Misesian system. We already know that the unproven idea that others are human is what gives Mises the impression that he can make logically valid statements about their actions, while in reality they are only psychological projections: because Mises thinks he is human, he projects this assumption onto others. We must now focus on some of the theoretical devices Mises uses to deal with the troublesome consequences of this basic flaw. It is only by performing such analysis that we will come to understand why everything is indeed logical from a Misesian point of view, which does not mean that it is logical from an objective point of view.

This analysis is not easy, because it touches directly upon our view of what is subjective and what is objective, which is a philosophical discussion in and of itself. What is objective to one person might come across as subjective to another one, and vice versa. In the case of the Misesian system, this analysis is extra hard, because Mises believes his subjectivist system is the one and only “objective” way to describe human action. But if so, how then does he respect the subjectivism of those who do not want to accept his system? These are not just rhetorical questions. These matters go to the heart of any theoretical system. And because Mises was so close to the truth, yet could not let go of logic to reach it, we find ourselves in one of the most difficult discussions in our field.

Therefore, before I come to conclusions about the essential flaw of the Misesian system – its objectivist bias – I want to focus on three unique features of his system: (1) his belief in the apodictical certainty of his axiom, (2) his theoretical conception of rationality and (3) his exclusion of psychological arguments. The first is in conflict with the second, and the third serves to protect his theoretical construction from any critique that might illustrate the conflict between the first and the second. By the end of this chapter, I hope two things will have become clear: (1) that his “error” is not really an error (like the philosophical error in chapter one) but more of a theoretical bias, and (2) that this bias is radically inevitable, revealing a second paradox: that of radical subjectivity.

If the reader accepts my position on radical uncertainty, it is easy to see how audacious claims as the ones Mises’ puts forth must necessarily fail. If uncertainty is radical, namely, then our concept of reality necessarily must be too. Ironically, Mises quoted Einstein in an all too relevant passage on this matter: “As far as the theorems of mathematics refer to reality, they are not certain, and as far as they are certain, they do not refer to reality.” (Mises, 1998, p. 39) Mises dismissed the quote on the assumption that what was true for the natural sciences did not need to have any import on the

social sciences. But this only shows the positivist stance of Mises when it comes to the natural sciences: no modern day physicist would even dare to doubt what Einstein has said.

We will come to that later. For now, it is important to note that there have been attempts to show that the assertion of apodictical certainty really only is a demonstration of Mises' own subjectivity, and not a demonstration of the "objective" existence of an apodictical certain theory. Inspired by Dr. Lachmann's critique on excessive formalism in economic theory in a particular sense (Lachmann, 1977), and the hermeneutics of Dr. Gadamer (Gadamer, 1960) in a general sense, Dr. Don Lavoie (Lavoie, 1988) argued that Mises is generally seen as an "Euclidian" theorist (one that departs from axioms deemed radically certain) but can as easily be interpreted as a hermeneutical theorist (one that respects the inter-subjective and dia-logical nature of theorizing.)

Together with Block (Block, 1989) I do not find this analysis very convincing. Though it is true that Mises, at some occasions, leaves room for sidestepping his rigid deductive system, it is only with the goodwill proper to hermeneutical theorists – in their view anything can be re-interpreted – that Mises could be read as a hermeneutic theorist. Quotes like "The theorems attained by correct praxeological reasoning are not only perfectly certain and incontestable, like the correct mathematical theorems. They refer, moreover, with the full rigidity of their apodictic certainty and incontestability to the reality of action as it appears in life and history." (Mises, 1998, p. 39) simply cannot be brushed away like out of the ordinary utterances – they are essentially Misesian.

The reason I mention the work of Don Lavoie, however, has more to do with the critique offered by Dr. Block, which is instructive for our focus: "Perhaps the most interesting part of the Lavoie contribution is his analysis of the textual evidence. He starts out well, citing Mises in several of his more "Euclidean" utterances. His first criticism is that Mises is a "bit free" (p. 200) in attributing certainty and incontestability to his pronouncements. Two responses are in order here. First, there is a failure to distinguish the claim that economics is an apodictically certain enterprise from the one that any particular economist, such as Mises, is apodictically certain. In the enumerations of Mises' words in his text, our author indicates only the former declaration, not the latter."

We will discuss the second critique later, but here, already, Block hits the nail right on the head: there indeed is a difference between the feeling of apodictical certainty Mises *personally and subjectively* attributes to his system, and the claim that economics is an apodictically certain enterprise in a *general and objective* sense. When it comes to Lavoie, however, Block is a bit over-zealous in his critique, for the former's intent was never to argue about this specific point. His intent was to show that Mises could be interpreted as a hermeneuticist. Nevertheless, in formulating his critique, Block does lay bare that there are indeed two different dimensions: the logical on the

one hand – the objective, demonstrable nature of a theory – versus the psycho-logical – the subjective *impression* about that objectivity – on the other.

Mises makes no distinction between the two. To him, whatever can be proven is objective and apodictically sure. And whatever cannot be proven is mere fantasy, to be relegated to the realm of psychology, which he saw as a science that needed to be severed of from praxeological analysis proper: “The classification of actions according to their various motives may be momentous for psychology and may provide a yardstick for a moral evaluation; for economics it is inconsequential.” (Mises, 1998, p. 234) If the enumeration of the various motives that impel man to action is really the task of psychology remains a question to be answered. But from this short passage it should already be clear that Mises did not even consider psychological arguments.

As such, it cannot be excluded that Mises’ subjective (and thus psychological) impression of having achieved objectivity indeed only is an impression. At least the theoretical possibility exists that his personal impression of objectivity does not coincide with “objectivity proper”. Whatever the status of that latter kind of objectivity is – my belief, for instance, is that it exists, but cannot be reached by means of logical ratiocination – one thing is certain: because of his exclusion of psychology from the realm of praxeological analysis, Mises could not even conceive the possibility that his system of thought was only one of many possible systems. He did not present his system merely as his way to understand human action, but as *the* way – period.

To a neo-classical or even a Marxist theorist, such a thing can easily be forgiven, for they do not even purport to be subjectivist. To the man that is generally seen as the greatest among the subjectivists – a view I do not share – we are legitimized to be less lenient: if Mises were a subjectivist through and through, he would not restrict his subjectivist analysis to the actions and theories of others, but also to his own actions as a theorist. He would acknowledge that his form of theorizing also serves a purpose, and not present it as the final truth. If he were a true subjectivist, he would have explicitly acknowledged what I have come to call the paradox of praxeology: if Mises wants praxeology to be the true and final method, he must allow for its denial.

He did not, however. As Lavoie rightly notes, Mises even “seems to be claiming not only uniqueness but also an exclusivity for his approach.” (Ibid, p. 201) The specific quote Lavoie uses to argue for this position is not very convincing to me, but his general point is: “The methodology of the science of Human Action which Mises explicitly formulated in his economic treatise of that name, was cast in Kantian terms and often described as a special category of knowledge that was inherently beyond any criticism. It is boldly presented as if it represented a completely unique

category of knowledge. In its purely formal and deductive character, praxeology is described as similar to logic and mathematics, it is even directly compared with Euclidian geometry.”

Lavoie is right when it comes to the Misesian predilection for certainty: “Aprioristic reasoning is purely conceptual and deductive. It cannot produce anything else but tautologies and analytic judgments. All its implications are logically derived from the premises and were already contained in them. Hence, according to a popular objection, it cannot add anything to our knowledge. All geometrical theorems are already implied in the axioms. The concept of a rectangular triangle already implies the theorem of Pythagoras. This theorem is a tautology, its deduction results in an analytic judgment. Nonetheless nobody would contend that geometry in general and the theorem of Pythagoras in particular do not enlarge our knowledge.” (Mises, 1998, p. 36)

As such, it cannot be denied that Mises thinks of his theoretical system as being as apodictically certain as that of geometry. His addition that “cognition from purely deductive reasoning is also creative and opens for our mind access to previously barred spheres” does not invalidate this point. It merely states that knowledge about the triangle and/or the praxeological system unlocks in equal fashion: when our knowledge about reality progresses, we suddenly notice new things. But to Mises, it stands above doubt that no experience can invalidate the correctness of praxeological reasoning: he has found the right axiom, and everything can be deduced from it. Doubting the axiom is impossible, since doubting is a human action. His universe is perfect.

## **2. The Misesian conception of rationality**

In the introduction I mentioned that the start of my interest in Austrian Economics came with the confrontation of two concepts of rationality: the objectivist one of Rand, which could be defined as “the volitional adherence to reality” and the subjectivist one of Mises, which sees *every* action that is aimed at pursuing ends with scarce means as rational – for that person. The subtlety of those last three words escaped me for a long time, but in the end I understood that there is no position that is not subjective, and that consequently, it is impossible to determine from an Olympus-perspective what is “truly” rational and what not. That is: at least not in *logical* terms. Truth may exist, but to reach it, one would certainly have to transcend ones own subjectivity.

The latter will be elaborated in later chapters. Meanwhile is it easy to establish that Mises truly is value-free when it comes to what can be considered as rational: “Human action is necessarily always rational. The term 'rational action' is therefore pleonastic and must be rejected as such. When applied to the ultimate ends of action, the terms rational and irrational are inappropriate and meaningless. The ultimate end of action is always the satisfaction of some desires of the acting

man.” (Mises, 1998, p. 19) In short: if a person acts, it is assumed that this act must make sense to the person – i.e. that it must be rational from the subjectivist perspective of the actor himself. Mises could look at any action, and call it rational – that is: purposeful.

Just how value-free Mises is, becomes obvious when we consider this quote about the nature of error in relation to rationality: “It is a fact that human reason is not infallible and that man very often errs in selecting and applying means. An action unsuited to the end sought falls short of expectation. It is contrary to purpose, but it is rational, i.e., the outcome of a reasonable – although faulty – deliberation, and an attempt – although an ineffectual attempt – to attain a definite goal.” (Ibid, p. 20) So even when applied to the means chosen for the attainment of ends, which later turn out to be erroneous, Mises refuses to attach the label “irrational”, for at the moment when this person thought his idea would work, his expectation was not unreasonable.

