THE APPLICATION OF RATIONAL CHOICE THEORY IN THE STUDY OF THE ADMINISTRATIVE ENFORCEMENT OF LAW

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Why rational choice theory of all theories?

When discussing the efficiency of the administrative enforcement of law, it is often stated that, although legal sanctions get tougher, it still “pays” citizens more to violate the law than to abide by it. Some even claim that only the “fool” observe the law. Is it really unreasonable to observe the law? Are all breaches of the law rational? For nearly two decades now I have been studying administrative sanctions and liability. Until now I mostly relied on the methods of legal dogmatics and the science of public administration. The methodology of dogmatics is also a part of a paper of mine, whose title is “Topical issue of liability in public administration - within and outside administrative dogmatics”. In this paper I apply an interdisciplinary approach to administrative sanctions and liability, involving the recent results of other disciplines because those other disciplines can perhaps offer fresh insights and solutions. Of the social sciences I employed results and methods of sociology, criminology, psychology and economics; of the natural sciences I used results of network theory, human ethology, neurobiology and neurophysiology.

In this paper I examine whether the use of an economics approach is successful; and I call attention to expected results and pitfalls. Rational choice theory (RCT in short) is a central category of the economic analysis of law and it has been one of the most influential theoretical attempts to explain legal phenomena.

Richard Allen Posner is the father and best known proponent of the economic analysis of law. That having said, today Posner’s approach cannot be described as the most typical or most representative among the relevant economic analyses of law.¹ Posner’s theory is based on the Chicago neoclassical model of the market. Posner applied Ronald Coase’s social cost theory (marginal cost/marginal utility theory) to law. He wanted to find out to what degree law served economic efficiency. The economists (and Posner) perceive sanctions as prices; their hypothesis is that people respond to sanctions in the same way as to prices: they buy less of the more expensive ones. Consequently, tougher sanctions yield fewer violations. This interpretation of the RCT is applying the cost/benefit theory to the enforcement of law. Simply put: people decide to breach the law because, all factors considered, that pays more (literally). Proponents of that theory see law as a “system of incentives”, a quasi “price

system”, in other words, as one of the limits to the actions of individuals in their pursuit of their interests. This approach treats sanctions as a price or fee and identifies law with liability, where the rules of liability appear as cost factors. A United States federal judge, Posner based his model on the private law of the United States and, within that, tort law, and he sought to influence the sentencing practice of judges. Posner’s original model was based on the case law of common law rather than the statute law of the European continent. That sheds a different light on his economic analysis of law. That model cannot be applied everywhere without alterations and the differences in circumstances need to be reckoned with our conclusions.

Economic efficiency, cost and benefit are easier to identify in private law. That is why the classic areas of the economic analyses of law can be found in civil law: examples include liability, law of property, contract law and lawsuits. Of lesser importance is the economic analysis of criminal law. In that area the goal is to minimize the social costs of crime.

Early attempts at the economic analysis of codified public law widely differed from the Posnerian premises. The analyses focused on taking stock of the costs of state intervention in homogenous fields like social insurance and the regulation of certain industrial branches. The RCT had appeared in the science of public administration earlier as the theory of bounded rationality by Herbert Simon is today respected in the science of public administration almost as a dogma. However, the science of public administration approach does not examine the conduct of the addressees of law. It examines the bounded rationality of decisions passed in public administration.

The economic analysis of law has been popular ever since its inception and it is even more popular today. Suffice it to have a look at the relevant international literature. In addition to the several writings of Posner, we refer to McKaay of Canada, Ferey of France and Cooter and Ulen of the United States. Their works remind us that economic efficiency should be a central category both of making and implementing statutes. This approach has had limited following in the Hungarian literature. As early as in 1984 a volume was published on the relevant theory and its criticism. It was edited by Attila Harmathy and András Sajó. Lajos Vékás applied the relevant theory as one of the possible approaches to liability in his volume that lays the theoretical foundations for a new Hungarian Civil Code. Discussing tendencies in legal theory, Péter Cserne referred to the economic analysis of law in several works. In 2008 György Gajduschek published a book, entitled: Let There Be Order, in which he applied the economic analysis of law when discussing the functions of supervision and the imposition of fines by public administration authorities. In that book Gajduschek voiced criticism of administrative law and administrative dogmatics (and of some my earlier statements on those

5 MCKAAY (2008)
6 FEREY (2008)
7 COOTER - ULEN (2005)
8 HARMATHY - SAJÓ (1984)
10 GAJDUSCHEK (2008)
subjects). Among other things, Gajduschek stated that the administrative dogmatics approach was not sensitive enough and the conclusions that can be drawn from it do not render the enforcement of law more efficient.

