

What the Label “Rational Choice” Stands for? Let’s Talk About Definitions

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„[T]he first business of every theory is to clear up conceptions and ideas which have been jumbled together, and, we may say, entangled and confused; and only when a right understanding is established, as to names and conceptions, can we hope to progress with clearness and facility, and be certain that author and reader will always see things from the same point of view“ (Carl von Clausewitz, *On war*).

Abstract:

This paper assumes that as long as there is no clarity regarding the main ideas developed within the rational choice framework, including the meaning of “rational choice”, it shall remain one of the most criticized, misunderstood and internally divided theoretical approaches in social sciences. A clear definition of the main terms of the rational choice theories should be regarded as the first step towards improving both the understanding and the explanatory power of these theoretical concepts. The article attempts to make a contribution to the transparency of rational choice premises as well as to a greater logical consistence within the rational choice research program. These goals shall be achieved first by the differentiation between the “rational choice” as a research program, an approach and as a theory, and second by discussing some essential features of the rationality assumptions. As a result, a more sympathetic handling of the rational choice school of thoughts by its antagonists is expected.

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1. Introduction

The rational choice approach belongs undoubtedly to the most controversial theoretical approaches in modern political science. No other family of theories is so popular and, at the same time, so highly controversial among social scientists, as the family of rational choice theories (see Cohn 1999: 2; Lupia/McCubbins/Popkin 2000: 3; Hedström/Stern 2008). This, in turn, creates a high degree of emotionality in debates over strengths and weaknesses of the rational choice approach (see Monroe 2001: 156).

However, emotionally intense discussions on this topic occur not only between the rational choice proponents and critics, but also within the rational choice school of thoughts. As Opp and Friedrichs point out, “Rational choice theorists are divided on what the most adequate version of rational choice theory is and on the kinds of behaviour it can explain. Furthermore, scholarly evidence differs with respect to which decision rules are predominantly used by individuals” (Opp/Friedrichs 2002: 401).

On the one hand, some rational choice scholars still regard wide rational choice models, allowing social and moral incentives as well as non-material and subjective constraints and opportunities, as being unsuitable for subsuming under the label “rational choice”. This line of argument emphasizes that wide rational choice models stretch the idea of rationality to such an extent as to be of little use for analytical and empirical purposes. Furthermore, the criticisms concern the apparent *ad hoc* tendency as well as the non-falsifiability of models including a variety of motives and constraints (Finkel 2008: 28, here see also for an overview over the criticisms of the wide form of rational choice models.). On the other hand, an increasing number of scholars try to adapt the rational choice theories to the real preferences and perceived constraints of individuals, including a wide range of benefits, rewards, and motivations. Consequently, altruisms, duty, solidarity, moral appropriateness, cognitive heuristics, internal norms, misperception, miscalculation, and imperfect information are not unexpected ideas in many rational choice theories anymore (see Bowles/Gintis 2004; Andreoni/Miller 2002).

Due to the fact that even rational choice theorists themselves are not able to find a consensus in defining first, the idea of “rational choice”, and second, the kind of costs and benefits the rationality assumption should involve, it is hardly surprising that in the leading journals of social science a rationally acting person – an object of analyses of rational choice theories – is still seen as equal with the *homo oeconomicus* model (see Frohlich/Oppenheim 2006: 237; Landa 2006: 436; Binmore 2005: 75; Rosenblum/Salehyan 2004: 681; Mueller 2004: 65; Sjursen 2004: 108 u. 114; Monroe 2001: 151-157). Therefore, even if some

scholars regard the shift of the rational choice theories from sparse mathematical models toward much broader arguments as a dramatic transformation (Kiser/Bauldry 2005: 172), many studies clearly show that the relaxing of the orthodox rational choice assumptions are still not widely recognized in the literature. In fact, the majority of criticisms are unchangedly based on the “standard” or “orthodox” rational choice models, overlooking the recent, much more empirically-grounded wave of rational choice theories.

In this paper I suggest that the main reason for the external criticism of the rational choice approach as well as for conflicts within the rational choice school of thoughts is primarily the lack of clarity about the meaning of the term “rational choice” itself. Certainly, as long as there is no clear answer to the question what “rational choice” stands for, we are not capable of answering the essential question of which assumptions belong to this approach, i. e., whether, and if yes, under which circumstances, wide rational choice models should be taken as pathologies of rational choice theorizing.

This article is organized in three sections. After discussing the main critical points of the rational choice approach, a definition of “rational choice” shall be suggested. It is based on a differentiation between the rational choice research program, the rational choice approach and rational choice theories. Since the lack of understanding of the main idea of “rational choice” results mainly from the large numbers of definitions of rationality, the next section discusses the rationality assumption, emphasizing its aspects, which are relatively seldom mentioned: the consciousness as well as the methodological position of this assumption in rational choice theories. Hopefully, a clear definition of “rational choice”, as well as one of rationality will have a positive impact both on the understanding the rational choice idea overall, and on the clarity regarding terms used within the rational choice school of thoughts.