While it may be doubted if the choice to sell liquid ice (means) in order to achieve a higher income (goal) is rational, Mises very clearly chooses to call any deliberation – although faulty – and any attempt – although ineffectual – rational. The term “irrational”, then, is strictly reserve to describe realities and speculations that lie beyond reason. As a prime example he gives the notion of the Absolute and all speculations that are related to it: “The ultimate given may be called an irrational fact.” (Ibid, p. 21) To Mises, “the opposite of action” – by which he means rational action – “is not irrational behavior, but a reactive response to stimuli on the part of the bodily organs and instincts which cannot be controlled by the volition of the person concerned.” (Ibid, p. 20)

This is important for our research. Apparently, Mises equates conscious, purposeful, deliberated behavior with the term “action”, which he calls rational and could be attributed to the conscious part of our mind, and juxtaposes this with unconscious, unreasoned, impulsive behavior, to which he applies the term “reactive response”, which to his mind is truly irrational. As such responses cannot be controlled by our mind, they cannot really be called human. Mises affirms: “What distinguishes man from beasts is precisely that he adjusts his behavior deliberately. Man is the being that has inhibitions, that can master his impulses and desires, that has the power to suppress instinctive desires and impulses.” (Ibid, p. 16)

To make his point of view abundantly clear, Mises illustrates this with an example: “To the same stimulus man can under certain conditions respond both by *reactive response* and by *action*.” (Ibid, p. 20, italics mine) He continues: “If a man absorbs a poison, the organs *react* by setting up their forces of antidotal defense; in addition, *action* may interfere by applying counterpoison”. It is here that we can see another dimension of the Misesian conception of rationality: it’s equation with free will: our organs, when confronted with poison, cannot decide not to act. They only re-act, and this

by putting up their defenses. These defenses, however, may not be enough to counter the poison, and as such only volitional action – taking in counterpoison – may prevent the person from dying.

In short, the irrational, according to the Misesian conception, is about actions we cannot control or grasp with our mind and seem to cover two broad fields: the metaphysical – at least if that subject is understood as the philosophy which speculates about that which lies beyond reason – and the psychological – at least if that subject is understood as the philosophy which speculates about what lies beyond our conscious control. If we would have to draw up a diagram of reality with reason separating the outer and inner world, we would see that Mises accepts its limits: we can know a lot about both worlds, but the ultimate given beyond our outward rational reach is irrational, as well as the ultimate given that determines our inner world.

This conception of rationality is not your every day idea about rationality. It is not how rationality is commonly understood. To be rational, in every day parlance, comes down to “acting in accordance with logic.” To be irrational, then, comes down to doing things that thwart all established wisdom. Mises would not consider it irrational for someone to buy snake oil from a person who is widely known as an impostor, not even after the prospective buyer has been warned by his friends, his family, the police, the national health institute, a historian who has made a PhD on racketeering, nor by several dreams in which he sees his fortune get lost to swindlers. What counts, to Mises, is that the person has held a rational deliberation about his action and could at least theoretically control it.

While this conception of rationality might seem far-fetched, it does have undeniable methodological advantages. Researchers in the social sciences, for instance, are very often not aware of their bias when it comes to rationality. They have preconceptions of what is rational, and as such, the human beings they study are not viewed as necessarily rational because they pursue freely chosen goals. Quite the contrary: very often human beings are seen as “rational” only if they fit into the predictive models of the researchers. Behavior that falls outside of their model will almost surely be branded as “irrational”. The Misesian conception of rationality has no such troubles: all action is rational – when seen from the perspective of the person.

### **3. The exclusion of psychological arguments**

Next to the (objectivist) claim to apodictical certainty and the subjectivist conception of rationality the Misesian system is characterized by a third unique feature: its adamant exclusion of psychology. When I first researched this aspect, I was amazed to find that in post-Misesian literature no single theorist has given attention has been given to this fact. Yet there is ample textual evidence to not only circumstantially suggest, but even to conclusively prove that Mises declared psychology off-

limits, both as an object of study, and as a source of valid arguments when it comes to discussions on method. I have therefore taken it upon me to index all meaningful instances where Mises talks about psychology in his four major methodological works.

Let us start with the quotation that can set the tone for this whole section: “The field of our science is human action, not the psychological events which result in action. It is precisely this, which distinguishes the general theory of human action, praxeology, from psychology. The theme of psychology is the internal events that result or can result in a definite action. The theme of praxeology is action as such”. (Mises, 1998, p. 12) With this, Mises leaves no room for doubt: what Mises wants to study is what Rothbard has called “demonstrated preference”: action as such, and not the motivations that impel people to take action. Speculations about what goes on inside the mind of an actor may be interesting. But only when he visibly acts, praxeology can start its analysis.

This is not an unreasonable position. Many a charlatan has gathered a fortune selling vain speculations about the depths of the psyche, and the question what we would learn about the market price of bread if we know that a particular man buys bread at too high a price because his mother always told him that cheap bread holds no nutritious value, is a valid one. To Mises, the motivation or intent behind a particular action does not matter: “Whether an action stems from clear deliberation, or from forgotten memories and suppressed desires which from submerged regions, as it were, direct the will, does not influence the nature of the action.” (Ibid, p. 12) and as far as I am concerned, this is an entirely legitimate remark.

Mises also specifies the relation of praxeology to a specific take on the psyche, namely that of (Freudian) psychoanalysis: “This also settles the relation of praxeology to the psychoanalytical concept of the subconscious. Psychoanalysis too is psychology and does not investigate action but the forces and factors that impel a man toward a definite action. The psychoanalytical subconscious is a psychological and not a praxeological category.” He adds: “The murderer whom a subconscious urge (the Id) drives toward his crime and the neurotic whose aberrant behavior seems to be simply meaningless to an untrained observer both act; they like anybody else are aiming at certain ends.” (Ibid, p. 12) Mises is not interested in the motivations of actors, only in their acts.

Of course, Mises was aware of the fact that to perform praxeological analysis without reference to the contents of the mind would be impossible. To delineate just to where the analysis of the psyche could go, he introduced a distinction between what he called “naturalistic psychology” and “literary psychology”. (Mises, 1957, p.265) Naturalistic psychology, in Misesian thought, is the branch of psychology that tries to predict human behavior using experiments. It could be compared to today’s term neurology, in the sense that “all human thoughts, ideas, judgments of value, and volitions are



the product of physical, chemical, and physiological processes going on in the human body.” (Ibid, p. 94) It is a crude form of determinism (and materialism), which Mises rejected.

Literary psychology, on the other hand, simply focuses on the knowledge of human valuations: “The specific understanding of the historical disciplines is not a mental process exclusively resorted to by historians. It is applied by everybody in daily intercourse with all his fellows. It is a technique employed in all inter-human relations. It is practiced by children in the nursery and kindergarten, by businessmen in trade, by politicians and statesmen in affairs of state. All are eager to get information about other people's valuations and plans and to appraise them correctly. People as a rule call this insight into the minds of other men psychology. Thus, they say a salesman ought to be a good psychologist, and a political leader should be an expert in mass psychology.” (Ibid. p. 265)

Mises did not use the word neurology for what he calls “naturalistic psychology”. In his day, this science was not even born. But for what he called “literary psychology” he did introduce a specific term: “thymology”. Etymologically, the word is based on the Greek “θυμός” or thymos, of which Mises mentions that “Homer and other authors refer to as the seat of the emotions and as the mental faculty of the living body by means of which thinking, willing, and feeling are conducted.” (Ibid, p. 266, footnote 1) The concept of “thymology”, then, must be understood, not as the science that studies the psyche in and of itself, but rather the contents that can be found in it. (Mises, p. 265) This way, psychology in a strict sense is separated from the study of psychological contents.

The question, of course, is whether such a separation is valid. It seems very hard to separate the contents of one's thoughts with their psychological genesis. In a sense, thoughts could even be seen as reactions of the psyche to external or even internal stimuli. Is the thought of having an ice cream the product of conscious deliberation? Or is it rather the conceptualization of a desire that welled up from the unconscious? Is the thought of taking out a fire insurance caused by a conviction that came out of nowhere? Or is it rather caused by the conceptualization of an imagined situation, triggered by the burning down of a house in the neighborhood? When it comes to neurology, research results would certainly indicate the latter in both examples.

Mises prefers not to answer these questions, and to focus solely on the action that springs from it. He even relegates the well-established term “psychology” to the narrower field of neurology (or naturalistic psychology), and as such empties the common notion of psychology of its more idealistic components, which are then moved to praxeology. The remainder of this field – whatever is deterministic – is then relegated to psychology. The result, at least to Mises' mind, is a clear distinction between psychology and praxeology: “While naturalistic psychology does not deal at all

with the content of human thoughts, judgments, desires, and actions, the field of thymology is precisely the study of these phenomena.” (Ibid, p. 266)

This has important implications for our research. Since (1) Mises restricts the common notion of psychology to its deterministic contents and (2) Mises rejects determinism (ibid, p. 73) we can validly conclude that (3) Mises rejects psychology – at least in his conception of what that field should entail. However, precisely because he limits the common sense notion of what psychology entails – a notion we could describe as: “the study of the relations between the conscious and the unconscious.” – and by doing so rejects a constitutional part of it (all that pertains to the unconscious, which to him is even equated with the irrational – cf. supra) we can also validly conclude that Mises rejects psychology in the common sense described above.

Is there any discussion possible about this fact? Only in the sense that one would be able to claim to devote oneself to the study trees while limiting the notion of the concept “tree” to indicate only its trunk, thus evacuating the study of its more ephemeral parts – its crown – to another science (in this case praxeology). This, even without the many contradictions in Misesian thought – at one time praxeology is to be separated from psychoanalysis (Mises, 1998, p.12), while at other times psychoanalysis “deals with (their) thymological aspects” (Mises, 1957, p. 267), implying that thymology sometimes has to do with psychology (in the Misesian sense) and at other times must be separated from it – is evidence to conclude that Mises is at least confused about the subject.

