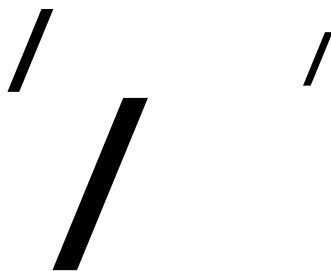




TEORIE VĚDY
/ THEORY OF SCIENCE



**THREE MEANINGS AND THREE ASSUMPTIONS OF
RATIONALITY OF HUMAN ACTION**

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Abstract

This text discusses the notion of rationality with respect to economics. First, it states the essential meanings of this notion and then goes on to the possibilities of rationality, which is a synonym for the effectiveness of human action. It distinguishes three types that may correspond to this meaning, where each type is unique and independent of the other two. In the end, it relates the presented typology to the work of Ludwig von Mises. His radical approach provides for good instruction of the sides of economic thought that I want to call attention to. Economics as a deductive science is interested in very strong assumptions about human action, and ambiguities about the notion of rationality provide for rhetorical tactics that can justify it. Elucidation of the notion and the presented typology of the meanings and assumptions of rationality should contribute to the revelation of these tactics.

Keywords: *rationality; teleology; rhetoric of economics; Ludwig von Mises*

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1. Introduction

Economics and rationality are very much related terms. Economics, more than any other social science, adopted rational mathematical means, and that was possible only because it assumed actors that are suited for such apparatus, i. e. rational actors. However, it is far from clear how this assumption alters reality, how it matters for the plausibility of the results of the theory, and even what notion of rationality economics uses. When Herbert Simon explained to us that we cannot count on the unlimited analytical capabilities of human individuals, it seemed that the switch was moved to a brand new direction. Nevertheless, mainstream economics was affected only slightly and the gap between its understanding of the actor and the understanding of the remaining social sciences has remained wide. The problem is that the notion of rationality is extremely equivocal and, even though Simon's argument was sound, economists persuaded themselves that it is not in their way. This is not completely true, but I'd like to show that to some extent it is, because Simon's criticism does not affect all of the rationality assumptions that economists use. In such a situation, it is not so important to ask whether we assume too much or too little of rationality as to discuss the very meaning of the notion. This text follows this insight and tries to distinguish among the contents of the notion of rationality so that it will encompass the essential understanding of rationality in economics.

The concrete impulse for the unrest over the Simonian argument of rationality is its inability to account for the fundamentals of consumer choice in neoclassical microeconomics and also its irrelevance to the whole of Austrian economics. I've always thought that Austrian economics was built upon very strong rationality assumptions. It is, nevertheless, believed to be untouched by Simon's criticism of the concept of human rationality

in economics.¹ This is also one reason why this text dedicates attention to the works of Ludwig von Mises. The second reason is that his strict and in a way one-sided approach provides for a clear description of the treatment of the notion of rationality I want to address.

Any notoriously unclear notion suffers from rhetorical exploitation and arbitrary shifts in meaning. Notably, these twists and shifts were already analyzed in the case of rationality. Lagueux pointed out a different meaning of rationality in classical and neoclassical economics.² Denis and Laville showed how rhetorical tactics are used to dodge the critique of the implausible elements of theories that are related to strong assumptions about rationality.³ This text wants to join this discussion and examine the rhetoric on the notion of rationality as well.

Before moving on, I have to make one more comment regarding my methodology: The approach used in this text generally refers to *problem* instead of to *choice*,⁴ which is more usual for an economics discourse. *Problem* is a more general notion and does not provide the possibility of time misconception. *Choice* could easily appear as instant or timeless, but this appearance is deceptive because in reality even a choice requires time to be committed. It is ambiguous to treat “knowing how to do” and “knowing how to choose” as very different things.⁵

¹ Some authors explicitly claim that bounded rationality is in accordance with Austrian theory; see e.g. Roger KOPPL, “Austrian Economics at the Cutting Edge.” *Review of Austrian Economics*, vol. 19, 2006, no. 4, p. 234.

² Maurice LAGUEUX, “The Forgotten Role of the Rationality Principle in Economics.” *Journal of Economic Methodology*, vol. 11, 2004, no. 1, pp. 31–51.

³ Andy DENIS, “Two Rhetorical Strategies of Laissez-faire.” *Journal of Economic Methodology*, vol. 11, 2004, no. 3, pp. 341–357; and Frédéric LAVILLE, “Should We Abandon Optimization theory? The need for bounded rationality.” *Journal of Economic Methodology*, vol. 7, 2004, no. 3, pp. 395–426.

⁴ So that human action is something that solves problems rather than something that chooses.

⁵ Richard NELSON – Sidney WINTER, *An Evolutionary Theory of Economic Change*. Cambridge, MA: Belknap Press of Harvard University Press 1982, p. 52.

2. Three meanings of rationality

The very basic problem of the ambiguity of a scientific term is its detachment from its everyday use. Hardly ever are these two spheres of meaning distinguished between and often this is a natural source of rhetorical utilization. Hence, it seems to me that it is essential to take into account the common meaning of the term and analyze its relation to the rhetoric of science.

In economics, the meaning of “rationality” and “rational” is tied to effectiveness. To be able to develop a theory about social phenomena it is essential to know how individuals would be effective in solving problems. However, the meaning of the term in everyday language is broader.