2. The Main Criticisms of the Rational Choice Approach

Currently, the increasing degree of formalisation of rational choice theories is unquestionably one of the main sources of its criticism. While at the time where rational choice theories were in their infancy, mathematical formulas were used basically to illustrate hypotheses, recent studies are “less and less ‘user-friendly’” (Walt 1999: 20; see also Pedriana 2005: 354). Certainly, mathematisation of the rational choice approach forces social scientists to invest time and effort, which is tied to the acquisition of demanding abilities in higher mathematics (see Büthe 2002: 482). Since not every social scientist is familiar with mathematical formulas, the necessity of acquisition of sophisticated mathematical equations might have highly

discouraging effects. Moreover, the increase in formalized concepts is linked to the risk that such theories would survive only due to their capability of skipping the evaluation process. The logic behind this supposition is that when potential critics are not capable of finding out how the line of argument is constructed, they cannot assess, and if necessarily reject, mathematically argued concepts (see Walt 1999: 21). Due to the difficulty evaluating the usefulness, correctness and accuracy of formalized models it is, therefore, possible that trivial ideas will succeed simply because they bypass the assessment process (see Mayer 1993: 123).

Furthermore, according to Thomas Kuhn, criticism of the rational choice approach could also be rooted in the “arrogance” of its proponents. Undoubtedly, when a new scientific approach claims its applicability to almost every field of social science, its rejection by adherents of the already established approaches seems to be pre-programmed (see Von Beyme 2000: 147). Moreover, some scholars refer to the intolerance and disrespect of the proponents of formalized models towards scholars using non-formalized concepts (Niou/Ordeshook 2000). In this regard, Keohane speaks about “sin of hubris” as distinctive for the rational choice adherents (see Keohane 2002: 357). Walt even writes about “hegemonic ambitions” (Walt 2000: 117) and “imperial tendencies” (Walt 2000: 118 a. 119) of the rational choice theorists, who are sometimes also labelled as „imperialist“, „colonizers“ and „Leninists“ (Cohn 1999: 2). It might, therefore, be reasonable to expect that if the rational choice proponents behaved more modestly, they would, perhaps, be much more influential (see McLean 1991: 511).

The feeling of exclusivity, which rational choice adherents are accused of creating, reduces the awareness of and openness to political science research carried out from alternative perspectives (Dunleavy 1991: 2). As a consequence, the rational studies remain being discussed mostly within their proponents – first because the specialized expertise has created a barrier to analysis by outsiders, and second because many rational choice scholars seem not to have a sincere incentive to confront their work with other theoretical frameworks.

The next critical point refers to the tendency of rational choice studies to theoretical instrumentalism, which, in turn, creates a lack of balance between the building of hypotheses and their empirical tests (see Bartoloni 1999: 437). Indeed, in large part due to difficulty empirical testing (for example, difficulty measuring of cognitive variables), most rational choice studies still concentrate on abstract models rather than on the areas most useful to political scientists (Dunleavy 1991: 2). However, the rational choice scholars appear to be aware of this unbalance in favour of the instrumental models (Cohn 1999: 6).

The dominance of the theory-building orientation of rational choice theories, compared to making empirical contributions, is tied, in turn, to the criticism of their apparently weak explanatory power. Accordingly, the over-simplified (Bunge 1989; Zey 1992) and unrealistic assumptions (Schoemaker 1991: 240) should make empirical tests impossible.¹ Admittedly, although an increasing number of studies are noticeably placing a certain level of emphasis on the maximization of logical consistency between theoretical assumptions and empirical data, accusations of empirical tests being somewhat secondary in importance in many rational choice studies might certainly be justified.

Moreover, both criticism of the empirical falsehood and the lack of testability of the rational choice premises are tied to the core premise of the rational choice approach – the rationality assumption (see Anzer 2004: 43; Lupia/McCubbins/Popkin 2000: 3). However, it should be emphasized that the “discovering” of diverse anomalies of rational behavior frequently results from the misinterpretation of the economic rationality overall. In fact, the process of “purging” the rational choice theories from some dogmatisms (Diekmann/Voss 2004: 13) has resulted in a much higher correspondence between theoretical assumptions and empirical evidence. Therefore, many accusations of the irrationality of human choices are no longer appropriate. Accordingly, norm-, and rule-oriented behaviour, incomplete information about alternatives and constraints as well as consequences of choosing a particular option, subjective beliefs about surroundings, restricted cognitive abilities, and certainly the openness to define goals have come to belong to the empirical oriented rational choice theories.

Undoubtedly, this short overview of the main critical points regarding the rational choice approach shows clearly that the scepticism towards it is partly entitled, and partly based on misunderstandings. However, many misunderstandings result in large part from a considerable chaos regarding definitions of the main terms of this approach. It is surprising that the definitional chaos, as one of the main weaknesses of the whole rational choice research program, is relatively seldom mentioned in the associated literature. This chaos regards, above all, three aspects as extraordinarily important to the whole rational choice approach: The cause of making particular choices, the name “rational choice”, and the rationality assumption. First, there is a vast uncertainty about what the rational choice approach regards as the main cause for individual choices. Accordingly, terms such: interests, motives, benefits, preferences, goals, and objectives – taken as causes for people choices – are very often used synonymously. This, in turn, makes empirical tests of rational choice theories

¹ For a list of critical points, see Green/Shapiro 1994. For a respond to Green/Shapiro, see for instance Diermeier 1995; Cox 1999.