#### **4. The close of the Misesian system**

The confusion about psychology in Mises is vast. At some point psychology is a sister discipline of pedagogy (Mises, 1998, p. 317) – no validation of this statement is given – and a bit down the line it suddenly is the science that can explain why people want stuff (ibid, p. 397). This in combination with “physiology”, by which we must assume Mises means the physics of the body. Or maybe even indeed neurology, if seen as the physics of our nerve system? No further explanation is given, and all of the sudden, the scope of psychology is again very restricted: “All that psychology can do for the explanation of this fact (someone taking action) is to establish as an ultimate given that man as a rule prefers the preservation of life and health to death and sickness.” (Mises, 1998, p. 126)

This confusion has a reason. There is a fundamental conflict that is lurking in the Misesian system, which is entirely psychological in nature: the fact that one can *factually* deny the axiom of human action, even though this would be an illogical and thus irrational thing to do in the common sense of that word. From a Misesian point of view, however, such an action cannot be called irrational: “Human action is necessarily always rational.” As such, theoretically, one is fully entitled to reject

the whole system that he has built on this axiom (1), while at the same time Mises contends that his system is universally true – that is: true, independent of the human action that is performed (2). It can only be one of two: either Mises allows (1), or he has to admit (2).

We have seen that (2) is out of the question. Mises is entirely, fully and apodictically sure that he has found the axiom by which to explain all human action. To his mind, there can be no question about denying the human action axiom, since that would amount to a performative contradiction. It is here that we see Mises' shallowness when it comes to his analysis of what is man. He never explicitly says that he considers man to be "the rational animal", but his whole philosophy is geared towards this notion – irrational behavior (in the common sense, not in the Misesian sense) is not even considered worthy of investigation. That is something for psychology, namely, and as far as Mises is concerned, that field of study is entirely "irrational" – because: beyond reason.

What we have here, is an illusion, consisting of three angles, that are seemed together at a very high level of perfection. First, Mises is apodictically sure about his premise. Second, rationality is deemed to be entirely subjective. Third, psychology must be excluded from praxeological analysis. The result is that any denial of his system can indeed be branded as irrational (or psychological), but that the status of this judgment is different for someone who believes in the Misesian system – who is "in it", so to speak – than for someone who does not believe in it. For the first category of people, the rejection of the human action axiom is an act of self-disqualification: the subject refuses to be rational. For the second category of people, the rejection is indeed irrational, but valid.

It is entirely thinkable, for instance, that one has good reasons to reject the axiom. We can imagine a potentate, for instance, trying to legitimize power. He might claim that he is an *Urbemensch* who has come to liberate humanity from the shackles of ignorance, or that he is really a messenger sent by God, instructed to take human shape. He might even claim that he is an alien from another galaxy who felt the need to come to our planet and instruct us; and in order not to frighten our little human minds, has decided to morph into human form. As history can testify, any fantasy can be used to legitimize power, and in the past potentates have been very creative in making up just the right story to hypnotize the minds of the gullible.

Mises cannot analyze this kind of action, at least not if he wants to preserve his analytical system, which is built, entirely, on the impossibility of its rejection. The only thing Mises can say without having to admit that his axiom can be denied – be it indeed purely irrationally, but who would dare to claim that irrationality is not human? – is that this person is irrational. But even that is impossible, because his own definition of rationality does not permit him to say such a thing. All Mises can do – and effectively does – is to typecast these non-market actors into the stereotypes of

“bureaucrats” (ibid, p. 377), “politicians” (ibid, p. 419), or even that of a dictator (ibid, p. 563). Though we cannot deny that these stereotypes do exist, *their* human action cannot be analyzed.

What has emerged, since Mises, is a slow but certain theoretical de-humanization. Individuals of flesh and blood have been progressively reduced to cardboard figures in the theoretical theatre that is Austrian Economics. Ever since Rothbard, for instance – his most important follower – it has become commonplace to dismiss the actions of central bankers, elected politicians and government officials as irrational, ignorant or even stupid. They are typecast into the role of scapegoat: the free market works, and when it does not work, its failure is projected on these categories of people, who “just don’t get it”. Long orations are held about the importance of the human action axiom, but the humanity of these non-market actors is all but denied.

To wit: I am not saying that Mises actively advocated that point of view. I am saying precisely the opposite: that Mises was unaware of this sordid implication of his theory. To claim that no action is irrational is logically equivalent to claiming that rejecting his system is not irrational either. But that was a contradiction he did not see – nor even talked about. To his mind, his subjective and thus psychological system was the objective and thus logical theoretical system. This is the essence of my critique on Mises: if he wants praxeology to be the universal method, he has to allow for its denial. But instead of taking this full-fledged subjectivist viewpoint – even on method – he ends up being an objectivist, excluding and prescribing what theory should be and not be.

Can we blame a theorist for doing so? As has been stated earlier: in the case of non-subjectivist theorists, we can’t. Their premise never was subjectivist in the first place. In the case of Mises, however, we cannot turn a blind eye merely out of sympathy: it is precisely by limiting the theoretical to the logical, and disavowing the psycho-logical, that the essence of our humanity is lost: the fact that we do not know what that essence is, and spend our lives trying to make sense of it all. One could call it the religious dimension. Mises talks about this, but only in rhetorical and fairly negative fashion. He does not incorporate it into his fundamental theory of the human condition; his analysis pertains to actions he cannot even prove to be human.

Long gone are the times where the German historicists, in search for a condescending term, would call the Austrian School “the psychological school”, without realizing that it was a complement, precisely because it indeed was a school that honored radical subjectivism. At no point in time, however, did Menger show any nihilist tendencies, which are usually attributed to taking such a radically subjectivist position. Even though Menger had no axiom to speak of, no theoretical exclusives, and not even a fixed method other than describing what he experienced, he won a battle

over method like no one had ever done. What is his secret? I attribute his success to his implicit acknowledgement of a second important paradox: that of total ignorance.

### **5. The paradox of total ignorance**

To claim that the Misesian system falters because of a conflict between his concept of rationality and his idea of an apodictically sure starting point of thinking might seem a bit exaggerated. At first sight, this problem could be fixed by admitting that the axiom can indeed factually be denied, thereby subjectivizing not only our methodological approach to phenomena we try to understand, but even the method itself: actively recognizing that it is entirely built on the psycho-logical assumption that others are human, while this cannot be proven. Some might even say that this analysis is really only a lot of fuss, “much ado about nothing”, because whoever doesn’t believe others are human does not even deserve to be part of the debate.

And yet, there is an entirely logical reason why this problem is not just a lot of fuss. One is free to consider the fact that someone can *factually* deny his axiom as a trivial sophism, but I venture that this would negate the essence of the problem: if Mises’ axiom would indeed truly be universal, this kind of denial would not even be possible. His statement, namely, – man acts – is a proposition about a class of elements: all men. So theoretically, there are only two options: either the denier of the human action axiom must be explained as not human, or the axiom of human action is only valid for those who take an oath and swear that they are human. In the first case, we dehumanize those who do not want to agree with Mises. In the second case, his axiom cannot truly be universal.

Whatever logical consequence Mises chooses, his system breaks down. If he chooses option one, it becomes very clear that his system is not *subjectivist* in an objective, logical sense, but merely *subjective* in a personal, psycho-logical sense: Mises determines who is human and not. If he chooses option two, it becomes equally clear that his axiom cannot pertain to all objects he would like to see as human, but only to those objects who actively agree to take the oath that they are human. The difference between being subjective and subjectivist, then, is the difference between being psycho-logically biased, but not necessarily being aware of this, and logically acknowledging that very bias, in the full awareness of the paradoxical status of that acknowledgement.

Mises seems to be a case of the former, thinking he is the latter. There is no indication, namely, that Mises actively acknowledged his subjective bias. Quite the contrary: his impression was that he had found an apodictically certain axiom, yielding an unassailable universal system. His bias, however, must be clear by now: to think that man can be explained in logical terms. His axiom, namely, is not “wert-frei” at all. It implies that the elements of the class of which it claims to be the all-explaining

root can only be understood in logical terms. He makes the subjective choice of excluding certain human behavior – which he calls psychological or irrational – and presents the inability of psychology to counter praxeological arguments as the objective truth.

This, however, is not necessarily so. All depends on one's definition of both psychology and rationality. It would seem that the Misesian conception of these terms is quite out of touch with their common understanding: rationality, to him, is purposefulness, and psychology, to him, broadly equates with the study of the unconscious, which he associates with irrationality. In common day parlance, however, the irrational is simply the illogical and psychology is precisely about the relation between unconscious behavior and our conscious awareness of that behavior. As such, we cannot exclude the possibility that these Misesian conceptions are part and parcel of a skewed triangulated system of beliefs, fitting to what Mises wants to see in the world.

The problem, however, is that we cannot conclusively prove this hypothesis either. My theory about the subjective (and not subjectivist) nature of the Misesian system, namely, might be suffering from the same defect. It cannot be excluded that for some psychological reason I think my line of thinking to be subjectivist, while I am only being subjective. The hallmark of unawareness is, quite tautologically, that one is ... unaware. This brings us to the second paradox at hand: our radical ignorance about whether or not our theory actually explains objective reality. It might just be that all is biased, but if that is true, even that theory is biased, and as such we radically don't know. Our bias, as human beings, is to think we have no bias. And even that statement might be biased.

Special notice must be made of the fact that it is not enough to call this reality “the paradox of radical subjectivity”, or “the paradox of inescapable bias”, or anything that would express that man cannot help but starting from a unique methodological position. This would only draw our attention away from just how radical our ignorance is. The point is not that we are biased and must keep this in mind when analyzing reality. The point is that we radically cannot overcome our bias and that as such, no point of view *whatsoever* can identify objective truth. This also includes all possible viewpoints on method, including the one just mentioned. Paradoxically, then, the only thing we know is that we know nothing.

This ties directly into what Socrates is attributed to have said when Plato lets him talk about this paradox of knowledge in Apology (Plato, Apology, 29b): “When I left him, I reasoned thus with myself: I am wiser than this man, for neither of us appears to know anything great and good; but he fancies he knows something, although he knows nothing; whereas I, as I do not know anything, so I do not fancy I do. In this trifling particular, then, I appear to be wiser than he, because I do not fancy I know what I do not know.” Here, Socrates does not only seem to be entirely aware of the

radical subjectivity of the theory of his opponent, but even of the radical subjectivity of *any* theory, including his own, which comes down to our total ignorance about the nature of reality.