I concede that perhaps other approaches bring us closer to the roots of the problems but my purpose was to determine the conditions under which the RCT could be applied. The use of the RCT can chiefly be justified if the economic analysis of law yields noteworthy findings in private law. If that condition is met, then perhaps findings can be made also in codified public law that - even if they fall short of questioning the results of an earlier dogmatics approach - add new shades to them and grant us supplementary information that can take us closer to rectifying the ills of the administrative enforcement of law. My other research hypothesis was that the rational choice theory approach can enable us to examine simultaneously the law-abiding and the unlawful conduct. I am increasingly certain that when breaches of law are examined in isolation, the point of reference gets lost. Applying the rational choice theory, we can identify the areas where law-abiding conduct can be contrasted with unlawful conduct.

Useful results can only be obtained if two preconditions are met: (1) we have to examine the premises and limits of the original economic rational choice theory approach, (2) we have to examine what special conditions and limits are assigned to those economic limitations by public law. The perimeters of the two disciplines put together cover the domain where the rational choice theory can be applied in administrative law. Moreover, such an approach draws the boundaries beyond which the findings are certainly unrealistic.

**Interpretations and notions of RCT**

The expression “rational choice theory” is an umbrella term, which is open to various interpretations and applications. During the 1980s it gained popularity among neoliberal economists. As an umbrella term it can refer to economic models that vary in substance or form. It can also mean a method for deciding certain questions. If the rational choice theory is considered as one that generates models, it can mean any of the following things: types of individual decisions, game theory, public choice theory, and microeconomic models in social sciences (for example, political science, sociology, psychology and jurisprudence). If however the RCT is considered as a method, it is a “shared methodology platform that separates and differentiates the social science applications of the above-mentioned models from other programmes and theories of other social sciences.”

The RCT can be interpreted from another angle. We have to differentiate between the RCT understood as a theory of action and as a social theory. In the domestic literature on the RCT however such differentiation is often missing. Applying situational logic, the RCT places the individual and individual action into the focus of attention; the individual is treated as a being that acts intentionally. The rational starting point of the analysis is that individuals in their decisions pursue their own interests. They analyse the information at their disposal and then

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13 SZÁNTÓ (1998/b)
pass decisions that bring them the biggest possible benefit. With that approach the RCT can be interpreted on the level of individuals, in other words, for the description of micro-level phenomena.

As a social theory, the RCT employs methodological individualism. It says that a statement of social science can only be flawless methodologically if the phenomena examined can be traced back to individual intentions, desires and motivations. Employing that method, we can speak of public choice theory, RCT sociology, RCT political science or the economic analysis of law. Unlike the theory of action approach, the social science application of the RCT means the explanation of macro-level phenomena as relying on the actions of individuals. Whether the RCT is considered as a theory of action or as a social theory, we apply the methodology of microeconomics. Our working hypothesis is that, relying on their preferences and information; individuals seek to maximize their benefits and are bound to choose the best of all the available options. Microeconomics is a description of the distribution of finite resources and of the methods of maximizing benefits.

To promote better interpretation, it is necessary to make related terminology more precise. In economics the micro- and macro categories are used in several senses. For the purpose of this paper, the expression “micro-level” will be used to mean the level of individuals and not the entities typically referred to by microeconomics (as for instance, households, companies and the state). For the purposes of this paper, the expression “macro-level” will mean the level of government, public administration, society and community. By contrast, in economics the expression “macro-level” is typically used to mean the policies and structures that form the economic system as a whole. The expression “meso-level” is used to refer to structures that mediate between the micro- and macro-levels.

**The rational choice theory as a theory of action in jurisprudence**

In economics a decision is seen as rational if actors choose the best decision by honouring their preferences and have access to all the necessary information. However that theory makes serious limitations already when defining the notion of “rational” because it refuses to examine the moral norms. Max Weber worked out a remarkable definition of rationality. He differentiated between purpose-rationality and value-rationality. According to that analysis, acts can be classified as follows:

a) purpose-rational acts: the aim of the activity is to attain a goal;
b) value-rational acts: conduct is determined by belief in some unconditional ethical, aesthetic, religious or other self-value;

and acts can dispense with rationality if they are

a) emotional acts: acts are determined by emotions and temper,
b) traditional acts: acts are determined by deep-rooted custom.

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The two types of rationality are usually sharply separated. In some situations however the types can get intertwined. In case we have to choose between rival (and/or conflicting) purposes, choice is usually based on value-rationality. Weber is of the opinion that, when viewed from the standpoint of purpose-rationality, value-rationality is always irrational. The more value is elevated onto the rank of absolute - to which activity is adjusted - the less actors are considerate of the consequences of their action because they focus on self-value. In reality the two types of rationality are rarely fully separated. The RCT only considers purpose-rational acts as the subject of its analysis because it examines the logical structure of decision-making.