I want to address three essential meanings of rationality.⁶

- To act consciously with the use of reason, and not be driven by emotions, instincts or habits.
- To proceed in the optimal way in the solution of a problem.
- To act reasonably, wisely and with regard to the broader scope.

I am convinced that the presence of these three meanings in one term is a source of a great deal of misunderstanding.

One crucial problem is the fact that the first meaning is a description of the means of acting while the latter two relate to performance. This brings the tendency to interconnect effectiveness and the conduct of reason, which is an arbitrary connection that cannot be taken as fact. There can well be routines, traditions or even emotions that in certain situations serve better than the deliberation of reason.

The mismatch of the second and third meanings is another major source of problems. If we don't distinguish between these meanings,

⁶ A similar distinction can be found in Richard RORTY, *Truth and Progress*. Cambridge: Cambridge University Press 1998.

effectiveness in solving a particular problem is taken as automatically beneficial. The presence of these two meanings on the same shelf of “rationality” supports the illusion that our wisdom is derived from our success no matter what we succeed in.

3. Ontological and methodological claims

The first meaning of rationality mentioned above contains a characteristic that differs from the other two. When we say that action is guided purely by our reason – that people think to act – we inevitably very specifically describe the actors. It is an ontological claim. Whereas if we just say that people pursue goals⁷ it supposes only certain moving power that pushes the living being forward. It does not say what form this moving power takes and therefore does not give a clue about its performance. In comparison with the former, it is only a methodological claim.

Methodological claims only consider the means of how to approach a problem that shouldn't influence the belief of its actual character. They also don't exclude their alternatives, because there can be more than one suitable means of how to approach a certain problem. Ontological claims are, on the other hand, definite conclusions about the objects of enquiry that are rivalrous per se. Both types can be used as a theoretical assumption, but methodological claims are generally weaker, and also much less controversial, because they don't have an ambition to tell a piece of objective truth.

With a little simplification it can be said that the critics of economics consider its assumptions rather ontological and therefore unrealistic, whereas the defenders think that the assumption of rationality is only one way of how to look at a problem that doesn't limit the extent of human action⁸.

⁷ This is a framework in which I will place the two latter meanings.

⁸ We can see Simon's allegation and Friedman's defense of economics through this perspective. See Herbert SIMON, “Rationality as process and as product of thought.” *American Economic Review*, vol. 68, 1978, no. 2, pp. 1–16; and Milton

One reason why ontological and methodological claims are so mixed in the case of rationality is the ambiguity of its meaning. Whenever rationality is mentioned, it generally has a tinge of all three of them. It connects endeavor after a purpose with rational conduct as well as with universal adequacy. It is, for instance, as if it wouldn't be possible to act "through" reason and fail or, on the other hand, act effectively "through" the habit of affection.

We can draw the problem nearer by contrasting Weber's ideal types of action and the purely teleological perspective developed by Czech economist Karel Engliš. Weber's four types of action – purposeful-rational, value-rational, affective and traditional – are genuinely ontological. They signify four types of how humans can act. There is no hierarchy among them and they are not comparable. For instance, value-rational action is irrational from the purposeful-rational perspective and vice versa.⁹ To impose an assumption that an action is by itself purposeful-rational in this sense is a drastic reduction of human existence. It is neither just a simplification nor an idealization of action as such, because the other three types are not worse options of purposeful-rational action; they are something generically different.

Rationality in this sense is something intuitively familiar to us. It is the conscious conduct we operate under in daily life and we feel what is easy for it and what is not. Later in the text I want to show that this is often unfortunate because it silently creates an image of a causal nexus in problem solving.

Teleology works with "purposes" as well as with "rationality", but here it means something different. Finality, the principle of teleology, is only a way of looking at things that does not in any way describe the object

FRIEDMAN, "The Methodology of Positive Economics." In: *Essays in Positive Economics*. Chicago: University of Chicago Press 1953, pp. 3–43.

⁹ Max WEBER, *Economy and Society*. New York: Bedminster Press 1968, p. 26.

it conceives.¹⁰ It is not a claim describing people as consciously seeking goals, but is only a perspective through which we look at individuals. It is the perspective of the one that looks, not a description of an individual character that is looked at. For this reason it can well be used as a means of conceiving any object (even a holistic entity such as government). Government of course is not a being of reason or consciousness, but there is no reason why we couldn't look at it as it pursues its goals.

The problem is that when we use rationality with respect to the teleological way of looking at acting individuals, it coincides with Weber's type of purposeful rationality, which is something totally different. Economics is said to be based on teleology, but there is often much more that is added to the mix. Notably, the teleological concept can be used in many possible ways, but in economics the mixture with purposeful-rational behavior as in Weber's typology makes it fixed to only very specific conscious purposefulness.

4. Rationality as effectiveness – three assumptions of rationality

Let's now forget the previous meanings and start anew from the point of view of social science's need which is centered around the question of the effectiveness of human action. Let's first outline the essential rationality assumptions of economics, i. e. the assumptions of rationality understood as effectiveness.