How fundamental this paradox is, cannot be fathomed, precisely because of our inability to know the extent, let alone the existence of our bias. It is tempting, namely, to presume that the paradox of radical uncertainty must somehow be more fundamental. But by which standard could we compare radical uncertainty with total ignorance? The answer can only be: by necessarily indeterminate means. There is no way to logically link something that is so uncertain that it has no fixed features with something that is so unknowable that we do not even know if we can know it. And yet, the connection between both paradoxes must necessarily exist. And that, in and of itself, is yet another, paradox, the importance of which is enormous for the original Austrian theory: that of Menger.

In summary: Mises' bias is that he has no bias. Or at least: that is our assumption. The phenomenon of bias, namely, is so radical that we cannot even validly criticize Mises for being biased – if bias is indeed radical, our theory about bias will be biased too, and as such, no *logical* critique of another theoretical system is possible. This is fundamental: *any* critique that is given from one theoretical position *can only be* psycho-logical – that is: logical, when the premise of our own bias is accepted. Logic, in and of itself, is merely “the art of non-contradictory identification” (Rand, 1963, p. 125). It has nothing to say about its own starting points. Those are entirely non-, a-, or meta-logical, or, to put it in Misesian terms: entirely “irrational”.

It is clear that Mises did not realize this fundamental truth. To him, logic proceeded from “the logical structure of the human mind” (Mises, 1998, p.4), which not only displaces the problem, but makes it even worse: this position tries to validate logic by presenting it as the outcome of a *historical* process. Something, to wit, Menger never would have done, for his whole mission was to combat the implicit nihilism generally known as historicism. It is through the discussion of Menger's “irrational” assumptions (at least: in a Misesian sense) that we will start to understand why Mises cannot be called an Austrian: he does not respect the Logos, proceeding from accepting the trinity of aforementioned paradoxes.

## Chapter III: The transcendence of theory

### **1. The fundamental problem of any theory**

In the former chapter, we demonstrated the existence of two important paradoxes: that of radical uncertainty, and that of total ignorance. The first one is fairly easy to understand, once one has come to the conclusion that Hume is indeed right: from correlation causality does not necessarily follow. The second one is far harder: it requires personal awareness about the non-objectivity of any theory. Logic, in this regard, must merely be understood as a tool used to objectify differences. It can never eradicate the subjectivity of the individual that is using it. All depends, as has been said, on what is considered to be a valid starting point of thinking – a choice, it must be stressed, which cannot be made logically, but only psycho-logically: by wanting it to be true, or: believing it.

This theme is of the utmost importance for Austrian theory, since it determines what is accepted as a valid method. The building of grand theoretical edifices like Mises did, for instance, cannot overcome the second paradox: the fact that we are radically unable to discard the logical system of any other theorist on the basis of its lack of objectivity. We never know, namely, if our own logical system is not equally subjective. The point is not that we would be unable to criticize its internal (logical) inconsistency or its external (factual) relevance. The point is that these arguments can only give us *circumstantial evidence* that the theory is wrong, and not *final proof* that it really is. It must be understood that delivering such proof is radically impossible.

But how then, can we make any advances in theory at all? If it is true that what we consider to be valid logic merely depends on what we consider to be valid premises, the latter being an entirely subjective, psycho-logical matter, do we not end up in a nihilist, kaleidoscopic universe where all is true and untrue at the same time? As a matter of fact, at least when we do not transcend the logical realm, we do. If we fully understand the second paradox, we will come to the conclusion that it might just be that our appreciation of facts is so skewed that we are locked up in a triangulated theory of reality ourselves. For instance: who can be sure that Rothbard, when “Breaking out of the Walrasian Box” (Rothbard, 1987), did not simply enter broke into his own?

Several authors (for instance: Schleiermacher – 1874; Otto – 1923, to only name a few), have testified how, once the reality of unbridgeable epistemological subjectivity is fully realized, a sensation that has been described as the “mysterium tremendum et fascinans” takes hold of the psyche. It is the combination of fear and fascination for the grand mystery that is reality. The fear, in case, is that for the loss of all meaning. If it is true that no theory can reach full objectivity –



usually expressed such terms as “true truth” or “real reality” – then what is the use of our whole epistemological endeavor? Would social constructivists really be right then, when they say that all theory is a mere game of power?

At the same time, however, there is the fascination for the fact that the acceptance of this loss of meaning is dictated by logic itself. Thinkers holding the position that “true is what can be proven” are forced to give up that position, and this as the result – o mystery – of an entirely logical process: if it is true that only what can be proven is true (1) and if it is true that the basis of logic cannot be proven to exist (2), then the logical conclusion must be that (3) logic isn’t true. In other words: the modernist idea, that “truth is the recognition of reality” (Rand, 1963, p. 126) comes into crisis with itself, because the only “true” recognition of reality can be that human reason cannot transcend its own biased pre-disposition: the correspondence theory of truth is impotent in that regard.

The fundamental problem of theory, then, is that it can only deliver us an inter-subjective view of reality, based on an agreed upon premise. If we would imagine truth to be a square box, then our theory would be a round ball in that box: we can spin it around its central point in all directions, but we can never touch any side of that box with it, not even it’s bottom. The only thing a theory does, if we take that central point to be our personal perspective looking out, is to organize the images we believe to detect on the inner sides of that box, without the possibility of ever knowing if these images really are there, or maybe are only skewed impressions, caused by our the curvature of own theoretical construction. This inability is so radical that we do not even know if the box is there.

What we can try to do is to transcend all logic. This, however, can only be done by an act of faith, an intellectual leap into the uncertain and unknown, the equivalent of submerging ones self in what seems to be irrationality, at least before we take that leap. Precisely because of that perceived irrationality, we often do not dare to take that step, because we fear that all it can yield is nihilism. Ironically, it is only after taking this fundamental leap that one realizes the nihilist joke was on the old, “pre-leap” you. Before you could muster the courage to take it, namely, you were holding two radically incompatible positions: (1) that of believing logic is the alfa and omega of true knowledge, and (2) that of refusing to accept the logical conclusion that it cannot possibly be.

There is no way to describe what one experiences when taking that step. It is like entering a new dimension, without invalidating the old: the formalism of definitions is still valuable, but it is now superseded with a fullness of meaning never experienced before. One suddenly understands what the difference between truth and reality is, and one is amazed to find that it is exactly the inverse of what one always thought. Once one has overcome the fear of intellectual death, the definition of “true” changes, from “the correct recognition of reality” – which seems to be a logical definition,

but in reality isn't – to “that which brings man closer to infinity” – which is an entirely non-logical, and even vague definition you would have laughed at, before your leap.

And yet, it is the only way to prove anything about the presumed lack of validity of the Misesian system. As has been said before, demonstrating its logical inconsistency or factual irrelevance will not help, because we do not know if our theory does not suffer from the same defects. But we can demonstrate the erroneousness of the Misesian theory via another way, which is in fact a meta-method: by pointing out a psycho-logical fact that is incontestably true about Mises. This fact is not about (1) his theory in relation to reality, nor about (2) his theory in relation to its constituent parts. This fact is about his psychological attitude in regards to his own theory. This fact is in fact (no pun intended) a meta-fact: a non-logical, yet highly relevant feature of his demonstrated preference.

Proof for the invalidity of the Misesian system, then, lies in the following simple ascertainment: he did not mention the paradox of total ignorance or any textual expression that could be interpreted as a reference to it. Until and unless a theorist can provide a quote in which it becomes clear that Mises was aware of this paradox, we must assume that he wasn't. And if he wasn't, his theory cannot possibly be right. Not because its logic would be inconsistent – that depends on what one sees as a valid premise. Not because its conclusions would be trivial – that depends on what one sees as relevant facts. But simply because he did not acknowledge a feature of reality that is so fundamental *that it even must be a part of every theory describing it*.

This meta-theory of proof, then, states that the lack of an explicit reference to this paradox is enough proof to conclude that he was not aware of them. If he had been, namely, he would not have held them back as comments on the side, *but would have acknowledged them as essential parts of his theory*. No theory about reality that ignores its constituent phenomena – radical uncertainty, total ignorance, and the third paradox we are about to discuss – can be assumed to hold true, and this in a radical sense: these paradoxes must lay at the basis of theory itself. One can have a theory about certainty, as long as one explicitly acknowledges one is not sure that the theory is true. If one fails to do this, one has developed a logical system, but we can be *sure* it says nothing about reality.

## **2. The paradox of necessary indeterminacy**

We are in meta-terrain, and to the non-transcendent reader my propositions might come across as far-fetched. Within a couple of sections, however, I hope to prove that they really aren't. There is one paradox, namely, that we have only mentioned, yet the understanding of which will get us back on the logical track, so to speak. At the same time, it is the hardest paradox to understand, because it requires a full grasp of the two first. If one does not acknowledge that uncertainty is radical, and

if one does not understand that our ignorance about whether or not our subjective theory describes reality is total, it is impossible to understand that the relation between these two paradoxes must be one of *necessary* indeterminacy, thus constituting a third paradox.

The first and seemingly most fundamental paradox is that of radical uncertainty, and can be seen as metaphysical in nature: we are so uncertain about the existence of uncertainty that we cannot even know if uncertainty exists. The second and seemingly derived paradox is that of total ignorance, and can be seen as epistemological in nature: even if we do construct a logically coherent system of statements of which we presume that they identify reality, we still do not know if they objectively “map the territory” (Korzybski, 1933), or are merely our subjective, psycho-logical visions on/of reality. The third one is the relation between both: it is radically indeterminable whether the first paradox is indeed the most fundamental one, giving rise to the other, or vice versa.

One can try to determine which paradox was first, but it will soon prove impossible. Is it the fact that we can never arrive at an objective theory without ignoring our own subjectivity that gives rise to radical uncertainty? Or is it the fact that uncertainty is so radical that we cannot even conceive an answer to the question whether total ignorance is merely a logical implication of radical uncertainty? These questions are mind-boggling, to say the least. There is no way to determine what was first: radical uncertainty, or total ignorance. The only thing we know is that the status of their logical relation *necessarily* must be left undecided. Determining this status is impossible, and not just logically impossible, but even factually impossible – that is: impossible in every possible way.