Every legal norm includes the principle of purpose-rationality as the bureaucracy that created that norm must have been after some purpose. But the rationality of a law-abiding person does not necessarily coincide with the rationality that the writers of the norm had in mind. Only a part of the breaches of administrative law can be seen as purposational action while another part is value-rational. In numerous violations the two mix, or the acts belong to the emotional or traditional categories of Max Weber’s system. I examined in detail the motivations of such violations in some of my earlier publications. I could not and cannot tell for certain which acts can be regarded as purpose-rational acts. What I do know is that numerous breaches of law that are fined under statute law are the result of purpose-rational acts but we cannot declare that all violations of statute law are of that nature. Even if we manage to tell about a breach of law that it is a consequence of a purpose-rational decision, we still cannot be certain that the purpose was obtaining a material gain. As a rule the RCT posits material gain as the purpose (that is quantifiable) but a direct pecuniary gain cannot always be proven.

Of the acts that fall under the category of the law of infractions, we can safely declare that they are not purpose-rational; instead, they violate social norms and have moral motivations. Neither do we find guidance on this issue if we consider what society thinks about breaches of law and whether such a violation is denounced because several types of purpose-rational violations do not provoke a negative response. Take for example discipline in keeping vouchers (receipts and other documents about commercial transactions), its violation is usually received with connivance even though it is easy to prove in such cases the drive for material gain and doing harm to society. There are instances when society is not harmed and yet there is a moral motivation behind the violation. Consider the example of beggars who stand in the street: they are usually disapproved by the public. Let us conclude then that there is no way of separating sanctions that only belong to violations with rational, moral or emotional motivations.

As far as sanctions imposed on breaches that do not cause material damage are concerned, it is easier to find purpose-rationality than finding the drive for material gain. In principle we can think of a violation where the sanction imposed is the closure of an organization, that is, the suspension of its operation, and the violation was meant to yield some material gain - but

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16 In more recent literature the evaluation of the relationship of moral norms and rational choice theory is more nuanced. Houranszky, for example, divides relevant opinions into two groups. In the first group only conduct that seeks self-interest is rational. In the second group moral norms are not considered as irrational but they cannot be examined with the methodology of the RCT. Houranszky (2003) p. 112.

even there the connection is not linear. After all, the law can be violated even in such a way that the breach brings no material gain (for instance, someone fails to fulfil a certain duty) and the sanction is prohibiting the pursuit of the activity concerned. The negligent or wilful violations of the financial interests of the European Union always involve the effort to reach material gain; however, purpose-rationality cannot be identified when negligence is behind such acts.

When examining the rationality of breaches of law, our first problem is that - when defining the object of study - the traditional categorization of legal dogmatics cannot be used for defining groups of cases. That is because the categorization of dogmatics employs another system of classification for the analysis of violations of law and related sanctions. The mere fact that the models set up with the two methods of analysis only partly overlap is not a serious problem, but we have to be aware that the conclusions can only coincide partly.

According to the classical neoliberal economics, there are the following preconditions for the acts of persons who are motivated by self-interest and who wish to maximize their benefits:

   a) they possess all necessary information,
   b) assess risks realistically,
   c) have clear-cut and non-changing preferences,
   d) choose the most useful option.

**Access to information and their processing**

Whichever decision situation we simulate, we have a slim chance for having access to all required information and for evaluating it correctly. If our approach is that of cost/benefit, the very acquisition of information costs us money and/or effort but even then the persons involved cannot take the possession of all information as granted. Additional information costs more money - which is called the endless regression of information gathering. There is a point where decision-makers say they have sufficient information in hand - but they can never be certain of that.

Neither can it be assured that the processing of information is optimum. Psychological factors (whose effects cannot be discussed within the confines of this paper) as well as cognitive processing can distort conclusions. As advocates of the so-called behavioural economics have amply analysed those distortions, we confine ourselves here to offering some observations. Xavér Móra sums up the most frequent cognitive mistakes as follows:

1. Heuristic distortions: simplified information processing and assessment
   a. access heuristics: we have a tendency to consider data that are easier to recall from our memory as more frequent, which leads us to overestimate their frequency;

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18 See works by Tversky and Kahneman on consumer behaviour, for which they received the Nobel Prize in economics.
b. heuristics of recording and adjustment: we have a tendency of attributing greater emphasis to information obtained first and indeed we relate all other pieces of information to the one obtained first;

c. heuristics of representativity: when we make a conclusion we consider to what extent are the visible features representative of some cause;

2. disregarding the size of the sample;

3. mistakes in causal conclusions.

There are two typical areas where there is less than enough information concerning violations of law in public administration. (1) Offenders are underinformed about the rules they are supposed to obey. The legal response to that is that not knowing the law does not exempt one from responsibility. That solves the question of responsibility but fails to sort out the efficiency of the enforcement of law. In other words the principle that not knowing the law does not exempt one from responsibility offers a solution at the macrolevel of the enforcement of law yet it fails to explain the motivations for an offender’s concrete decisions.