especially difficult. A prime example of this kind of term chaos can be found in the “Economic Theory of Democracy” by Anthony Downs. As “primary goal“ or „objective“, Downs takes the election victory or re-election (Downs 1957: 11, 30 a. 35). However, he regards the re-election also as a motive: “We do not distort the motives of party members by saying that their primary objective is to be elected” (Downs 1957: 30). Furthermore, Downs adds that “the only goal” is to enjoy the advantages, which are tied to public office (Downs 1957: 28 a. 296). However, seeking advantages tied to public office is, according to Downs, also a “chief motivation”. As an “end” and at the same time a “motive”, Downs views, moreover, the demand for income, prestige and power (Downs 1957: 28 a. 296). However, not only re-election, income, power and prestige are regarded as motives (and, accordingly as goals) of political actors or parties, but also maximizing of voters (Downs 1957: 159). Finally, as “chief motive” of all social behaviour Downs interprets also self-interest (Downs 1957: 293). Undoubtedly, amongst other things for the purpose of empirical testing of the voter maximizing hypothesis, it is crucial to regard it as an instrumental goal, and not a chief motivation (see Dylla 2007).

Second, the definitional chaos regards the term “rational choice” itself, which is regarded as an approach, a framework, a paradigm, a methodology, theories or models in literature. Lastly, the chaos of terms refers to the core assumption of all rational choice theories: the rationality of human behavior. Not only is rationality defined differently, but, what is perhaps even more imperative, is that its methodological position in a particular rational choice theory is often underspecified. This means that the question of whether the rationality assumption is perceived to be a heuristic or an empirical testable hypotheses remains unanswered. Since definitions of both rational choice and rationality are needed in order to make the rational choice world of ideas more transparent and understandable, in the following sections I refer to the meaning of rational choice, and the interpretation of the rationality assumption.

3. The Definition of “Rational Choice”

Finding out what the label “rational choice” stands for appears to be no easy matter. Consequently, in the current literature one can find plenty of additions to the term “rational choice”. Specifically, there are: the rational choice theory or theories (Orr 2007; Butler 2007; Mintz 2004; Mackie 2006), the rational choice model or models (Dugan/Lafree/Piquero 2005), the rational choice approach or approaches (Dowding 2008; Bueno de Mesquita 2002), the rational choice methodology or methodologies (Filippov 2005; Schotter 2006), the

rational choice research program (McCubbins/Thies 1996; Congleton/Swedenborg 2006), the rational choice framework (Grofman 2004; Clements/Hauptmann 2002), as well as the rational choice paradigm (Mitchell 1999; Monroe 2001; Frohlich/Oppenheimer 2006). Moreover, the name “rational choice” stands for a diversity of labels such as the economic approach for explaining individual behaviour, the economic explanatory approach, the new world of economics, the economic school of thought, the interest approach, the economic behaviour model etc.

This diversity of terms clearly shows that no uniform name for the “economic view of the world” has yet been adopted. Regardless of the reason for this lack of uniformity, there is a clear need for clarity of what it means to speak about “rational choice”. As a contribution to the clarity of the rational choice terms, the following part of this section offers a three-step hierarchy of the rational choice terms:

- (1) Rational choice as a research program,
- (2) Rational choice as an approach,
- (3) Rational choice as a theory or a model.²

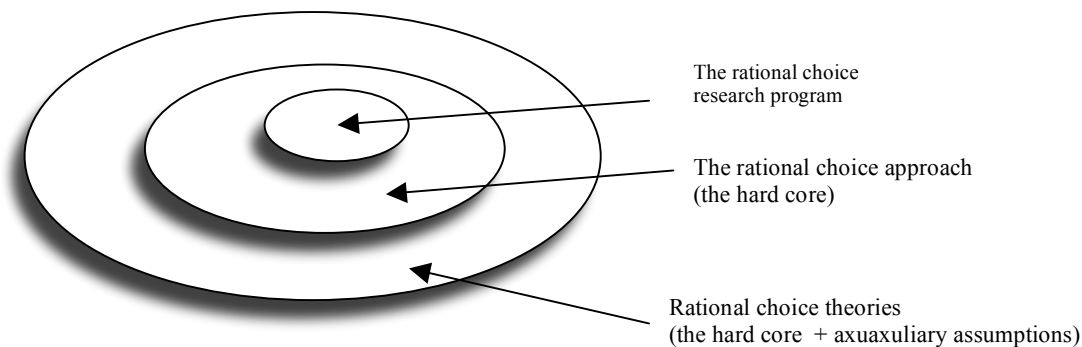


Figure 1: Rational choice as research program, approach and theory

First, by “rational choice”, without any additional terms, is understood to be a *research program* in the sense of the Lakatos’ idea.³ The rational choice research program

² It would be ideal to differentiate also between theories and models. As a model could be understood a formalized theory, which defines its assumptions in an axiomatic-deductive form (Diekmann/Voss 2004: 19). However, this differentiation is very seldom recognized in the literature. Therefore, the terms “theory” and “model” are treated here as synonyms.