If we are to verbalize the most common objection towards assumption of rationality in economics it would be that economics supposes computing abilities and knowledge that always lead agents to the optimal solution of a submitted problem. This assumption is essentially what criticized Herbert Simon, who argued that people possess only imperfect cognitive

¹⁰ Karel ENGLIŠ, *Teleologie jako forma vědeckého poznání*. (Teleology as a Form of Scientific Understanding). Praha: F. Topič 1930, p. 28.

abilities that compel them to use various rules of thumb that lead to sub-optimal solutions.¹¹

However, we should not miss the fact that this assumption is distinct from another significant component of economics' way of looking at acting individuals. It claims that agents behave in the best possible way considering their well-being: "The analysis assumes that individuals maximize welfare *as they conceive it*"¹². It is an assumption directed primarily towards the individual, not to the problem he operates in. Among the critics of this assumption, I would like to call attention to Vanberg.^{13, 14}

We have to distinguish between these two because there is no assurance of their coincidence. An agent can perform in an inferior way in solving a problem and it can still be the best possible response under the given circumstances, but also, reaching the optimal solution may not be the best action considering the agent's preferences, because he may prefer the product of solving completely different problems.

The former assumption works with problems as outer systems that have their own logic that is independent of the individual. On the contrary, the second mentioned assumption about rationality cannot be connected to any particular "visible" problem, because it is based on the ability to choose the best problem to solve. In other words, it assumes

¹¹ Herbert SIMON, "Theories of Decision-Making in Economics and Behavioral Science." *The American Economic Review*, vol. 49, 1959, no. 3, pp. 253–283. For summarization of the bounded rationality issue, see John CONLISK, "Why Bounded Rationality?". *Journal of Economic Literature*, vol. 34, 1996, no. 2, pp. 669–700. Another source of relevant findings about human performance in various types of problems is experimental psychology (for summarization of this approach see Eldar SHAFIR – Robin LEBOEUF, "Rationality." *Annual Review of Psychology*, vol. 53, 2002, pp. 491–517.

¹² Gary BECKER, *The Economic Way of Looking at Life*. Nobel Lecture 1992, p. 1.

¹³ Viktor VANBERG, "The Rationality Postulate in Economics: Its Ambiguity, its Deficiency and its Evolutionary Alternative." *Journal of Economic Methodology*, vol. 11, 2004, no. 1, pp. 1–29.

¹⁴ Both assumptions are present in both neoclassical and Austrian economics, but neoclassical economics stresses the former while Austrian economics the latter.

optimal solving of the overall situation of the actor that need not be apparent in any concrete problem that is registered by the scientist. The actor may not solve the problem the scientist wants to explain or he may dedicate only inferior attention to it. If we'd want to say that this assumption grants success in solving problems, it would mean the problems of action as such and not any particular problem that is regarded by the previous assumption.

For example, when dealing with the problem of inflation, economists assume that people accurately estimate the purchasing power of their money, i. e. solve a clearly defined problem that exists apart from the individual. If they would just assume that people are solving problems based on their preferences (unknown to economists, hence possibly not connected to inflation), it would be insufficient for the needs of the theory. On the other hand, the assumption about human ability to estimate purchasing power need not to imply that people act well according to their preferences.

The first mentioned assumption about rationality assumes the motivation of the actor to take part in the solving of the problem while for the second the motivation is a determining factor.

Let's sketch these findings by distinguishing three types of rationality. The first two correspond to the two rationality assumptions just discussed and the third is their counterpart that expresses a view of rationality without any of the previous characteristics. Subsequently, I'd like to explore the types of problems that are connected with these rationality types.

- *rationality^I* (perfect a priori) – A general property of human action warranting conformity with all preferences, i. e. the best possible response to a given situation according to the actor's well-being.
- *rationality^{II}* (perfect intersubjective) – Certainty in reaching the solution to an intersubjectively defined problem (or sort

of problem). This rationality assumption refers to problems external ('given') to the individual (in contrast to (tacit) problems of personal goals related to rationality).

- *rationality*^{III} (weak/intuitive) – An understanding of rationality without a link to any causality towards the optimum. It, however, opposes randomness or meaninglessness in behavior and understands the human being as an active and conative subject. Any judgments about the performance of human action under this assumption of rationality can therefore be based only on intuitive familiarity with the context in which the action takes place.

This understanding of rationality can be expressed in multiple ways:

1. Reflection of a simple optimistic feeling that “people are not stupid”. Lagueux assigns this concept of rationality to classical economics to distinguish it from neoclassical optimizing rationality.
2. Human action viewed through teleological settings. Action is conceived as an endeavor after a certain goal, but this in no way means that teleology is just a specific form of causality.¹⁵ There is no way to ascertain the effectiveness of human efforts purely from teleology.

We can also point at the concept of the human being in phenomenology (e. g. Heidegger's “Dasein”)

3. Rationality with regard to the ungraspable character of the world people live in. There are general elements such as complexity of environment, time demands and knowledge limitations that are incompatible with universal certainty

¹⁵ ENGLIŠ, *Teleologie*, p. 30.

regarding reaching the best solution to any kind of problem. (In economics, this perspective can be ascribed to G. L. S. Shackle or Ludwig Lachmann.)

5. Rationality and problem-solving

If we agree that, as Karl Popper says, all life is problem-solving, it is natural to ask for a more specific description of what a “problem” is. The general definition of “problem” would say that it is a state of difficulty that is to be resolved. However, to clear up the notion with regard to this paper, we have to say in what context this state takes place and what is the relation of the actors to it.

I have already outlined two types of problems connected to the two mentioned rationality assumptions and now I want to specify them and examine the issue more closely.