Paradoxically as that may sound, too much information is also problematic. Think for instance of the dilemma we face when too much information hinders us in preparing our tax returns. The information brochure that is sent us by the tax authority alongside the tax returns intimidates us rather than orients us. Some legal theorists state that the complexity of regulations is an unavoidable concomitant of an ever more sophisticated modern society. Viewed from the standpoint of offenders, their being underinformed is not compensated by the fact that “the complexity of the rules inevitably follows from life’s growing complexity and riskiness; in that respect an individual’s complaint can only be reckoned within individual cases. Technically speaking, the majority of the norms originate from the Union, which means they are objective circumstances, just like a drought or a flood.”\(^{20}\) Our theory of action model is harmed if those shortcomings in being informed are ignored. The complexity and occasional inconsistency of statutes is ostensibly an objective circumstance that cannot be changed. But if the consequences of an act are assessed, the best possible decision has to be made in such a complex situation. It would not be a realistic requirement to expect offenders to make their decisions in a hypothetical “ideal” world.

The other problem with information is related to information processing, that is, the ability to attribute information the importance it deserves when the risks of decisions are assessed.

**Risk management in decisions that violate the law**

The RCT defines risks in accordance with the Neumann-Morgenstein utility theorem. The rational choice theory defines as a risk situation a situation in which we cannot be certain whether or not an event takes place. We do know however the level of the probability of the happening of the event. The model offers a fraction between 0 and 1 to quantify the risk. That

fraction however can only be employed to the social theory of the RCT but it cannot be used in theory of action because offenders hardly ever weigh their chances by studying mathematical models.

What is the biggest risk that potential offenders face? The violation is exposed and a sanction imposed. That, in short, is the issue of latency. Cesare Beccaria has eloquently pointed out that the sense of the inevitability of punishment is a stronger deterrent for a potential offender than the severity of the sanctions. Hence it follows that by simply making punishments more severe, the enforcement of law will not become more efficient; and potential offenders do take into consideration what is the likelihood that they will be punished. As we do not have methods for measuring latency, some techniques need to be worked out at least for estimating it. But as such estimation is also difficult, we cannot safely declare that potential offenders weigh the risk they face by analysing latency.

It is more likely therefore that the potential offenders’ subjective perception of the likelihood of being caught determines their risk management. That however lies outside the realm of a rational choice theory; instead, it requires the methods of behaviouraul economics or psychology. The application of RCT reveals components of risk management that are genuinely new factors in the analysis of the violations of law. The RCT states that the risks of whether or not a crime can be proved, how efficient appeal proceedings are, what is the outcome of court proceedings and of the enforcement of judgments can be examined and measures and that they are risk factors.

As I pointed out above, the conditions under which risk management occurs is objective but the way individuals perceive the risks they run varies. If we treat the rational choice theory as a theory of action, we have to differentiate between risk-taking and risk-averse attitudes. The way potential offenders evaluate risks is decided by, among other things, whether they go for gains or for minimizing losses. In the rational choice theory the asymmetry in the relationship between gains and losses is called mirror effect; and that may even grant some decision latitude in regulation. In case we manage to modify the point of reference and convince those concerned that a loss is actually a gain, or the other way round, then that can have an effect on risk management. In his monograph on law-abiding attitudes Sajó points out that individuals vary in their perception of punishments and rewards from society to society, stratum to stratum and group to group, depending also on their character features. Some of the considerations appear for them as objective circumstances, others become interiorized. That is closely linked to the exactness of the wording of regulations and whether the lawmakers can explicitly define what “investments” they expect from citizens and what gains they can expect in exchange; and what are the “costs” of violations.

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Preferences in decision-making

When analysing the preferences of individual offenders, the RCT is especially usable if we take the actors’ preferences given and unchangeable in time and space, independently of the options of realization. In actual fact however everything, including preferences, change and so they heavily depend on the level of information. If potential offenders choose an option of which they know relatively little, in the course of learning more about it, they perhaps change their mind and reassign that option to the category where the options they originally rejected can be found. Thus the theory of action approach suggests that the quantity and quality of information can directly influence preferences.

When formulating legal norms, legislators always have long-term preferences in mind. However, the preferences of those abiding by the laws and those violating them tend to differ. All of us agree with legislators in that in the long run we would be better off if we asked for a receipt whenever we use a service because the higher the tax revenues, the higher the state benefits. That having said, our short-term preferences (let us spend as little as possible today) lead us to breach the law. Thus legislators cannot handle the temporal changes in preferences. The conduct of the law-abiding citizens on the whole coincides with the preferences of the law-makers but we have no information of the causes. Perhaps the preferences did not differ from those of the legislators in the short term either; perhaps had a decisive influence on them, but in the case of offenders, the temporal difference can usually been identified.