Recognition of this paradox is scarcely one hundred years old (Heisenberg, 1927) and in the social sciences it has not even been arrived – at least not to my knowledge. In common day parlance, namely, the principle that Heisenberg has identified when studying the relationship between the momentum of a particle and its position is referred to as “the uncertainty principle”, which comes down to the idea that measuring the speed with which an electron moves prohibits us from knowing its exact position, and vice versa: when we measure its exact position, we stop its momentum, and therefore cannot know its true speed. It appears as if we have to choose one of two strands of knowledge: or we know the particles’ true speed, or its true position.

This common conception, however, is entirely erroneous, because it does not do honor to just how fundamental Heisenberg’s principle really is: the point is not that we have to choose between either knowing the exact position or the true speed of a particle. The point is that it is radically impossible to determine both at the same time. The difference in approach seems subtle, but it isn’t. To claim that one can measure the true and thus certain speed of a particle is the same as claiming that it has no position, since full and true measurement of such speed can only occur when literally nothing is

stopping that particle. If so, then how can anybody measure it? Measuring implies that there is contact between the thing measured and the method used.

Vice versa, the same thing goes. To claim that one can measure the exact and thus certain position of a particle is the same as claiming it has no speed at all, since full and exact measurement of such a position can only occur when literally nothing is moving that particle. If so, then how can any method measure it? Measuring, again, implies that there is contact between the thing measured and the method used, and as any such contact would certainly move the particle – giving it speed, and thus an uncertain position – its exact location can never be ascertained. As such: to call this most fundamental of observations merely the “uncertainty” principle and not the “indeterminacy” principle is proof of not understanding just how deep Heisenberg’s insight was.

As of present, I call upon the scientific community to recognize a Second Indeterminacy Principle: if we acknowledge that the relation between the speed and the position of a particle is indeterminate, then we might just as well acknowledge that the relation between the method and the meaning of a concept is just as well. If we try to state the method by which we have arrived at a concept in fully clear and certain terms, it loses all meaning. This is what the logical positivists have tried under Carnap with their “rational reconstruction” (Carnap, 1925) and they failed. They arrived at a fully consistent and exact language, that much was true. But they had to recognize that it had lost all relevance in the sense that it could no longer explain observed reality.

Vice versa, the obverse is also true. If we try to describe the meaning of a concept exhaustively – that is: to its fullest extent and in its full dynamics, we lose all clarity. This especially the case for higher-level concepts such as “love” or “justice”, which require so much explanation in terms of lower-level concepts, that one sometimes gets the feeling of having to explain the whole universe to someone who has not yet acquired the necessary amount of definitions. The sort of concepts where this tendency is the clearest is metaphysical concepts such as “God” or “infinity”: no amount of definitions – that is: no fixed method – can ever explain the wealth of meaning subsumed by these designations. In a sense, in trying to bring out that wealth, one paradoxically gets lost in vagueness.

This is not a coincidence. We already quoted Mises, dismissing Einstein when the latter ascertained that “As far as the theorems of mathematics refer to reality, they are not certain, and as far as they are certain, they do not refer to reality.” (Mises, 1998, p. 39) But we cannot make the same mistake as the common populace has done when referring to Heisenberg’s indeterminacy. The relation between meaning and method, namely, just as the relation between momentum and position, is not uncertain at all. We at least know it must exist, for in both cases method must make contact with

reality, yielding to a meaningful measurement. What we must try and understand is that the relation between meaning and method is indeterminate: that is – we do not know which determines which.

Is it the method that determines the subject? Or is it the subject that determines the method? We could argue for both. I cannot measure the length of a table with a survey, nor can I measure public opinion with a meter. But neither can I determine that a meter is the right measurement for that table without acknowledging at least one characteristic of that object: that it has length. Nor can I determine that a survey is the right measurement for that subject without at least acknowledging one characteristic of the public at large: that it has an opinion. Going onto the streets and trying to measure peoples opinion by using a meter can yield comical effects, but it does not yield meaning. Likewise, asking the table's opinion about his own length cannot be counted as a true method.

Method and meaning, then, have a necessary but indeterminate relationship, and without explicitly acknowledging this strangest of paradoxes – how can something ever be necessary and indeterminate at the same time? – is essential for the production of “good” theory: that is theory, which can describe reality as it is, and not just a version of reality. It may take quite some time for the scientific community to understand the massive importance of this requirement, but one thing must be understood, and must be understood deeply: actively acknowledging the paradox of indeterminacy and the two other paradoxes is not enough. That requirement is much more fundamental: all three of them *must form a constitutional and active part of any theory*.

But how do we do that? How do we operationalize these insights? And what do they have to do with Austrian Economics per se? All of that will become clear in the next sections. For now, it is important to notice that these three paradoxes – radical uncertainty, total ignorance and necessary indeterminacy – share a common essence: all three of them relate, in some way or another, to one of the most ephemeral concepts ever conceived. Truth be told, it is not even a concept, for it does not refer to any specific thing in reality. Quite the contrary: it refers to everything (which includes every thing), even to the very minds that are trying to determine whether these paradoxes are true or not. What these three appearances refer to, namely, is the same essence: infinity.

### **3. The Holy Trinity of Paradox**

Grasping the paradox of necessary indeterminacy is no easy feat to accomplish. It requires the acceptance of the first paradox, and the insight that this very acceptance activates the awareness about the second paradox. Only after a while, one also realizes that there must be a relation between the two, a relation, furthermore, that cannot be logical in kind, yet must be true. In my case for instance, my former concepts of truth – “the recognition of reality” (Rand, 1963, p. 126) – got

flipped upside down in the most violent manner: true was no longer what corresponded to reality (the correspondence theory of truth), but “that which brings man closer to infinity”, a definition I will come to in the course of this chapter.

The reason I had to let go of my former definition must be obvious by now: the simple fact that the relation of my own, biased mind to general, radical uncertainty could never be one of stable, logical quality is enough to destroy any correspondence theory of truth. The idea that man goes into the world and discovers truth by means of a combination of logical ratiocination and empirical survey is true, but only true in a trivial sense. The key insight, namely, is that he does discover truth in this manner, but only after he has been frustrated enough by not finding it when employing precisely this method. The method has to die, so to speak, before it can be reborn in such a way that it truly delivers identifications that are meaningful.

I do not take the analogy with quantum physics to be a coincidence. Just as a quantum leap happens only when enough positive energy (potential) is amassed below the limits of what is physically visible, the same leap in method occurs if enough negative energy (frustration) has amassed below the surface of our conscious mind. One starts to realize that something ineffable lies at the core of those three paradoxes that unites them, the acceptance of which enables us to see reality in a wholly different way. As long as we do not accept that ineffable essence, our mind struggles and fights and it feels like it will never have the possibility of ever winning. It is like playing a tennis match with your mind on both sides of the net, but without even a net.

For a time, one understands what Kierkegaard said when he quoted the essence of our existential plight, not by defining it – by now one realizes such a thing has truly become impossible – but by describing it: “I stick my finger into existence – it smells of nothing. Where am I? Who am I? How came I here? What is this thing called the world? What does this world mean? . . . Why was I not consulted, . . . throwing me into the ranks, as if I had been bought by a kidnapper, a dealer in souls? . . . And if I am to be compelled to take part in it, where is the director? . . . Is there no director? Whither shall I turn with my complaint?” (Kierkegaard, 1843, p. 23) What Kierkegaard describes is a psychological state of utter disorientation; so meaningless that even anxiety is useless.

What is this ineffable essence that lies at the core of the three appearances we have been able to identify? What is it that radical uncertainty, total ignorance and necessary indeterminacy have in common? To find an answer to that question, we must deconstruct these paradoxes one more time, and to do so, it is instructive to recall a remark I made when discussing the first: that uncertainty is only radical, because existence is not finite. This is the exact phrase I used: “It belongs to the essence of infinity that we can never know if an observed regularity is indeed regular, or stops

being regular somewhere beyond our epistemic reach.” Let us consider this argument again, and see if it applies to the two other paradoxes as well.

What is the argument? Quite simple: that if existence would be finite, we could at least know if the concatenation of facts is regular. Regularity, namely, is the death of uncertainty: if a fixed pattern can be found, no uncertainty can exist. But this – the presumed finiteness of the universe – seems to be the problem: we do not know if it actually exists. It might just be that it doesn’t, and that reality extends into infinity. But the problem is twofold: we do not only not know this in actual fact, we cannot even know this potentially. To do so, namely, would mean that we could stand outside of infinity and observe it from there. But if so, then how can what we are observing ever be infinite? Infinity does not stop at the frontiers of our senses – it runs in every direction.

This description of impossibility is reminiscent of the second paradox: that of total ignorance. The reason we are totally ignorant, namely, is because we never know if our finite logical systems – we tend to call these systems “theories” – actually cover the whole of reality. It is always possible, for instance, that a factor emerges, upsetting all we thought we knew. When Young performed the first version of the double slit experiment, for instance, his research results thwarted all common sense, and it took us more than two hundred years to realize that our former mechanical theories about the universe, largely inspired by Newton, were not necessarily false but simply were not as universal as we thought they were. As such, the phrase “you never know” expresses more than a trivial truth.