5.1. Prime and exclusive problems and the problem of action

The basic settings can be well exposed by the basic intuitions of phenomenological sociology:

Our primitive impulse is to affirm immediately the reality of all that is conceived, as long as it remains uncontradicted. But there are several, probably an infinite number of various orders of realities, each with its own special and separate style of existence. James calls them “sub-universes” and mentions as examples the world of sense or physical things (as the paramount reality); the world of science; the world of ideal relations; the world of “idols of the tribe”; the various supernatural worlds of mythology and

religion; the various worlds of individual opinion; the worlds of sheer madness and vagary.¹⁶

Among the multiple realities there is one that presents itself as the reality par excellence. This is the reality of everyday life. Its privileged position entitles it to the designation of paramount reality.¹⁷

Summarizing the content of the quotations, in the multiple realities connected to our existence there is the reality of everyday life that differs from the others by special importance and characteristics. Schutz¹⁸ states six such characteristics while the one especially requisite to mention is that the everyday reality subsumes a special form of sociality; it is “the common intersubjective world of communication and social action”. If we suppose that this reality is somehow problematic, it follows that the problems of this reality are already mutually understandable and communicable. These are the problems as the word is intuitively understood – difficulties around us we relate to in our conversations; problems about which we share consciousness and discuss their proceedings. Unlike the everyday reality, the problems of the remaining realities are always to some extent exclusive and their connection to the problems of everyday life is, if any, only indirect.

To distinguish problems of the everyday reality and those of the remaining realities, I will denote the former *prime problems* and the latter *exclusive problems*.

It shouldn't be overlooked that by providing these insights, a reality by itself is set – the conceptual reality of an individual before his access to any particular (prime or exclusive) problems, the reality of human action where

¹⁶ Alfred SCHUTZ, “On Multiple Realities.” *Philosophy and Phenomenological Research*, vol. 5, 1945, no. 4, p. 533.

¹⁷ Peter BERGER – Thomas LUCKMANN. *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*. London: Penguin Books 1971, p. 35.

¹⁸ SCHUTZ, *On Multiple Realities*, p. 552.

the problem refers only the subjective difficulty of how to act (i. e. also in which problem of which reality to actively participate)¹⁹.

When we talk about problems, we generally mean problems in our everyday life, and we can also find problems in other more or less exclusive realities, but these have to be distinguished from the problem of the action itself. These kinds of problems provide a scheme describing the position of the human individual as separate from the concrete contexts of the reality he acts in. He can only aim at goals that are to be reached in particular realities, but his point of departure is more original – without any a priori attachment to any problem of any reality. It is not as trivial to mention as it may seem, because it is not easy to be free of the environment we live in. It is a bit unnatural to imagine that an action can be something more than its exposure to a (prime/exclusive) problem we are concentrated on. When playing football I react to the movements of other players and these movements are meaningful to me as actions only through the setting of the football game. However, the meaning I understand is enclosed in the prime problem of a football game and does not reach to the individual's problem of action. Football game is about football not about what should somebody do with his life. I can't see the relation of the prime problem (football game) to the individual problems of action.

Even social science tends to ascribe its settings to the actor. Economics did it bluntly, creating *homo oeconomicus*, an individual that is already embedded in the world of economic science. Even though this may be an advantageous assumption, it puts the actor in a completely different reality and therefore changes his very nature.

¹⁹ This does not refer to the subjective perception of a *prime* problem but a concept that conceives the overall situation of an actor, i.e. it is a problem of a completely different nature.

5.2. Problems and science

Social science is related to all three mentioned types of problems. Like any science, except purely abstract mathematics or logic, it was established to solve *prime* problems of a kind – difficulties in the everyday world with general insistence. Like any other science, but probably even more, it created a world of its own that contains its own problems detached from the everyday reality. Scientists do not just solve (our) problems, but also adjust or even create problems according to the needs²⁰ of the theory, and it is always hard to say where the borderline is. It is also hard to say in which cases such a plunge into abstraction is beneficial.

The relation between social science and the problem of action follows from the fact that social science is called on to solve problems that depend on the peculiar nature of the people that participate in them. In the (*prime*) problems that social science is called on to solve, it is difficult to find any empirical uniformity across time and space. Therefore, social science is forced to look at a problem not just from its own logic, but also from the viewpoint of individuals (i. e. from the viewpoint of the problem of action).

Rationality is of course meant to be a characteristic of human behavior (i. e. rational solving of the *problem of action*), but we can easily read about rational solving of a *prime* or *exclusive* problem. It may be misleading to mix these uses of the term. It could falsely seem as if individual minds were already born in such problems or that success in solving the problems of a particular reality can be generalized on success in an arbitrary context.

To find out about the possible engagement of human rationality in *prime* and *exclusive* problems, we must first be sure about its nature by conceiving the problem of action.

²⁰ Paul K. Feyerabend in his *Against Method* (London: NLB, 1975) showed very persuasively how this is essential to science.

5.3. The problem of action

There are many ways to conceive the problem of action. Economics, however, is accustomed to use the concept of teleology and look at individuals as if they seek the means to pursue their own goals. I would like to contrapose two conceptions of the problem of action that tend to be mixed in economics' concept of action. The first is purely teleological, and the second, even though it may look like a variation of the first, is in fact causal. It is important to distinguish between them, because optimality in solving each type results in two very different conclusions. Both will subsequently be used to define the already outlined assumptions of rationality.