As a rule, an offender’s preference is to violate the law. As a rule offenders do not violate the law because it is their “hobby,” neither because it is their deliberate method of resistance to state power. Instead, in the given situation they find that particular conduct as the most purposeful one, and that incidentally leads to a violation of law. Either because some prior commitment prompts them to give preference to certain solutions or because “there is a situation there” and in the given moment they see no other solution. In such situations legislators have few tools in their hands that could exert a direct influence on preferences. It is the so-called “situational tools” that can yield results. In other words, rules are needed that prevent the emergence of situations where the opportunity for committing a violation comes up to start with.

Choosing the most useful option

According to the rational choice theory, whether or not a citizen opts for violating the rules has to be the result of a logical process. In such cases the violation of law yields the biggest gain. The rational choice theory model can prove with mathematical methods that there can be breaches of law where sanctions can be quantified that exceed the financial gain obtained. That model does not offer an answer (and cannot because that is not its function) as to why those sanctions do not work? If we relied on cost/benefit analyses alone, we could expect a much higher number of violations of law.

The question of questions is what is the ultimate gain in breaches of law? As has already been mentioned, the damage caused by administrative infractions cannot be expressed in financial terms in a considerable part of the cases or the effective damage caused can only be proved indirectly. The gain obtained is clear in the case of, for instance, when people opt to have bigger houses built than what their building permits would allow even if they pay the fine than to purchase a bigger plot. By contrast, where is any gain obtained when people fail to fasten their safety belt? The model explains such conduct with reference to “runner’s high”, which is a sort of subjective gain - but still something is missing from this explanation. Why do half of the motorists fasten the safety belt and why do not the other half? What makes that gain subjective? Málík\textsuperscript{23} states that no gain is obtained at all. He is of the view that motorists separate possible options of action from the possible consequences of their acts. They either do not posit any link between the two or underestimate the correlation between them. Thus we cannot speak of any gain; they simply do not sense any damage caused. At the end of the day the statement rings true that it is a subjective gain but in the model that case should be treated separately from the fine imposed on people who violate building rules. Indeed, if I take the theory of action approach, this breach of law cannot be addressed by the model at all.

The rational choice theory often seeks to explain the notion of gain with the example of damage caused to public goods. However the common good - which is protected by administrative law - and the damage done when it is violated cannot be confined to public goods even if public goods get a broad interpretation and are defined as “immaterial goods.” Hence it follows that “gain”, which is a pivotal component of the RCT approach, is a key impediment in the way of applying that theory because a meaningful result can only be expected in breaches of law where the violation brings a quantifiable gain.

**Opportunities to correct rational choice theory as a theory of action. The possible impact of behavioural economics on the study of breaches of law**

As has been seen above, the application of the rational choice theory as a theory of action cannot be ruled out. In fact it would even be more effective. However, the original neoliberal theory of economics cannot be applied to all decisions - either in economics, or in jurisprudence. It would go beyond the scope of this paper to present the related limitations in economics. Suffice it to note that the earliest critical evaluation of that theory was offered in Hungarian language by János Kornai in his *Anti-Equilibrium*\textsuperscript{24}. Later on numerous other authors\textsuperscript{25} pointed out that human behaviour cannot be exclusively seen as rational, neither can it be described merely by economic considerations. That however does not undermine the validity of the tendency of the rational choice theory that it attempts to describe everything that yields itself for description. Thus we have come to the conclusion that the rational choice theory is not suitable for describing everything under the sun but it can be used as a springboard for numerous decisions provided it receives subsequent adjustments. Behavioural economics - alternatively referred to as tendencies in behavioural sciences - offer the most

\textsuperscript{23} MÁLIK (2006)  
\textsuperscript{24} KORNAI (1971)  
refined critique of the rational choice theory as a theory of action. Behavioural economics mainly deals with consumer decisions and it involves in decisions the psyche. Those tendencies mainly refer to the insufficiency of information and the individual’s inability to make decisions. True, insufficiency of information limits the ability to make decisions. But that is not enough to explain that occasionally people do not act rationally even if they have access to sufficient information. For the purpose of this paper we will refer to those conclusions of behavioural economics that refer to the modification of decision preferences and of the decision-making process itself.