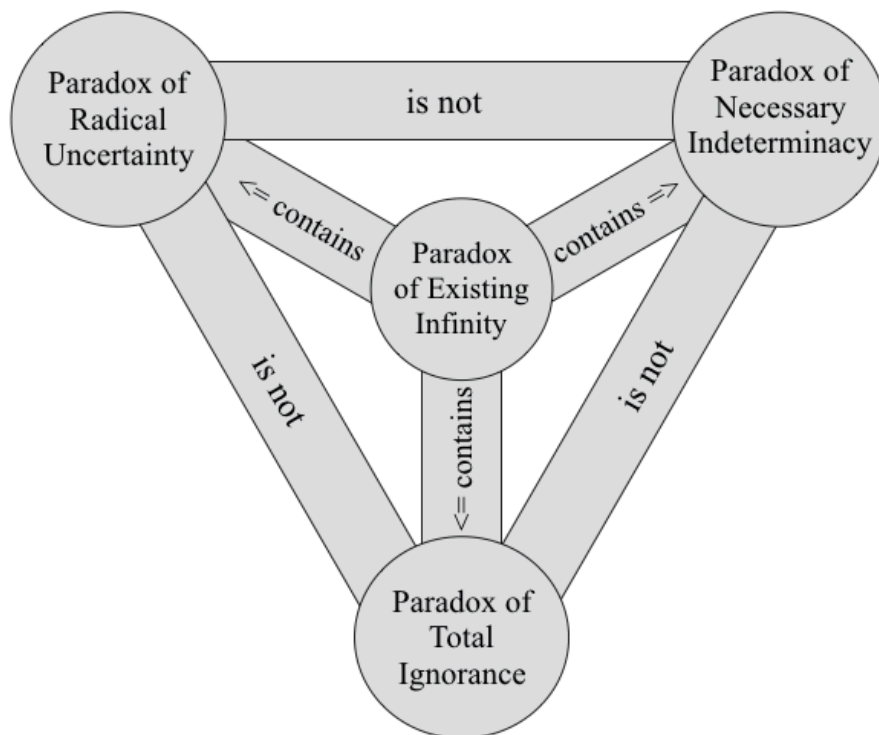
This inability to ever know – that is: to ever be entirely certain – also directly ties into infinity. If existence would be finite, namely, there is no way we could not know all there is to know: every thing could be indexed, measured, weighed and categorized. All logical relations could be found out, and the grand illusion of the positivists – to know all things – could be realized. Yet, this is not how the cookie crumbles. It seems that reality is indeed infinite, and that as such, all we know really comes down to all we *think* we know, which is not the same. To know is to be certain. And how can anyone be certain, if there is a potentially unlimited amount of things we do not yet know? It might even be that the void materializes before our eyes, no matter how far we reach in space.

As such, at least radical uncertainty and radical ignorance share the same radix, or root: infinity. But what about the third paradox, that of necessary indeterminacy? Can we prove that it relates to infinity as well? It is tempting to conclude that if the two phenomena it relates to both have infinity at their root, this must be the case for necessary indeterminacy as well. But let us not forget that exactly such logical inferences are impossible when it comes to discussing an indeterminate relation. Delivering proof that infinity indeed lies at its core is not easy. Its infusion with infinity

must be demonstrated in an independent way, yet cannot but talk about the relationship between radical uncertainty and total ignorance.

There is only one way to achieve this: to illustrate the inevitability – and as such to demonstrate the necessity – of infinite regress. No matter what part of the indeterminate relation between radical uncertainty and total ignorance one takes as a starting point of analysis, one will always find that the one regresses into the other and back – and this without end. One can ask oneself the question if radical uncertainty exists, but this question will inevitably lead to the question how we can know this. And if one contemplates this question, one will inevitably come to the conclusion that reality must have the quality of knowability to be able to answer it. To contemplate the knowability of reality, however, leads us right back to the question if regularity (or radical uncertainty) exists.

As such, I consider it proven that the common essence lying at the basis of our three paradoxes is infinity itself. To conclude this section, we can draw up the following schematic representation, outlining the relations between infinity (the essence) and the three paradoxes (the appearances):



**Figure 2: The Holy Trinity of Paradox**



#### 4. The spectre of nihilism

Can we call the discovery that infinity lays at the basis of our trinity of paradoxes as a form of epistemological progress? It seems like whenever we discover a paradox, namely, a new one emerges. After the paradox of radical uncertainty we discovered the paradox of total ignorance, and after the paradox of total ignorance that of necessary indeterminacy. And now it would seem that at the heart of these three paradoxes, lies yet another one: the paradox of infinity. Existing, namely, comes down to having shape, taking form, having borders. A tree exists, water exists, concepts exist. But if infinity exists, then how can it *not* be finite? If we define existing as “having borders”, then it is clear it cannot exist. Are we believing in illusions? Or should we change our definitions?

Let us first begin with the question if we have made progress. That question is quite easy to answer in the positive. We know we have proverbially “hit rock bottom” with our methodology for the simple reason that there is no other, more fundamental paradox imaginable: beyond infinity, there is nothing. Or, to be entirely precise: that is what I personally believe. I cannot prove that infinity exists, namely. And even if I could prove it, it would seem that I have actually disproven it, at least given the former definition of existing. The existence of infinity, or so it would seem, is radically uncertain, unknowable and indeterminate, although nobody can actually prove it is. It must be clear: of all paradoxes discussed, this is truly the most fundamental one.

To understand it, then, we need an extra tool. We need to posit a new concept that expresses the very difficult notion that something can exist without existing. To the Objectivist reader, this notion is an absurdity: existence is all there is. Yet no one can fail to notice that between existing things – that is: things that have shape – we can still imagine something else to exist: space. This reality, however, is not something that we can observe with our senses: what we observe is only the object across the imagined space. There is no way of proving, namely, that space *qua space* actually exists. Yet it is entirely possible. It might just be, for instance, that all shapes exist inside out, and that what we observe as objects, are really only the inner borders of the one big object we live in.

However, even if that were true, the epistemological status of space would still be a problem. Even if we imagine to be living at the center of a big object, the space between our senses and the outer borders of that object does not cease to exist. Or, to be more precise: the distance does not cease to exist, which is not space in and of itself, but a measure of the space between two objects. Whether or not space in between those objects exists, however, is not answered by that measurement. It is not because we can pull a string between two trees that this necessarily implies that the space between those two trees exists. There might just as well be nothing in between them. And as a matter of fact, hardly any theorem in physics is done without reference to the vacuum.

But is space really empty? Or is it full? This question, although it seems like a trivial one, is one of the most fundamental questions in philosophy, because it masks a very deep divide between two kinds of thinkers: those who believe in the transcendent nature of reality, and those who do not. To the former category, namely, nothing does not exist, implying that space, although it is not a thing, is at least something. To the latter category, such considerations are simply meaningless: all that exists is matter, and space is merely the stage on which this matter interacts. It has no status in and of itself. To them, metaphysics is a swear word. They prefer the term “ontology”, so as to refer to the basic structure of things, which can then be apprehended by means of epistemology.

Yet ontology is always about things, never about the space in between those things. Metaphysics, on the other hand, covers both, and sees space as something that “has existence” too. However, it does not use that wording, for it would become quite obvious that this is a contradiction: existing is having shape, and the whole point is that space does not. Or, at least: we assume it doesn't. We just don't know. I venture that this is why sages in all places and all times have used another term that sounds like existing, yet isn't. In all natural languages, namely, a difference is made between “ser” y “estar” (Spanish), “Sein” und “Existieren” (German), “zijn” en “bestaan” (Dutch), “être” et “exister” (French), “yra” ir “esamų”(Lithuanian) or simply “being” and “existing” in English.

This occurrence is evidence, not proof, that this distinction is real. It might just be that all the sages of all the ages have made a mistake, and that existence – the collection of shapes – is really all there is. But if we do accept that Being indicates another reality than existence, we have to process the notion that this reality exists – that Being exists. This, again, is mind-boggling: how can something exist that does not exist? And how is this even a paradox, since it is clear that this time, it has no relation to our personal psyche? “Nothing is certain” at least implies that the contemplator of that paradox is not certain either. But “Being exists” does not even refer to the thinker. Are we dealing with mindless tautologies?

The latter question is radically unanswerable. Here, we have come to a point of inflexion, where reason cannot go any further. From now on, only a pure ACT of faith can bring us any further. It is the quintessential human act: believing that infinity exists. It is a totally irrational thing to do, yet it legitimizes the three paradoxes without which we cannot even start describing reality. If we would maintain that infinity does not exist, namely, we would not only lose the epistemological fertility of these paradoxes, *but rationality in toto*. The implication of saying that infinity does not exist, namely, is that one assumes reality is finite. That somewhere beyond the last planet – or beyond the last atom in our body – reality stops. It comes down to believing that reality borders ... on nothing.

The only way to assume that nothing can have a border with reality, however, is to assume that it is a thing. Nothing, namely, is truly nothing. It has no borders with anything. Believing that it does have borders – be through an implicit belief, namely actively denying or even passively ignoring the existence of infinity – is a position I have come to designate as “metaphysical nihilism”. In that view, “nothing” is not merely the designation for the absence of a thing, but a thing in and of itself, “the Nothing”, a noun with an article and a capital letter. The expression “Nothing is true”, in this sense, must be understood as a statement about ontology, rather than one about epistemology: in this view nothing is deemed true because it exists, as a *thing*, in and of itself.

Rand calls this “the Reification of the Zero”. (Rand, 1995, p. 60) and rightly diagnoses it as the fountainhead of all absurdity. It consists of inflating nothing into ever-larger proportions, until it swallows up, not only the whole of philosophy but even the whole of existence ... in nothing. In that regard, it is worth to quote the examples she gives: “‘Nothingness is prior to being.’ (Sartre) – ‘Human finitude is the presence of the not in the being of man.’ (William Barrett) – ‘Nothing is more real than nothing.’ (Samuel Beckett) – ‘Das Nichts nichtet’ or ‘Nothing noughts.’ (Heidegger). Consciousness, then, is not a stuff, but a negation. The subject is not a thing, but a non-thing. The subject carves its world out of Being by means of negative determinations.” (Ibid.)

If we define a contradiction as “a statement identifying two realities which cannot be true at the same time and in the same aspect” it must be clear that the idea of the existing nothing *literally* is the most fundamental contradiction in the universe. If “the Nothing” would exist, namely, it would have to exist everywhere. As such, anything existing besides “the Nothing” would immediately invalidate its existence. “The Nothing” must be total, or else it cannot be. But if that is true, then what is the status of the person advocating the existence of nothing, let alone trying to realize its implications? Surely he can only be nothing, since his very existence would deny the veracity of his statement. Mostly, however, the person is totally unaware of this most fundamental contradiction.