The first conception considers action as a problem of searching for means toward desired ends that are set according to the knowledge of the individual. Knowledge about the outer world defines goals that seem worth pursuing. The activity then consists of pursuing these goals.

It has to be emphasized that speaking of “searching”, “means”, and “ends” is only metaphoric. It is how we conceive the action, not how it is committed. It should not signify that action is just deliberation about means and ends. Also, mentioned knowledge is not only conscious possession of information, but is any information about the external world we have in the broadest sense of the word.²¹

This understanding of the problem of action defines only what is wanted and does not speak about what is reached. It is therefore purely teleological, which also means that it does not include any causal relationship between ends and means.

There is, however, another significant conception of the problems of action. While teleological understanding is defined solely by individual goals, here the problem considers all determinants influencing the resulting action. It takes into account all the richness of known and unknown circumstances related to action, i. e. not just the goal, but also the environ-

²¹ Basically any inner quality that plays a part in our decision-making.

mental conditions that influence the result of the actor's endeavor. Both types include a certain willingness to succeed, but while in the previous concept it was the sole element, here it is just one input. This conception conceives the action as the problem of an individual and the complex situation he or she is in. Optimality in solving these problems is a tautological necessity and does not in any way contribute to social-scientific analysis.

We could describe it in such a way that an actor acts in the best possible way according to the circumstances, which may seem like a useful statement to start from, but this is just a temptation caused by the word "best". We may as well say that he performs the worst and the meaning would not change. Any evaluative statement has no meaning, since there are no alternatives to compare because the outcome is necessarily unique. The key factor is the circumstances and not the effectiveness of performance.

"Choice is always amongst thoughts, for it is always too late to choose amongst facts."²² This statement in short expresses the difference between these two understandings of the problem of action. The first is based on the "choice among thoughts", while the resulting factual situation is unknown. The second subsumes "the facts" as well and therefore the outcome of this problem is necessarily unique, which also means that the problem is causal in nature.

Labelling both types as "problems of action" would make sense; hence we have to use a further distinction. For this paper I will distinguish them as the *teleological problem of action* (the former) and the *complete problem of action* (the latter).

In Austrian economics there is an apparent effort to compromise between these two possibilities or to suggest that the latter has some explicative basis. Even though there are possibly many other conceptions of the problem of action, it is not possible to mix these two on logical grounds. The common exposition of the argument is that the human individual is in a position of incomplete information that makes him prone to failure in

²² George Lennox S. SHACKLE, *Epistemics and Economics*. Cambridge: Cambridge University Press 1977, p. 280.

reaching his goal. In this position he is, nevertheless, able to act economically with respect to his well-being. A frequently mentioned example is the purchase of a potion of plain water in good faith of its healing powers. In such a situation an individual is supposed to economize somewhat inside his mistaken belief. This idea has, however, two significant defects:

1. It is irrelevant. Supposing that healing is the only function the actor expects from the purchased good, to economize is to not buy the good at all. To take into account the mistake as well gets us to *the complete problem of action* because suddenly there is not only the goal but also the circumstance that caused the degree of its fulfillment. There can be no economizing because failure is the same as success. There is just a single outcome.
2. Even if we would divide the action into economizing and not-economizing parts, such a division has to be arbitrary. If we consider that there are two pieces of information, one about the healing quality of the potion and a second about the alternative prices the potion can be bought for, then there can be economizing about the price and fallibility about the quality (i. e. the economizing economists work with) as well as vice versa, economizing about the quality and fallibility about the price. We cannot justify the consideration of only one of these possibilities, let alone declare it an a priori condition of human action.

5.4. The assumptions of rationality and the types of problems

I will now go through the aforementioned assumptions of rationality and try to explain them from the perspective of the aforementioned types of problems they are connected with.

Rationality^I presents an a priori success in solving the *teleological problem of action*. This means that the action is in conformity with all levels of preferences (virtually what Vanberg calls the “rationality hypothesis”). An action under this type of rationality is the best possible while left on its own. Any change of the actor’s decision would lead to the worsening of her well-being. If we suppose that the action could be prescribed by somebody else, then nobody, not even a perfect being, could “outperform” the original actor.

Although this concept of rationality grants success in personal endeavors, it does not mean that it will be visible in concrete *prime problems*. Even if we see people falling short in problems that we may intuitively assign to them, it does not change the fact that, considering their well-being, they are doing the best possible thing. Even if we see them being oppressed, hurt or mistaken, it is only our perception of their situation within the intersubjective world and not the testimony of their personal failure. If we could possibly hold the reins of their action and enhance performance in the (prime) problem we assigned to the actor, it could only mean worsening of their well-being, because they perform in the (prime) problem as well as they wanted to. It is impossible to help even by improving the external material conditions, because we never know what part of these conditions were subject to choice and therefore possess the effectiveness of rationality^I and what part is not “touched” by action.

In the beginning section, *rationality*^{II} was outlined as “perfect intersubjective”, which should have indicated that it supposes reaching an optimum result in some prime problems. For instance, economics asks about the output of a firm and assumes that it will be set in the most efficient way among the feasible possibilities. It therefore imposes an assumption of rationality^{II}, reaching the optimum in one problem of our everyday reality. However, the nature and behavior of the actors varies under this assumption of rationality as the considered (*prime*) problem changes. If we relate this notion to the problem of murder, we arrive at a very different

result under rationality^{II}. The first case results in harmony of the economic system while the second results in mutual annihilation. The choice of problem is the key factor because the assumptions of sufficient skill and motivation (rationality^{II}) can lead to very different conclusions both about the actors and the order of the society.