³ According to Lakatos, every research program consists of some methodological rules. Some of them sketch the research ways one should avoid (the so-called negative heuristic), whereas others depict research ways, one should use (the so-called positive heuristic). Scientific research programs consist, therefore, of some non-falsifiable propositions (the so-called hard core) as well as auxiliary

can also be called “economic research program” or just “economic”. However, as the political scientist at the University St. Gallen Gebhard Kirchgässner emphasises, there is an essential difference between “economy” as an object-area of economics, and “economic” as a method of social sciences. Accordingly, economic tries to explain the human behaviour through the lens of the rationality of choice (Kirchgässner 2000: 2). Focusing on the question of how people deal with scarce resources, economic analyses the individual behaviour or interpersonal actions based on a cost-benefit calculation. The rational choice as research program borrows some ideas from the classic and neoclassic economic⁴ applying them to analyses of non-economic research problems. These ideas focus primarily on people interactions – regarded as exchange processes –, on seeking self-advantages, on maximizing benefit and minimizing costs, and on the problem of allocation of scarce goods.

Second, the hard core of the rational choice research program constitutes the non-falsifiable rational choice *approach*. The approach is regarded as the basis upon which the whole research program has been developed, and it creates a clear point of departure for the developing of rational choice theories as well. The hard core consists solely of two premises: first, the assumption of the methodological individualism, and second the rationality principle, as discussed below.

Lastly, the rational choice approach, i. e. the hard core of the rational research program, is a starting point for creating rational choice *theories* and *models*. Consequently, rational choice theories and models consist of the hard-core premises as well as some auxiliary assumptions, which, in the Lakatos’ terminology, build the so-called protective belt around the hard core. The auxiliary assumptions specify the goal and constraints of the actors as well as referring to aspects such as imperfect information, subjective perceived probabilities and norm-oriented behaviour.

Concluding, there is no *the* rational choice theory, but rather a large family of rational choice theories. All of them are based on the rational choice approach, i. e., the hard core of the rational choice research program. They can be differentiated between, however, through their auxiliary assumptions, which are added dependently on a given research interest or an analytical area.

As emphasized, the differentiation between the research program, the approach and particular theories has big implications. First, the hard core of the rational choice research

assumptions, which build a “protective belt” around the hard core (Lakatos 1978).

⁴ It refers to works of Adam Smith further developed by the neoclassical Economists like Léon Walras, Joseph A. Schumpeter, and Alfred Marshall.

program provides no statements about the content of actor's preferences. Accordingly, the question of whether moral benefits, altruism, norms or duties should be included, is always a well-considered, individual decision made by researchers. Similarly, using mathematical formulas also depends on a decision of scholars, as it does not belong to the hard core of the rational choice research program either. As a consequence, rational choice theories do not necessarily have to be formalized, since it is not a formalized language at the core of the rational choice research program, but a goal-oriented behaviour. As Cox points out, the rational choice theorizing "covers a very wide range of theorizing, some of which is highly mathematical, some of which is completely nonmathematical" (Cox 2004: 172). The truth is, however, that this interpretation is not widely recognized, neither by the critics nor by the rational choice researchers. In fact, for most of them, rational choice theories are equal with formalized theories.

4. The Rationality Assumption

As previously mentioned, the first hard-core assumption of the rational choice research program constitutes the methodological individualism, maintaining that all social processes should be understood in terms of people choices (Ordeshook 1968: 1). Whereas this assumption is, in general, not a point of discussion (see Buchanan 1984: 13; Riker/Ordeshook 1973: 94), the second hard-core assumption, the rationality principle, causes the main criticism (Anzer 2004: 43). The fundamental importance of this assumption in all social sciences is stressed, for example, by Riker and Ordeshook. Accordingly, the rationality assumption is "one of the ways by which we arrive at the regularity necessary for generalization. (...) Rationality is the something we postulate in people that makes them behave in a regular way. And the essence of that something is that people relate their actions to their goals" (Riker/Ordeshook 1973: 11). Kirchgässner compares the relevance of this assumption in social sciences to the significance of the causal principal in natural sciences. Specifically, we are capable of dealing with natural laws only, if we accept the causal principle. Similarly, we can understand the human behaviour only if we differentiate between preferences and restrictions, assuming that individuals, in order to achieve their goals, choose the means in a rational way (Kirchgässner 2000: 18). The main critical point concerning the rationality assumption derives specifically from its lack of its testability, which is, in turn, often connected to the lack of verifiability of the rational choice theories overall. Certainly, the rational choice theorists partly bear blame for this accusation as they seldom specify if their argumentation is put at an analytical or an empirical level. Consequently, they left

readers in the darkness as to whether their hypotheses are empirically testable or whether they have an entire theoretical character. Since not each theory is built with the aim of being testable on the reality, a criticism of a lack of empirical power when dealing with pure analytical models must certainly be considered pointless. However, it is important and necessary to give a clear response to the question of whether theoretical assumptions claim an illustration of the reality or remain a theoretical construct.

Certainly, violations of the rationality assumption have been systematically found even in theories, which claim an empirical testability. However, not each discovery of an “anomaly” is proof of irrationality, but rather a result of a misinterpretation of the rationality assumption overall. One of the main reasons for this misinterpretation is the lack of specifying the methodological position of the rationality in empirical analysis as well as under-emphasising the importance of the consciousness when making (rational) decisions. Admittedly, these aspects, which are most responsible for the criticism of the rationality assumption, appear to be hardly noted within the rational choice research program.