It is here that we again see the difference between the logical and the psycho-logical. The only way for a metaphysical nihilist to be logically consistent with his premise, namely, is to achieve non-existence, i.e. death. Since this logical conclusion – that he actually has to commit suicide to be consistent – is psychologically unbearable, however, it is rationalized into what Ayn Rand has called “the malevolent universe premise” (Rand, 1964, p. 48): man is a suffering animal, trying to make sense of an absurd and cruel world. What such a person does not grasp, however, is that the absurdity is entirely of his own making: if he would check his premises – the starting points of his philosophical system – he would soon discover that he truly believes in nothing.

## 5. The quintessential human act

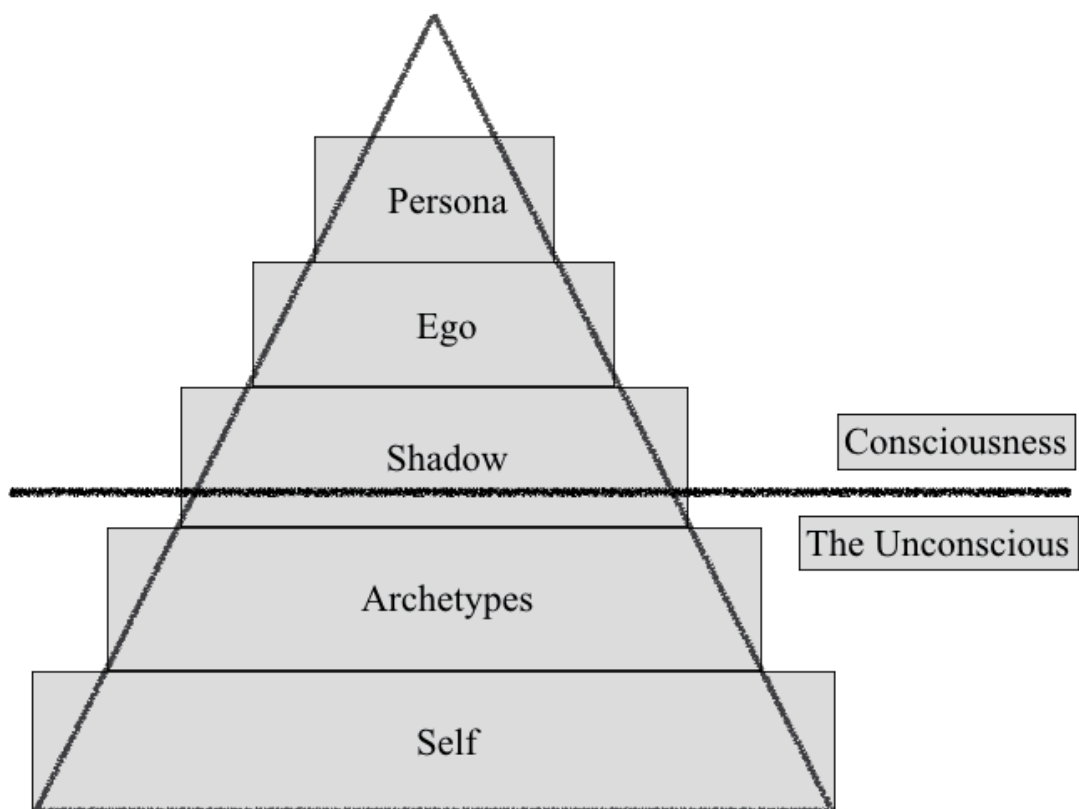
By now it should be clear that it is more than a bridge too far to simply posit an alternative basic belief from which human action “should” reasonably start. The demonstration of the futility of such proofs has shown that systems based on apodictical axioms may provide for some entertaining intellectual gymnastics, but can only deliver us logical systems that will explain reality only by chance, and this by necessity. Only aided by a lot of goodwill can such a formal theory tell us something about a radically informal world. The builders of such great systems did what they could, but the more they stressed their “unassailable” objectivity, the more they illustrated their lack of awareness of the second paradox.

The real question is this: does the absence of such an apodictically certain axiom necessarily mean that we are delivered to nihilism? Must we truly accept that nothing is true, and consequently also that theory can never reach objectivity? That all theory can achieve is at best an inter-subjective state of consensus? Is the end game of our search for truth necessarily indeed only a democratic process? A power play over words, yielding the epistemological constructivism Hayek so despised? I venture that it is not: since it is radically impossible to establish a logical relation between a presumed metaphysical uncertainty and our radical epistemological ignorance about it, our human existence is radically undetermined, or, in more colloquial terms: free.

There is one condition, however: these paradoxes only work if we believe in them, or more precisely: in what is making them have the quality of paradox – the supreme paradox infusing them. If we do not believe in the existence of infinity, there is no fertile psychological paradox in terms of which to explain reality and find our bearings. There is only *logical* contradiction, and our mind will not transcend. It will not make a flip to the factual side (a closer look at the logical statement) and a flop back to the logical side (a deep realization of a fundamental fact). It will remain in a purely existential state with all the anguish that comes from it: it will take reasoning to the hilt, without being able to prove that logic has a valid basis. It will, in short, become neurotic.

This paper is far too short to deal with the Misesian conception of neurosis, which is, in essence, a Freudian one. But it can be noted that the Freudian version of it axes completely on sexual desire, and explains neurosis as the behavior that comes from having to repress such desires, which are deemed socially unacceptable by the individual. While I agree that neurosis is indeed the product of the repression of unconscious contents, I, together with Jung, believe that this does not necessarily have to imply that these contents are sexual. It is the great achievement of Jung to see that what is repressed is far more than just the sexual desire. What is repressed is what the Taoists call “chi”, the Vedic texts call “prana”, and the Christians call “the love of God”: the life force itself.

If we picture the psyche as a triangle, with this life force at the bottom and our mental image of this life force at the top, we will soon find that the hallmark of modernity is to indeed treat what cannot be seen as non-existing. Whatever lies beneath our conscious barrier or outside our epistemic reach cannot be treated scientifically, and as such, it has no import on the rational reconstruction of truth. Theory becomes a mechanical building of conceptual blocks, each concept being the identification of a material reality. It is the ego, not the Self, that determines what is valid theory and what is not. As the Self – just another word for this life force – is unknowable, improvable and indeterminate, the ego – just another word for reason – rejects it as false.



**Figure 3: A neo-Jungian take on the psyche**

The above diagram is not Jungian, however. It is mine. Jung had the virtue of generating a massive amount of information collected from his patients, but he did not systematize his views to the extent that they could be used to explain the quintessential human action. His conception of Self, for instance, was different from that of mine, which I equate with “life force”. He thought it was just one of the archetypes that roam around in the unconscious. He neither thought about the psyche as being layered in exactly five layers, as I do, with the top of the top layer equaling action, and the base of the base layer equaling infinity. He thought of it as a set of concentric circles, reminiscent of how Böhm-Bahwerk modeled the capital structure, before Hayek drew his famous triangle.

Though this is not the time and place to elaborate on what could become a praxeological theory of the psyche, it is important to at least show that what Mises considers as “psychological” – that is: everything that inwardly lies below the threshold of consciousness – can be seen as logically equivalent to what Mises considers as “metaphysical” – that is: everything that outwardly lies beyond reason. Proof of this logical equivalency is easily given: since both fields are claimed to be lying beyond reason, there is no possible way in which they could be differentiated from each other. Applying logic to them is *equally* impossible: unknowability is their common characteristic, which allows us to put them in the same logical class.

Is this just rhetorical handiwork? I venture it is not. It is possible to make a logical class of things that are unknowable, and to contrast it with our belief in infinity. The difference between the two, namely, is that these “unknowables” are not paradoxical, while our belief in infinity is. However subtle this difference might be, it is a logical difference, and that is all we need to be able to make statements about them. As such, as long as we believe in the existence of infinity, we are able to say things about things we do not know, but *must* be. This comes down to a rational reconstruction of metaphysics, and opens up a whole new layer of praxeological analysis: the “irrational” beliefs people hold. Or, in other words: this opens up psychology to the praxeological profession.

The vital belief, of course, the hypothesis – or better: hypostasis – we cannot do without, is the existence of infinity. If belief in that paradox falters, the whole method falls apart. And while this may be considered as a weakness, it certainly is no weakness to explicitly admit that this is its Achilles’ heel. As we have seen, namely, all theories that bank on their “unassailability”, certainty, or “apodictical” nature must by necessity fail on the basis of their unawareness of the trinity. This theory, in contrast, does not suffer from that ailment: it doesn’t just acknowledge one or two or even three paradoxes, it acknowledges and actively believes in that which makes these paradoxes into paradoxes: the existence of infinity.

With this, I consider it proven that nihilism can be overcome. Not by a logical act – that much is clear – but by a psychological act: the act of believing in infinity. I venture that this is the act that makes us quintessentially human: in a world that is literally full of uncertainty, ignorance and a feeling of utter disorientation only faith in the above can give us guidance. It is our constant faith in the existence of infinity that creates the basic certainty we can bank upon: nothing is certain, except that which *constantly* accepts uncertainty. And if that constant acceptance can be held high, the logical result is that there must be a radical difference between the thing doing the accepting and that, which is accepted. In the end, or so it seems, logic is a product of faith.

## Conclusions

This paper needs two more chapters to prove that the categorization of Mises as an Austrian theorist is unwarranted. It needs showing how (I) the requirement that these three paradoxes be respected squares perfectly with the metaphysical assumptions Menger held and demonstrating how (II) the Misesian metaphysical assumptions – which are not transcendental in nature – do not. I am convinced, namely that these assumptions are the very thing that causes too much formalism in his methodological approach. Menger did not have fixed axiom, did not posit theoretical exclusives, and yet he employed a very powerful method starting from the essence of Austrian Economics: to simply describe reality as he saw it, fully aware of the fact that he is part of the spontaneous order.

Luckily, that was not my original intent. That was much more modest: simply to show that that the Misesian system of thought is an example of a hermetically triangulated rationalization, rather than a realistic theory from first principles. To prove this claim, I have done the following:

1. I investigated the basic philosophical error lying at the basis of the Misesian system: the belief that from the experience of ones own humanity one can validly infer that others are human too.
2. I explored the philosophical framework that allowed Mises to take such a position and I have demonstrated that it is based on a probability theory that is too certain. His distinction between class and case probability cannot be proven – it is only probable.
3. I have made a first exploration on probability literature, demonstrating that Mises is not alone in his assumption that uncertainty can be conceptualized. Amongst others also Knight, and even Bayes are too certain.
4. I have made recourse to the Humean problem of induction to demonstrate that not only our inductive conclusions are uncertain, but even the process by which these conclusions are reached.
5. I have called this insight “the paradox of radical uncertainty”: uncertainty is so radical that we do not even know if uncertainty exists. It might be that uncertainty does not exist, but it is radically impossible to know this.