While according to the classical RCT, a decision-maker has unambiguous and complete preferences, the behavioural approach reckons with also imperfect decisions, preferences that seem to be strange or irrational, and cognitive errors. That is relevant because in that way we can involve in the model violations of law that would be considered as “irrational” according to the classical theory of action. In that respect, decisions that derive from “weakness of will power” should be considered as irrational. Offenders know what the correct decision would be but, responding to some inner motivation, they do not have the strength to act accordingly. Such acts are irrational in the everyday sense. The RCT cannot however handle them because the mistake is not to be found in the structure of decision-making but in the subjective relationship between the offenders and their acts.26

In behavioural economics a rational decision is called a “limited rational decision.” As far as decision preferences are concerned, the biggest difference, paradoxically, is in that rational decisions are interpreted as “subjective notions”, in other words, they are treated as context-sensitive notions.27 Rational decisions are not ideal for everybody; they can be ideal for certain people who have certain psychological features and act under certain circumstances. A decision depends on some point of reference. In other words, a decision can be the best one by comparison to something else - and that cannot be modelled mathematically. That interpretation transforms also the taking of risks because risks are also interpreted by comparison to something else. As for preferences then, decisions are not of necessity pursuing self-interest. Instead, notions like gain and loss are modified by some other considerations: interests related to the community, family or an organization.

In a considerable number of cases the best decision, that is, the prevailing preference, does not get to first place by the offender making a cognitive analysis of the essence of the norm. Instead, offenders apply what is called an interpretation paradigm in the course of their interaction with their environment. According to the interpretation paradigm “norms are not simply based on consensus and they do not automatically ensure conformity. When there is interaction between two parties, they jointly identify the situation psychologically, determine their social interrelationship, and then they act according to some norm on the basis of that analysis. […] What really matters is not the existence of norms but the identity or similarity of interpretation patterns. Because the process of interpretation is programmed collectively,

human conduct evolves with more or less consistent characteristics." There can be several causes of limited rationality besides subjective elements. They may include distortions of judicial work, mistakes in problem solving, or a misinterpretation of a decision-making situation. If in everyday affairs the patterns of the interpretations of legislators largely differ from those of the citizens or from those that have to apply the law in their work, then the violations of law are a foregone conclusion.

The factoring in of certain subjective elements seems to shatter rational choice theory as a theory of action. Our conclusions are false in the economic analysis of law and especially in the examination of breaches of law if we disregard subjective components. To resolve this dilemma, behavioural economics states that, using the terminology of Simon, the decisions adopted have to be sufficiently good, satisfactory or, when that is possible, optimum. In 1978 Herbert Simon received the Nobel Prize in Economics for elaborating the theory of limited rationality. He studied complex structures of human behaviour and thinking as part of his efforts to develop artificial intelligence. That however was not his first project dedicated to the study of decisions. As early as in 1947 he wrote a book on public administration and in that book he stated that the essence of public administration was making decisions. In his view decisions are based, in the first place, on logic and psychology. He is of the opinion that decision-makers look for options rather than seeking optimum solutions. That is because people are unable to see objectively the circumstance of a decision-making situation and sometimes they cannot identify the possible options. Simon attempted to establish the crucial conditions of decisions in the language of information science on the basis of his study of the thought structure and content of categories of philosophy, psychology and other social sciences. He introduced a pair of categories that are multidisciplinary in character: “optimum decision - satisfactory decision”. The preconditions for optimum decision are that decision-makers know all the options and can rank them. As a rule however decision-makers have no ambition fully to explore all options; they tend to analyse problems until they find an acceptable option, in other words, a satisfactory option.

In my view the methodology of behavioural economics is a very useful contribution to the study of breaches of law. While the classical RCT attempts to create the model of the average, hypothetical citizens and seeks to describe and predict their decision-making patterns, when the RCT is complemented with subjective elements, it can describe predilections for committing errors. To be more precise, it is possible to filter and/or understand a higher number of potential errors by applying certain methods of behavioural economics. It goes without saying that there are plenty of differences between the behaviours of offenders and consumers. But treating the study of consumer attitudes as a model, we can elaborate our own methods of study for better understanding the motivations behind law-abidance and breaches of law. To supply a concrete example: the interplay between consumers access to information and their decisions has been amply examined because that is part and parcel of marketing and advertising research. How much information does a consumer have, what exactly are those pieces of information, and how to convey those pieces of information to consumers? All of us sense the results of such studies in connection with commercials and advertisements.

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30 Herbert A. SIMON (1947): Administrative Behavior, New York, NY, MacMillan
Decision-making is influenced by the quality of information and the way and tempo of the supply of information rather than just the sheer volume of information. By carefully supplying information, decision-making can be efficiently influenced - an opportunity that advertising and marketing experts use on a daily basis. It is unjustified to suppose that neurobiological processes that occur in the minds of offenders in the course of the daily enforcement of law differ from those of consumers in nature. Conversely, we can accept as a working hypothesis that the neurobiological processes of the one differ from those of the other but then we are supposed to examine and then prove that theory. We can certainly benefit in our understanding of the enforcement of law and the mechanism of the violations of law if we learn from the findings of other disciplines.