Finally, *rationality*^{III} can only warrant success in tautological *complete problems of action*. Hence, it can be based on nothing more than our feeling for concrete conditions of concrete context. It is not connected with universal success in problem-solving of any kind of *prime problems* or *teleological problems of action*, even though it could mean intuitive optimism towards some *prime problems*. Lagueux provides a convenient example: "If I look through my window at passing cars on the street outside, I can predict with a remarkably high degree of accuracy that these cars will continue straight ahead and will not turn right or left before the next corner."²³ They will not because they are not stupid. They are rational^{III}. Keeping to the traffic example, that does not mean, however, that the drivers would behave the same way at a difficult crossroads, i. e. the intuitive feeling for a concrete situation does not indicate universal causality.

Since this understanding of rationality does not go beyond the intuitive, unsurprising level, it is hardly usable for science.

Even though these three concepts may evoke some similarities, it must be understood that they reside in completely different worlds and that there is no way to express one in terms of another.

It is important especially if we realize that we have access only to the latter two of them. We can possibly measure rationality^{II} because it manifests itself in the problems of the everyday world. We can find out what kinds of problems seem to be difficult for people or we may choose a problem and note people's action with regard to it²⁴. Rationality^{III} is derived

²³ LAGUEUX, "The Forgotten Role", p. 32.

²⁴ This is the major content of the works of Tversky and Kahneman and other psychologists studying behavior with respect to economics.

from intuitive familiarity with the environment around us. Its revelation is accessible through our everyday use of knowledge.

However, rationality^I stays only a notional concept without any possibility of direct revelation. We are unable to see the problem of action as we see (*prime*) problems around us. We are unable to see the goals people really pursue; we can only see the goals that we as such designate in the world around us and we simply don't have any clue as to whether these two are identical.

6. Rationality tactics

In the beginning I mentioned three common meanings of rationality and marked two typical misunderstandings that arise among these meanings. I want to show that the rationality assumptions I presented above are mismatched analogically, and moreover, that the rhetorical tactics of rationality assumptions originate exactly from the ambiguity among the common meanings of rationality.

Not distinguishing between rationality understood as endowment of reason and the other two meanings has its counterpart in claims that rationality^{III} and rationality^{I&II} are identical or that they are two sides of an identical phenomenon. Needless to say, rationality^{I&II} can be very useful for the social-science theory; however, they lack the intuitive plausibility of rationality^{III}, and these things together determine the rhetoric: when talking about assumptions and methodology, any economist is most likely to refer to the self-evidence of certain basic facts about human action that cannot go beyond rationality^{III}, whereas when prescribing a theory or making predictions, the notion often switches to perfect rationality, usually tacitly. Nelson & Winter mention a similar shift between elementary and intermediate courses of economics.²⁵

²⁵ NELSON – WINTER, *An Evolutionary Theory*, p. 8.

In order to substantiate the close bond between rationality^{III} and rationality^{I&II}, it is necessary to satisfy the intuition for rationality^{III} as much as possible so that the difference between mere subjective feeling about a concrete situation and the revelation of a universal rule will be indistinct. This is managed by introducing the problem in a very simple way that is free of the richness of complications that accompanies everyday decision-making. If we describe a concrete situation with a sentence, we thereby change it from a problem in life to a problem in words, from being in the world to mere proposition. In such a form we can still ask our intuition if the problem is within human reach, and moreover, it complies with the connection of reason and rationality that stems from one of the meanings of the term. Unfortunately, we very easily forget that such a situation is not the one we experience in real life. If I say: “There are three shops that sell identical apples and each has a different price. In what shop you will buy your apples?” it seems like a self-evident problem – everybody will choose the lowest price. This impression is very tricky. By stating the problem in such a manner, we do not transfer the original difficulty that is inherent in the human position with respect to the world. We only stated a few claims that are presented to the mind of the reader. But presenting it as a task for our mind and subjecting someone to the actual situation are two different things.

We do not act in the same way when we solve logical problems that are presented to us. There is a similar difference between controlling an individual in a video game and living actual life. In a video game we decide everything consciously with the use of reason. We have the luxury of no fear or anxiety, and clearly defined situations. Whether, in a video game, we walk in a park or we are endangered by a gun, it is always our cool deliberation that acts. However, there is a fundamental difference between commanding (a virtual person) and living.

Notably, these confusions would not have arisen without the habitude to judge rationality according to our knowledge of the concrete context and

also the natural link between the word “rationality” and the deliberation of reason. With these ambiguities, all that is needed is to give our reason the right questions and the illusion of perfect rationality becomes real. If the presentation is skillful, the distance from “people are not stupid” to “people can’t be fooled” may easily seem short.

The second ambiguity lies in not distinguishing between rationality^I and rationality^{II}. The first may be a powerful assumption, but it is still directed toward the a priori characteristics of the action itself, while the second is based on the logic of the prime problem and does not directly relate to the quality of action. It only assumes sufficient skill and motivation for reaching the optimum, which may vary from (*prime*) problem to problem. These two understandings of rationality are virtually different and neither can be deduced from the other; however, they are often used as a pair as if they were different labels for a single fact.