In the following parts I give, therefore, a short definition of rationality focussing on the consciousness of the individual behaviour as well as the methodological position of the rationality assumption in empiric-oriented rational choice studies.

4.1. Understanding of rationality

There is no single definition of rational behaviour, but rather a wide range of diversely defined rationality assumptions, axioms, and principles, each of which could be applied to entirely different aspects of a choice situation (for an overview over multiple meanings of the word “rationality” and “rational” see Lupia/McCubbins/Popkin 2000: 7; McCubbins/Thies 1996). Bearing in mind this variety, it appears tremendously important to define what each scholar means when using the term “rationality”.

In this article, rationality of human behaviour – as a hard-core element of the rational choice research program – is understood in terms of pursuing of goals by choosing this alternative action, which is perceived to be the most efficient instrument to achieve these goals. “Efficient” means that goals should be achieved at minimum cost, with constraints always being taken into account. This definition is based, therefore, on two assumptions: First, the human behaviour is *goal-oriented*, second, *constraints* determine whether, and to what price, a given goal could be achieved. In this definition, rationality is understood instrumentally, and not substantially, i. e., the rationality assumption refers not to the content of actor’s preferences, but solely to the means chosen in order to realize those preferences.

Consequently, preferences might be egoistic as well as altruistic (Bowles/Gintis 2004). It means that egoism as well as selflessness, solidarity and norm-orientation can be “maximized”. Let’s ask in this context with Doron and Meydani: “[S]hould genocide be considered an aggregated “social” product of individually-guided rational actors? (...) Or, do the massive suicides conducted by the Japanese Kamikazes during the Second World War constitute rational behavior? (...) And, what about the behavior of Muslim Shahids, functioning as suicide bombers in the Middle East and in other parts of the world since the beginning of the 21st century? Should these acts of people destroying their own and others’ lives be considered rational?” Their conclusion corresponds closely with the definition of rationality presented above: “The theoretical answer to these questions is clear, final and positive. As long as the behavior is not meaningless or random and so long as it may be perceived as goal-directed, it is defined as rational” (Doron/Meydani 2006: 1). Therefore, it might be stated that rationality is a matter of means, not of goals (Heap/Hollis/Lyons/Sugden/Weale 1992: vii), and that a rational choice should be defined as “reasoned choice, not reasonable choice” (McCubbins/Thies 1996: 24, see also Lupia/McCubbins/Popkin 2000: 8).

Consequently, the choice of the best alternative does not mean that an individual knows the implications of all actions available to him or her, or that the issue is calculated on the basis of perfect information or that he or she finally chooses the alternative with the most beneficial consequences. However, this interpretation of what rational choice theories apparently assume, can still be found in micro-economic textbooks, which clearly display an immense backlog of demand for the conveying of the modern, empiric-oriented economic models.

However, in recent years one can observe a clear effort of rational choice researchers to formulate realistic assumptions. Norm-orientation, incomplete information about options and consequences, the openness of preferences, and by no means least a subjective assessment of choice situations have come to belong to the standard assumptions of empiric-oriented rational choice theories, and could be regarded as anomalies certainly only by scholars, who are not familiar with the rational choice research program.⁵

First, social norms may be regarded as internal or external restrictions for an individual behavior, since their violation might imply high costs. Therefore, due to restricted

⁵ One of the criticisms referring to the permanent violation of the rationality assumption roots in the conviction that rationality contains the axioms of transitivity and continuity. These are, however, auxiliary assumptions, which do not belong to the hard-core rationality assumption (for this argumentation line, see for example McCubbins/Thies 1996).

information and uncertainty, the orientation on societal widely recognized norms does not contradict the rationality assumption. Moreover, a norm-governed behaviour might result from the internalization of particular values, which violation would cause internal costs, for instance, remorse. For this reason, taking into account social norms, and including them in their cost-benefit analysis, seems to be in interest of most actors. Furthermore, it is not unthinkable that paying attention to social or moral norms could be conceived of a goal in itself as well.

Furthermore, there is no doubt that seeking and processing information and alternative actions implies costs, too. Therefore, an effort of seeking information is considered to be rational if the benefit of additional information outweighs the cost of obtaining the said information. Consequently, a decision about the acquisition of information is based on the evaluation of the cost and benefit of gathering additional knowledge. When the cost of information gaining about possible alternatives and consequences are estimated to be higher than the worst decision, or when the probability that a consequence will really occur is about zero, than the actor forgoes a cost-benefit calculation, and behaves habitually instead.

Moreover, rational behaviour does not necessarily have to be tied to a search for material goods. Since neither goals nor preferences are specified in the hard core of economic, altruistic preferences could be subsumed under the maximizing of benefit as well. Obviously, any kind of behaviour which is incompatible with the *homo oeconomicus* model is not inevitably contrary to the rational choice approach.

Furthermore, many scholars appear to agree that a rational behaviour does not mean pursuing an objective, but rather a subjectively expected benefit. Undoubtedly, both intellectual abilities of an actor and external factors cause constraints in the process of goal maximizing.