**Digression on neurobiology or where are good decisions made? And the wrong ones?**

From time to time socio-biological tendencies emerge in penology. The socio-biological approaches are products primarily of the study of responsibility. They received some prominence in crime control at the turn of the 19th and 20th centuries when some scholars sought the causes of crime in human biological traits. The study of chromosomes began and new methods emerged in the examination of biological inheritance. Later in the 20th century emphasis shifted onto the study of perpetrators’ family relations and differences in genetic set-up and education, which were supposed to explain differences in attitudes.

Nothing justifies supposing that administrative infractions have a genetic basis but nothing is known of the processes that occur in the human brain when good or bad decisions are made. Legislators hypothesize that citizens learn the orders carried in statutes and then make purpose- or value-rational decisions and then, even more importantly, act accordingly. That, however, is not the case. The question is whether that can be traced back to some neurobiological cause?

Being a researcher on law, I would sound preposterous if I ventured into the realm of brain research and neurobiology. All I did was making an attempt to get a general idea of what neurobiology says of that topic for lay readers. In other words, I tested on myself what the Union and the national legislators expect from an average citizen - the only difference being that I do not have to act accordingly.

As a rule, the biological approach employs two pairs of categories: conscious and subconscious, rational and emotional. However, those are categories of psychology rather than neurology. If I boldly simplify the “topography” of control mechanisms that are associated with said notions, I can state that neurologists usually describe the brain as having three parts. Paul MacLean writes that the brain consists of three clearly separable parts: the first and most primitive one is the brain stem, which is attached to the spinal marrow and sometimes

32 To offset criticism that my statement is unscientific, let me make it clear that neurologists state that the above simplified model is obsolete because the operation of the brain is much more complex. For the purpose of this paper however this simplified model is suitable. It is, by the way, similar to Freud’s psychological model, which many experts also consider outdated. Presently it is neither possible nor necessary to go into more detail. For further information, I recommend to study works by Susan Greenfield.
also called as the “reptile brain.” Located around the brain stem is the limbic system, which transposes the animal urges into an appropriate context and is consequently responsible also for the instinct-level urges. The third part is the cerebral cortex, which is in charge of the cognitive functions.

The so-called association areas of the cerebral cortex are in charge of the cognitive functions (of learning), which are the most difficult to grasp. The major part of association cortex is located in the frontal lobe of the cerebrum. That is the so-called prefrontal cortex, which we have a tendency to blame for practically everything because that is the very part of the brain whose job is not to control the operation of the autonomic nervous system. Instead, it controls the most sophisticated aspects of the operation of our mind, the very essence of our personality. That is the part which determines how we as individuals respond to the world. Proof that is offered by serious accidents and the surgery that for a considerable period in the past was applied to treat people whom society labelled as “uncontrollable”. It was called prefrontal leucotomy. When surgery severs the nerve fibres of the prefrontal cortex, the patients lose their sense of foresight, the capacity to solve problems, the ability to feel emotional responsibility - in sum, their entire personality changes, and they lose the capacity to come up with new strategies. Apart from certain conditions that cancel this statement, people with intact prefrontal cortex can follow rules; they may even change over from one rule to another or may themselves modify those rules. By contrast, people with an injured prefrontal cortex are unable to tune in to new rules - they can only obey old ones.

At first sight we can conclude that the prefrontal cortex is responsible for all decisions that are characteristic of humans because that is the location of every decision. When for instance we have to decide what make of a fridge to buy, what meal to prepare for dinner or whether a statute covers a certain type of a case, the answer is given by the prefrontal cortex. Or, to be more precise, decision is made there; in other words, that part of the brain is at work when such a decision has to be made. Whoever wishes to influence our rational choices apparently needs to learn how that part of the brain operates. By contrast, it is easy to remember cases when people are carried away by their emotions, they are angry or sad; perhaps they do “some foolish things” driven by joy or exasperation, without reflecting on what they are doing. What is going on in such cases? What is the location of such occurrences? Is it possible to measure such processes? If the answer is in the affirmative, how to do so? Those the most intriguing questions of brain research. Although there has been no brain research into decisions about breaches of law, there are methods for measuring the intensity of cerebral activities. Those methods however cannot shed light on every aspect of the operation of the brain. Numerous experiments have been made to verify the existence of, and to measure, the connection between the conscious and the unconscious. The most spectacular among them focus on the activity of certain parts of the brain and the order in which the various parts become active.

purpose of this paper however this simplified model is suitable. It is, by the way, similar to Freud’s psychological model, which many experts also consider outdated. Presently it is neither possible nor necessary to go into more detail. For further information, I recommend to study works by Susan Greenfield.
Benjamin Libet has examined the length of time required for registering incoming stimuli. The experiment is relatively simple: the subject’s hand was pricked with a needle while the brain’s activity was measured and the time was measured when the subject reported about the pricking. The direct stimulus reached the brain within 20 milliseconds but the subject needed 500 milliseconds, that is, half a second to perceive the pricking. Thus the brain needs 25 times more time to comprehend an event and respond! That can be frustrating news for orthodox advocates of the rational choice theory. Acts that are done routinely - and breaches of law are among them - are difficult to control cognitively because, by the time information reaches the prefrontal cortex, the act, for example, a breach of law, has long taken place.