Mixing rationality^I and rationality^{II} is closely connected to not distinguishing between rationality understood as effectiveness in solving concrete problems and rationality as the wisdom of living, i. e. not just (possibly wild) effectiveness in any problem, but also the skill of choosing one’s participation in problems. Since both these meanings are included in the notion of rationality, it makes it easy to consider an arbitrarily chosen prime problem as the judge of human happiness or the other way round – human happiness as the necessary cause of the performance in a particular prime problem. None of these relations are justifiable and stem only from the confusion about the notion of rationality.

6.1. Mises’s *Human Action*

The aforementioned issues can be seen very well in the work of Ludwig von Mises. His works are useful mainly because Mises pursued a pure a priori method that should make deductions from basic facts about human action. Naturally, such a method puts a lot of weight on rationality,

which makes it appropriate for instruction. Furthermore, Mises's concept of rationality is interesting because it is believed not to be threatened by Simon's criticism of instrumental rationality in economics.

I will now focus on several statements from his magnum opus *Human Action* and try to elucidate his conception of rationality and human action.

Human action is purposeful behavior. Or we may say: Action is will put into operation and transformed into an agency, is aiming at ends and goals, is the ego's meaningful response to stimuli and to the conditions of its environment, is a *person's conscious adjustment to the state of the universe* that determines his life. Such paraphrases may clarify the definition given and prevent possible misinterpretations.²⁶

The very first sentences of *Human Action* introduce action within teleological settings, and even though it does not indicate any a priori optimality, it contains one controversial element that will do its work later – Mises's assumed connection between the teleological framework of purposes and ends and conscious rational conduct.

Human action is necessarily always rational. The term “rational action” is therefore pleonastic and must be rejected as such.²⁷

The meaning of rationality in the above quote is unclear. It is a definition that refers to the self-evidence of *complete problems of action*, hence we should consider only weak rationality^{III}, but most people would probably use the terms “meaningful”, “purposeful” or “reasonable” in this sense to be clear. The use of the term “rational” offers a mismatch with rationality^I.

However, Mises never explicitly states the definition of rationality in terms of rationality^I. Moreover, he often talks about people failing and

²⁶ Ludwig von MISES, *Human Action – A Treatise in Economics*. New Haven: Yale University Press 1949, p. 11, emphasis added.

²⁷ *Ibid.*, p. 5.

making mistakes, but not be mistaken whenever he feels the need he uses unmistakable rationality in a hard causal sense:

He acquires habits, he develops automatic reactions. But he indulges in these habits *only* because he welcomes their effects. As soon as he discovers that the pursuit of the habitual way may hinder the attainment of ends considered as more desirable, he changes his attitude.²⁸

There is no chance that he could be mistaken in following a habit.

Men have developed a method of ascertaining *as far as possible* the expediency of their actions and of removing uneasiness in *the most practical and economic way*.²⁹

(to be recalled as statement A):

The consumers patronize those shops in which they can buy what they want at the cheapest price.³⁰

These claims suggesting direct causality in human problem solving are by no means implied by the introductory statements about the self-evidence of human rationality. They are examples of the routine described above. The problem is described in simple fashion as a logical proposition and presented like this it seems self-evident for our logical intuition. Such an exposition cannot, however, transfer the difficulty that is inherent in deciding in an actual situation in life.

What integrates the individual's actions into the whole of the social system of production is the pursuit of his own purposes. In indulging in his "acquisitiveness", each actor contributes his

²⁸ *Ibid.*, p. 47, emphasis added.

²⁹ *Ibid.*, p. 216, emphasis added.

³⁰ *Ibid.*, p. 270, emphasis added.

share to the best possible arrangement of production activities. [...] There is no antagonism between the interests of the individual and those of society.³¹

And finally, the system ends in the perfect harmony of perfect action.

We can see that Mises's use of rationality is incoherent and that it collides with the multiple rationality assumptions presented above. In *Human Action* he begins with claims on the level of rationality^{III}, but then in particular cases the proclaimed purposefulness of human action switches to infallibility and his argumentation seems closer to a priori rationality^I. He claims that “[a] prioristic reasoning is purely conceptual and deductive. It cannot produce anything but tautologies and analytic judgments. [...] It cannot add anything to our knowledge”.³² Throughout his book, however, there are many cases where facts about human problem solving seem to be obvious for Mises as would be implied by his introductory methodological statements. He does not claim that people don't fail in certain situations because...; he claims that in certain situations there is simply a causal success of human problem-solving *per se*.

Even if we suppose that rationality^I holds, Mises's approach has to face up to the fundamental difficulty of how to overcome the gap between rationality^I and rationality^{II}. To be able to succeed in the task of building upon the logic of action, the analysis mustn't leave the domain of *the problem of action*, because otherwise the footing (axiom) for the logic is lost. On the other hand, being a social-science theory, it must say something about the processes in the economy that take place around us, i. e. it must relate to prime problems of a kind. But there is a conflict between these two requirements, because the intended analysis is not valid for *prime* problems. We may abstractly classify alternative means with respect to an individual end, but without the knowledge of the individual ends we have nothing to fill

³¹ *Ibid.*, pp. 725–726.