Lastly, as a result of an “approximation to the reality”, many rational choice researchers claim to avoid the term “complete” rationality, using instead a “less extreme” principle of “bounded” rationality (see Watkins 1978: 35). As Simon puts in, “Rationality is bounded when it falls short of omniscience. And the failures of omniscience are largely failures of knowing all the alternatives, uncertainty about relevant exogenous events, and inability to calculate consequences” (Simon 1979: 502). This assumption rejects the existence of omniscient people with respect to the domain of choice. Even if people miscalculate, their behaviour is not accidental. Rather, “They proceeded in a *logical way* from their (false) premises to an (erroneous) conclusion. (...) Typically it is fully consistent and, given the false premises, entirely explicable in terms of goals” (Riker/Ordeshook 1973: 30).

In fact, nowadays the term “bounded rationality” constitutes a common usage in the rational choice literature. However, without questioning constrained intellectual human capacities, one might ask if the term “bounded rationality” should really be regarded as an accurate description of the hard-core rationality assumption? As German social scientists Homann and Suchanek point out, it is somehow trivial to say that in empiric-oriented studies one must reject the extreme case of the perfect informed *homo oeconomicus*, taking instead into account constraints, which accompany the information gathering and processing. In truth, the fundamental question is, how people deal with such constraints in practice? It is worth reiterating here that seeking the “best” alternative is tied to costs. Consequently, the Simon’s *satisficing model*, which derives from the “bounded rationality” assumption, and postulates to stop searching for new alternatives once a satisfying alternative has been found, might be regarded as compatible with the rationality assumption too. Using the term “bounded rationality” seems, therefore, meaningless because one cannot speak about an underlying category without having a main category. Or put simply, if the rationality is incomplete, there cannot be a bounded rationality as well. Therefore, that which is called “bounded” rationality, is, in fact, currently – at least in empirical-oriented rational choice studies – the “standard” rationality assumption. Riker and Ordeshook similarly argue: The satisficing-principle is “distinguishable from the principle of maximizing only if under the latter, perfect information is assumed. Otherwise the principles are identical. (...) The question is, therefore, whether or not one ought to include perfect information in the rule of maximizing expected utility. We think not” (Riker/Ordeshook 1973: 22). The assumption of the perfect information is, therefore, “an unreasonably high standard for rational behavior. Indeed, if we require perfect information for rationality, then only god is or can be rational” (Riker/Ordeshook 1973: 22).

Concluding, the rationality assumption should not be regarded as a mathematical optimization of any goal function, but rather as a systematic selection from the options one faces. Such a definition of rationality implies that people always maximize their rewards under constraints. Consequently, the rationality of behavior can be assessed only under the reconstruction of the subjective interpretation of a given situation.

4.1.1. Conscious Behaviour

In the previous sections several assumptions have been made: first, the question of what kind of goals people pursue is not determined in the hard core of the rational choice research program; second, the goal-achieving process is tied to restrictions; and third, goal maximizing does not have anything to do with “superhuman” abilities. However, as of yet, this modern

interpretation of rationality has been not capable of removing all critical points, and the main criticism seems to be based particularly on the universal validity of the rationality assumption. In this context, some scholars specifically emphasize the fact that people often behave habitually, i. e., they do not calculate the advantages and disadvantages of every action they take. This section attempts, therefore, to deal with the question of habitual behavior, showing why and under what circumstances it could be regarded as a rational one.

In discussing the aspect of routine behavior, an obvious, although often neglected, fact to consider is that the object of a rational-choice analysis is always a *conscious* behavior of individuals. In other words, the rational choice research program does not deal with non-reflected physiological processes, but with choices made intentionally. Assessing a non-reflected behavior as rational, only because an individual reacts appropriately to a particular situation,⁶ is, therefore, to be perceived as false. For instance, crying during a funeral is undoubtedly appropriate to this specific kind of situation, but it is not a choice, i. e., not a conscious behavior. Consequently, one cannot regard a behaviour which is genetically pre-programmed as rational in the sense of an economic rationality. Certainly, such a behavior might be appropriate in particular situations, but it has nothing to do with a conscious maximizing of someone's benefit. Furthermore, some scholars assume that a rational behavior could also be driven by instinct. Accordingly, both the internal and external instinct mechanism is a purposive one, as it safeguards one's survival and maintains the human race overall. However, once again, an instinct is not an alternative someone can choose. It is worth reiterating, therefore, that the object of a rational-choice analysis is a human behavior, which results from a conscious choice between at least two alternatives. Consequently, a rational behavior is a "choice behavior", and the economic rationality is a "decision rationality". Both of them necessarily include intention and considerations. However, if rational choice theories deal only with reflected behavior, rather than with reactive imitations, mechanical or spontaneous behavior or instincts, then the accusation of irrationality seems to be meaningless. Either habitual behavior is conscious or it is not a result of choice, which means that it is not of analytical interest for the rational choice scholars.

⁶ "When we speak of 'rational behaviour' or of 'irrational behaviour' then we mean behaviour which is, or which is not, in accordance with the logic of situation" (Popper 1983: 354). However, this Popper's criterion of a rational behavior, it is its appropriateness, is often misunderstood in the sense that the elements of consciousness as well as pursuing of a goal are not taken into account. Popper puts unmistakably in, though, that the situation "already contains all the relevant aims and all the available relevant knowledge, especially that of possible means for realizing these aims" (Popper 1983: 359).