The main result of this first chapter was the documented necessity of accepting a most fundamental paradox: the fact that we cannot be certain if uncertainty exists. The following chapter, then, focused on Mises bias: the idea that he has no bias. I have contrasted the Misesian system of

thought, by demonstrating that its axiom cannot be categorized as a paradox, which gave us a first indication that my thesis was at least relevant:

6. I started out by discussing the first of three essential features of the Misesian system: its claim to apodictical certainty. Mises thinks his logical system is “unassailable” because its axiom cannot possibly be denied – logically.
7. I have then discussed the second of these essential features: his entirely subjectivist conception of rationality. I have shown that his concept of “irrational” is distinct from that in common usage: it refers to that which cannot be consciously known, or: the unconscious.
8. I have then discussed the last of these essential features: his rejection of psychology as having anything to do with praxeology. I have shown that his concept of “psychological” too is distinct from common usage: it refers to the unconscious as well.
9. I have then demonstrated the crisis of the Misesian system: that it is entirely possible to deny the Misesian axiom, and this even within the Misesian system. The Misesian concept of rationality, namely, does not allow for this action to be called irrational.
10. I have then formalized this insight into a general law: by stating that the problem with the Misesian system is not unique to Mises, but in any theory, including this one, I have borne out a second paradox: that of total ignorance.

The fruit of this chapter was to have found a paradox that is similar to the first one, yet has a distinct explicative power: uncertainty is not just radical: even if we are able to produce theories which purportedly can limit uncertainty by systematizing perceived regularities, these logical wholes can only be shown to have internal certainty – in relation to the “true” whole we do not know if they are relevant. The following chapter, then, focused on the latter question:

11. I started out by restating the fundamental problems that necessarily confronts any theorist: radical uncertainty and total ignorance. I offered a preliminary meta-theory of proof: Mises’ theory cannot be true, since he did not explicitly mention his awareness for these paradoxes.
12. I have then focused on the relationship between these two paradoxes, and concluded that since the phenomena it tries to relate cannot be captured by logic, the form in which it exists is necessarily indeterminate. I have called this the paradox of necessary indeterminacy.



13. I have then researched what these three paradoxes have in common, only to find that they are governed by a Supreme Paradox, which I have called the paradox of infinity: to make the trinity work, one must assume that it exists, but if it does, it cannot exist.

14. I have then focused on the spectre of nihilism: the conviction that infinity does not exist. I have demonstrated why this conviction is the literally most fundamental illusion in the universe: if nothing is true, then nothing is real and all theory is indeed but a construction.

15. I have then concluded with a demonstration that from a logical point of view, the nihilist theory cannot be rejected. It can only be rejected by the quintessential human act: to believe that infinity indeed does exist.

The achievement of this chapter was to show that the truth Hume has expressed – from observed correlation the reality of causality cannot be inferred – it does not necessarily follow that all theory must be nihilist. I have shown that it is exactly in accepting the Supreme Paradox that logic is created: the difference between that which tries to know, and that which is radically unknowable is the most fundamental difference in the universe. No logical argument can be raised against the psycho-logical choice to believe in the radically uncertain, unknowable, and indeterminate existence of infinity.

With this, I come to my final conclusions:

1. Mises is not aware of just how uncertain uncertainty is. He thinks his system is apodictically certain and true, just because it cannot be refuted logically. He does not consider the possibility that logic is not the alpha and omega of knowledge.
2. It has been demonstrated that the obverse is the case: without a constant and active belief in an entirely non-logical reality logic is not even possible. To “be logical” is an entirely psycho-logical choice. Psychological acceptance of unknowability is the basis of logic.
3. By excluding psychology as a source of valid arguments from which to critique and/or improve praxeology, however, Mises has cut himself off from this transcendental legitimization of logic. This closes the triangle: he is hermetically unable to even see his epistemological captivity.

If the intent was to show that that the Misesian system of thought is an example of a hermetically triangulated rationalization, rather than a realistic theory from first principles, I hereby humbly submit that I have succeeded in demonstrating what needed to be demonstrated.

## Envoi

It cannot have escaped the Christian reader that the Holy Trinity I demonstrated in this thesis resembles the Catholic trinity almost to perfection. The three appearances of the Supreme Paradox – infinity – can quite easily be compared to the three persons of Catholic theology: the Father, the Son and the Holy Ghost. Is this analogy merely a coincidence? Or is there more to it? Could it be, perhaps, that the acceptance of radical uncertainty turns us into a better theorist, in the sense that we also start doubting our own objectivity? The fruit of that intellectual travail, namely – the Son of the Father – is the realization of the second paradox: we cannot escape our subjectivity. The fear of nihilism takes a hold on us: can we truly not transcend our own finitude?

The “*mysterium tremendum et fascinans*” can take years, and is only resolved when we realize the third, enormously abstract paradox: that or radical indeterminacy. If the nihilist argument is correct that all beliefs are equally meaningless, it logically follows that one is then also free to choose a belief that says that not all beliefs are equally meaningless. This is the flipside of the argument, the aikido-move I mentioned in my introduction, the transcendent take on things. This move, however, can only be done after contemplating the Father and the Son, and especially the relation between them. The very moment one realizes that this relationship is indeterminate the Supreme Paradox is realized. It is the ACT of believing in that supreme paradox, unleashes the power of the third.

Could it be that this third paradox is nothing more than the Holy Ghost that comes over us, and that creative work is the fruit of that acceptance? During the writing of this paper, at least, I cannot but acknowledge that I have been helped and inspired at several occasions, especially when my logic seemed to crash into a wall of contradictions. It is only along the way that I saw they really were only paradoxes. It was no easy task to rigidly accept what logic dictated, but every time accepted what was given to me, a new insight came up – spontaneously. The idea that there had to be three paradoxes, for instance, opened itself up for me like a flower blooming from the inside out, with ever-brighter petals. It truly was a religious experience.

Could it be, then, that spontaneous order is simply the product of the necessarily indeterminate relation between radical uncertainty and total ignorance? Could it be that the perspective Menger took is a direct consequence of his own metaphysical beliefs? In Schulak & Unterköfler (Schulak & Unterköfler, 2011) we find the following: “Carl was raised in a strict Catholic family (cf. Grünberg 1908/1909, p. 2). This must have been constricting to him and his two brothers, Max (1838–1911) and Anton (1841–1906), who would also gain great prominence as a German-liberal member of

Parliament and a socialist university teacher, to the extent that all three of them later distanced themselves from the Church in a drastic way, with Anton even becoming an avowed atheist.”

Though Carl Menger did not go as far as his brothers, it cannot be denied that he at least had a strict – that is: dogmatic – upbringing of which a study of the trinity would certainly have formed an integral part. And neither can it be denied that the whole cultural atmosphere, in which Vienna was immersed at the time of his writing, was Catholic. It is only in 1867 that other religions – in case the Jewish religion – had been admitted in Austria-Hungary. That the influx of Jewish immigrants – of which Mises’ family was only one, the Freudian family being another – had already influenced Menger so much that by 1871 his “Grundsätze” would no longer be informed by that Christian philosophical substratum, seems highly unlikely.

As such, could it be that Menger, as a strict Catholic, or at least as someone who believed in God at least at some point in his life, is more deeply influenced by Thomism than we always assumed? It would certainly not be out of line with the history of our School. As Dr. Jesus Huerta de Soto has stated: “A number of recent studies have shown how, in fact, what Menger did was to take up, through Say, a much older tradition of thought that had been cut short precisely as a consequence of the negative influence of Adam Smith and the English Classical School. I refer to the continental Catholic tradition which, *on a secular basis*, had constructed all the essential elements that constitute the paradigm of the present Austrian School.” (Huerta de Soto, 1998, p. 90, italics mine)

Maybe, especially after the demonstrations I gave in this thesis, a new and fifth phase could be added to “the ongoing Methodenstreit of the Austrian School” (ibid, p. 75). Maybe not even that secular basis must be kept. It would seem that it is precisely secularism – understood as: the idea that all can be grasped by pure reason – that is preventing us from truly understanding spontaneous order. Maybe we should show a greater respect for the mystery that is spontaneous order, and accept that any attempt to do more than describe it – for instance: to try and explain it, as Mises did – smothers its very nature. A formalist explanation looks good from a logical point of view but is essentially impotent when it comes to grasping the quasi-magical nature of spontaneous emergence.

That is why I consider a sacred respect for the three paradoxes – radical uncertainty, total ignorance and necessary indeterminacy – to be the essentially distinguishing characteristic of the Austrian perspective. Not its method. I suspect, furthermore, that Menger, although not explicitly, respected each and every one of the three paradoxes. He did not posit an apodictically certain axiom (paradox I), he fully and openly acknowledged his own subjective take on things (paradox II) and he did not demand any kind of stringent formalism when it came to logical derivations from first principles

(paradox III). I venture that it was only by respecting these three features was he able to make such a great contribution to not only economics, but also sociology and even ethics.

All of the above might be a mirage. It might be that I am seeing things. But if it can be proven that what I have discovered and what Catholic theology teaches is the same, then we will have found a clear demarcation criterion for what can be called Austrian: theorists that do not respect the paradox of radical uncertainty (The Father), the paradox of total ignorance (The Son) and the paradox of necessary indeterminacy (The Holy Ghost) cannot rightfully claim that label. In this view, the essence of this perspective would then not lie in its method but in its fundamental respect for these paradoxes, a respect, furthermore, that can only come about by accepting that which infuses the trinity of paradox, that which I have called the Supreme Paradox, that which is infinite, unknowable, and indeterminable, or, in other words: that which is generally referred to as ... God.

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9<sup>th</sup> of June 2017,

Villaverde Bajo, Madrid

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