³² *Ibid.*, p. 38.

in the scheme. The application of empirical or intuitive data, the only data we have, lowers us from rigorous logic to vague opinions. The world of the problem of action and the everyday intersubjective world just do not have any channels for transferring one to another.

To show how easy it is to leave the declared subjective domain of the problem of action, let's focus on statement A. This statement can be read in two ways. We can keep the subjectivity, but then "what consumers want" remains unspecified to us and we can't generalize it (transpose it to the intersubjective world) on a particular generally accessible good. Since we suppose rationality^l, the problem is solved, but there is nothing we can infer from this. We cannot say, for example: corn, the good on the market, is always bought at the cheapest price.

The alternative understanding would allow the previous sentence, it would transpose the meaning onto concrete generally known goods, but then the domain of subjectivity (*the problem of action*) would be left. Such an understanding would set a rationality^{ll} assumption, but it would not be connected to the logic of the individual action.

The difference between these two understandings is essential for the social theory that may build on the logic of individual action. The first understanding of statement A is true assuming rationality^l, but it is useless for any theory about the world around us. The only implication of this statement, considering we keep the domain of subjectivity, is a defense of the status quo. No matter what we see, any acting individual is doing his best and nobody can improve his/her decisions³³.

³³ It may seem that rationality^l could be sufficient at least to argue for releasing the action from the coercive power of the state, which is the most expressive claim coming from Austrian economics, but that just could not be concluded from the logic of action. "The state" takes place in the intersubjective world, not in the world of action. We don't know what *state* is to the subjective perception of an individual and we don't know the relation of the state to him. If, for instance, an individual chooses to be coerced by the state, there would be no way to distinguish it from enforced coercion. The abolition of the state could possibly be coercion in the same way as it could be liberation.

The second understanding can very well be the starting point of a theory leading to a description of the social order around us as we may imagine it with “no antagonism between the interests of the individual and those of society”, but it is not within the domain of subjectivity and the logic of action.

In summary, Mises’s approach is weak on two levels. First, regardless of its own methodological assertions, it relies heavily on rationality^I, and second, even this understanding of rationality is arbitrarily transposed towards specific rationality^{II}. The statements describing the functioning of the economic system are implied neither by the introductive axiom of human action nor by rationality^I.

Simon’s criticism of economics’ understanding of human rationality was believed not to harm Austrian economics, because while Simon talks about human performance in *prime problems*, Austrian economics is mainly concerned with the logic of action. However, as we can see, it is impossible to build an economic theory purely on the logic of action. In fact, Austrian economics, regardless of its tenets, did the very same thing as neoclassical economics – it supposed that people solve certain problems around us without any difficulty. Its rationality^{II} assumptions are concentrated around the functioning of the free market which is in the Austrian view the preserve of effectiveness. Regardless of the plausibility of these assumptions, they just do not follow from rationality^I.

Even though it does not have a justification, the close connection between rationality^I and rationality^{II} is omnipresent in economics’ assumptions of rationality. It is so because these assumptions take power from each other. Without the idea of a priori rationality of human action, it would be hard to escape the case by case basis of rationality^{II} definition³⁴ and insist on rationality^{II} as something a priori present on the market. And without

³⁴ Which, for example, is the approach of experimental psychology.

assumptions of rationality¹¹ in the concrete prime problems of the market, there could be no neoclassical/Austrian economic theory.

7. Conclusion

Lionel Robbins's famous definition of economics says that: "Economics is the science which studies human behavior as a relationship between ends and scarce means which have alternative uses."³⁵ Stemming from this definition, the importance of the notion of the rationality of human action follows directly. We have to work with some conception of effectiveness that would assess how the chosen means work to fulfill the ends. Such a quality is usually referred to as rationality. However, before discussing the human ability to fulfill the ends, we must have a conception of the relation between what we consider ends and the actor himself. To claim the right to represent genuine human ends, wants, or purposes is suspicious; often it only masks the problems that would arise upon closer inspection.

In this paper I presented the fundamental contexts in which we usually consider rationality (and therefore the ends and the means). Each has certain limits that set the character and strength of the rationality assumption defined within its framework. Since economics demands a strong assumption of rationality (effectiveness), and since the meaning of rationality is equivocal, there is an apparent propensity to overstep the limits of rationality assumptions with the help of certain rhetorical tactics.

To improve the orientation in this issue, I distinguished between three common meanings of rationality and three rationality assumptions, where the former are based on the general meanings of the term and the latter are based on different concepts of effectiveness. I also tried to identify certain points where the strong assumptions about effectiveness take advantage of the intuitive connection to the everyday meanings of rationality.

³⁵ Lionel ROBBINS, *An Essay on the Nature and Significance of Economic Science*. 2nd edition. London: Macmillan and Co. 1945, p. 16.

It wasn't my ambition to judge the plausibility of the presented assumptions about rationality, even though I am convinced that clarification of the notion of rationality serves in this respect as well. Once the notion is clear, the limits of the assumptions become clear at once.

I believe that there is still a lot of room for enquiry about the assumptions of rationality. Not just in order to reveal the actual assumptions of existing theories, but also to create methodological frameworks for positive theoretical work. I wanted to show that teleology as the basis for economics was usually enriched with implausible elements that, however, did not belong to the original, purely methodological concept. However, being aware of this danger, I think that teleology itself is a prospective theme for study that may support us with usable methodological assumptions.

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