That said, one would ask where this conscious element could be found in habitual behavior? In order to answer this question, two factors should be emphasized: first, a cost-benefit analysis carried out prior to habitual behavior, and second, the perception of eventual changes of the environment.

First, routine behavior is to be considered rational if it is based on a cost-benefit calculation done previously. So habitual behaviour results from previous rational decisions, which were found as useful and profitable. Obviously, without such automatisms each decision would be too cost intensive. Accordingly, the rationality of using habits is based on the desire to save analysis and adjustment costs, which in regularly repeated situations could unnecessarily absorb decision makers. The goal of using habits is, therefore, to avoid choices in situations which are repeated regularly. As Azner puts in, “Rational choice is not only a theory about decision making but also a theory about the costs of decision making and therefore it is even a theory of the *avoidance of calculation*” (Anzer 2004: 55).

Second, the schema-oriented behaviour is rational as long as no significant changes occur in the environment. Otherwise, an individual has to reject the habitual behaviour, and undertake a cost-benefit calculation relying on new information. Strictly speaking, routine behaviour must be accompanied by an analysis of the situation as well. Consequently, habitual behaviour cannot be based only on rational decisions made previously, but also on the consideration as to whether one should behave habitually in a given situation or whether costs and benefits have to be weighed up again because of situational changes. In short, if habits are based on a cost-benefit calculation made before, and are re-thought once the situation changes, the habitual behaviour might be regarded as rational.

Concluding, habitual behaviour means, above all, a simplification of a decision-making process. However, the decision in itself is still made on the ground of the maximizing criterion. Accordingly, each decision-making process could be regarded as a two-step model: first, an individual decides whether a habit should be followed; second, he or she carries out a particular action. So, this considered, it might be stated that a conscious choice to use rules of thumb or habits is nothing other than an economisation of a decision process. The rationality of a choice based on a routine is, therefore, related to the efficiency of routine behaviour: The efficiency results primarily from the fact that habits are easily and cognitively available, which reduces the cost of information processing and judging. Moreover, habitual behavior is often embedded in frameworks of social institutions and norms. This reduces, in turn, the social costs of making choices, as it increases the certainty of compatibility with the behaviour of others, as mentioned above.

4.1.2. The Methodological Position of the Rationality Assumption in Empirical Studies

As mentioned previously, in order to increase the transparency as well as the explanatory power of rational choice theories, each rational choice study should inevitably determine whether, by rationality, a non-falsifiable heuristic or an empirically testable hypothesis is meant.

On the one hand, trying to find out in the literature, which function the rationality principle plays in a given rational choice theory, one can find its interpretation as an empirically empty assumption. For Karl Popper, the principle of rationality is neither an empirical-based theory or a testable hypothesis nor *apriori* valid principle, but it is “clearly false” (Popper 1983: 360). However, according to Popper that is not to say that one should forgo this principle, rather just the opposite! This principle is not falsifiable, but it is an integral part of “every, or nearly every, testable social theory” (Popper 1983: 361). Regardless of its falsehood, the rationality principle should, therefore, be used as a “good approximation to the truth” (Popper 1983: 358). The adoption of the rationality principle “reduces considerably the arbitrariness of our models; and arbitrariness which becomes capricious indeed if we try to proceed without this principle” (Popper 1983: 365). A similar view is presented by Riker and Ordeshook. The assumption of the “goal-directed behavior”, i. e., the essence of the rationality assumption, helps the analyst discover regularities. Without this principle, the world of the interacting individuals would be chaos or coincidence. In other words, the rejection of the rationality principle as a general human behavioural basis would clearly imply an introduction of *ad hoc* explanations (Riker/Ordeshook 1973: 10).

The rationality principle should be regarded as an inevitable component of theoretical systems, which should remain non-falsifiable, according to John W. Watkins (Watkins 1978: 37). As such, we should not consider it to be true, but handle it as if it were true (Watkins 1978: 79). Similarly, the rationality principle is seen as a non-falsifiable assumption by the German national economist Jürg Niehans. Although the assumption is empirically false, it can significantly improve the acumen of theorists (Niehans 1989: 14). The rationality principle in empirical studies being considered as a non-falsifiable assumption is also applicable to Karl Homann. Accordingly, the rationality assumption is “not an empirical claim”, but rather “an *apriori* theoretical concept” or “a methodical principle”, which stands before the empirical work, makes it possible, and guides it. Consequently, the rationality assumption can neither be wrong nor false, but only valid or invalid (Homann 1988: 67).

In all those examples, the rationality principle is regarded as a non-falsifiable principle, and a heuristic means, but at the same time as an indispensable part of each model

in social sciences. This closely corresponds with the widely recognized viewpoint that some premises in the science are necessary carriers of fundamental ideas, and that in all theoretical systems there are some, which are responsible for their logical unity. Consequently, all theoretical systems encompass some *apriori* elements, which cannot be tested in reality. They can be neither verified nor falsified. However, one might debate over their usefulness. Undoubtedly, this kind of assumptions cannot provide empirical evidence, but solely useful arguments (Homann 1988: 121).

Each theory is, therefore, an approximation of reality and not its illustration; it cannot be true, but at most appropriate. Accordingly, both hard-core assumptions of the rational choice research program, i. e., the methodological individualism and the rationality postulate, are heuristic means, applied in order to develop an explanation strategy. The term “axiom” can be used interchangeably with the term “heuristic” as long as an axiom is not considered to be a self-evident proposition, *apriori* valid principle or a necessarily recognizable statement, but rather a postulate, which stands at the beginning of the economic research program. It does not follow from any other statements, but all other statements are logically derived from it.

On the other hand, some scholars regard the rationality assumption as an empirically testable hypothesis, admitting at the same time the difficulty of its testability. However, empirical tests are principally possible when auxiliary assumptions, primarily assumptions about goals and restrictions of an individual, are added to the hard core.

Those contradictory interpretations of the rationality assumption that can be found in the literature on the one hand as non-falsifiable principle and, on the other, as an empirically testable hypothesis, might lead to confusion and, indeed, the wrong conclusion that rational choice theories are in general empirically “empty”, and their explanations are tautological. However, close inspection reveals that we actually face two completely differently perceived interpretations of the methodological position of the rationality assumption. The empirically “empty”, i. e., without any auxiliary assumptions, rationality *principle* should, indeed, be regarded “only” as a good heuristic means. However, once it is enriched with some additional assumptions, it becomes an empirically testable rationality *hypothesis*. According to Vanberg, it is valuable, therefore, to differentiate between the *rationality principle* and the *rationality hypothesis*. By a rationality principle, Vanberg means such an interpretation of the rationality assumption, which postulates solely that people choose the best alternatives in their view, and that the choice is based on preferences they have at the time of the choice. The rationality principle can be understood either as a definition of a goal-oriented behavior or as a heuristic

principle, which provides information about how a scholar should handle a given research problem. This principle is neither true nor false, but more or less purposive. However, once we enrich the principle with additional assumptions regarding goals and restrictions of a decision maker, we have to do so with a falsifiable rationality hypothesis (Vanberg 2002: 6).

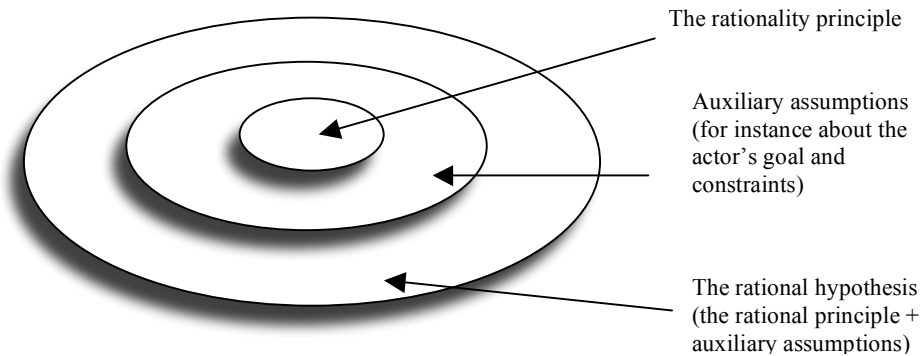


Figure 2: The rationality principle and the rationality hypothesis

Certainly, in an empirically oriented study, both parts of the rationality assumption – the principle and the hypothesis – are very closely linked to each other. Therefore, the involvement of only one of them would decrease or perhaps entirely eliminate the explanatory power of the whole rational choice research program. Unquestionably, for the purpose of explaining reality, an empirically testable rationality hypothesis is needed. Its central part constitutes the rationality principle, which is the very basis of the whole rational choice research program. Neither the principle without additional assumptions, nor the additional assumptions without the principle are able to give a sufficient explanation of real human behaviour. As result, in empirically oriented studies a human behaviour must be explained on the basis of the rational principle plus some additional assumptions, simply known as the rational hypothesis. It should be emphasized, however, that even after enriching through the additional assumptions, the rationality principle still remains in its “row” form the central part of the economic (see figure 2).

5. Conclusion

Rational choice theories undoubtedly belong to both the most influential and the most criticized theories in current social sciences. This paper tried to show that some of the critical points are entitled, whereas some of them result from the misunderstanding of the main ideas of the rational choice research program. However, the rational choice scholars should take the criticisms seriously in order to improve the argumentative transparency as well as the explanatory power of their concepts. After presenting some of the most frequently mentioned criticisms of this theoretical framework in the literature, this article added another one, namely the lack of consensus within the rational choice adherents in defining what the label “rational choice”, in fact, stands for. Hopefully, this question could partly be answered by differentiating between “rational choice” as a research program, an approach and a theory as well as by clearly defining the hard-core propositions of the rational choice research program. Undoubtedly, as long as there is no consensus, at least within the rational choice scholars as to what “rational choice” as well as the main assumption of all rational choice theories mean, there is no possibility to determine which theories could really be called rational choice theories and what kind of behavior might be considered to be a pathology of the rational behavior. Focusing predominantly on the second hard-core assumption, the rationality assumption, I tried to demonstrate that the so-called wide rational choice models, including a variety of goals and constraints, could absolutely be compatible with the hard core of the rational choice research program.

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