Susan Greenfield, a brain researcher in Oxford, carried out a related experiment on herself. She put the following question: when people decide to make a movement, what comes first: the decision or the movement? An a priori logically-sounding hypothesis posits that the sequence is as follows: first the prefrontal cortex registers the activity about the intention to make a movement, then the prefrontal cortex issues an order for the brain part where movement is controlled to go ahead, and then the movement occurs.

Electrodes were placed on Greenfield. Her task was to press a button whenever she felt like but before every pressing, she had to indicate the intention to press. The experiment yielded a dramatic discovery. The decision about the action is born one second after the brain parts in charge of motion prepare for issuing the order about the motion! It means that the brain makes the decision practically on its own and it takes a full second before our consciousness is informed that it is going to make a decision.

Greenfield does not really know what to make of her discovery. The only rational conclusion is that there is no rational Ego, no free will, and we are under the thumb of our subconscious. But wait a minute: how to find the function of responsibility and accountability? Should we discard the category of individuals who are accountable for their acts? In what light to see law? Evidently, we should not discard law. After all, it has been operating for thousands of years, even if with limited efficiency. The reasonable conclusion is that our image of rationality should be much more subtle. The above neurobiological research findings have proved that people tend to accord rational interpretations to events rather than being rational beings themselves. Each person has the same tendency to accord rational interpretation to his/her deeds, which means the same standard can be used for each and all. Even if in many situations our subconscious has the upper hand, the subconscious is also part of our personality; our subconscious has also derived from somewhere, our subconscious has also emerged from our self-consciousness, which in turn is the product of our earlier acts and self-reflection. Our acts and perceptions have their origin in us. Unlike animals, we can retroactively evaluate our experiences and at similar junctures we can extrapolate those experiences.

Recent research findings of neurobiology and neurophysiology tell us more of how decisions are made in the human brain but the question whether those decisions are good or bad is left

unanswered. Such researches describe but do not evaluate. Such description informs us about the mechanics of the process but cannot differentiate between law-abiding and unlawful decisions. They emerge in the same mechanism; whether the law is obeyed or violated, the same neurons are activated. However, our image of those decisions and their consequences do differ from person to person - and that is a difference of importance.

The findings of neurobiology can have an effect on what we think of, first, the interiorization of law and, second, of the enforcement of law. If we understand the mechanics of decision-making, we gain a better insight into potential violations of law and legislators could at least attempt to formulate rules that require less energy-intensive decision-making structures of our mind to follow. It is not the mechanism of the enforcement of law that can be transformed but the expectations attached to it can become more realistic. That in turn is bound to have an influence on legislative policy.

If we learn more about the combination of emotional and rational control in people, that can have a direct impact on society’s action against breaches of law that in recent years have shocked the country, as for example, football hooliganism, unprovoked damage to public property and other irrational behaviour that has caused considerable damage. The findings of neurobiology can also have some indirect influence on law-abidance, the violations of law and risk management. Suffice it to mention that members of the young generation, who have been exposed to a large amount of powerful visual experiences by the media, are more ready to run certain risks than members of previous generations. These young people have practically the same decision-making patterns as patients with a damaged prefrontal cortex. These young people are less capable, or are unable, to follow the rules and change from one rule to another. As visual stimuli play an increasing role in the intellectual development of the young generations, the appropriate conclusions have to be drawn in law. In the future the number of emotionally-motivated breaches of law, committed under the control of the limbic system, is likely to grow. The legal norms that are meant to appeal to rational decisions are without any effect in such cases. Early signs of such irregularities can already be seen in a growing number of violent incidents in schools. Unfortunately, experts examining such cases seek the motivations in the wrong place. Such conflicts should be remedied by situational methods rather than those that appeal to reason.

**How can jurisprudence use the use of rational choice theory as a social theory?**

The rational choice theory, which was once only applied to the study of the decisions of individuals, has been increasingly taken over by other fields of social sciences. Some researchers observed that economics “has set out to colonize other social sciences.” As a social theory, the RCT applies the microeconomic approach to society in the same way as the theory of action is applied to the behaviour of individuals. The RCT works with the premise that social phenomena (including their structure and changes) can be subjected to a scholarly examination by taking into consideration the characteristics of the individuals concerned (such as their desires and possibilities, opinions and convictions, decisions and acts). It has
also been stated\textsuperscript{37} that the economic analysis of law cannot be considered as a social theory, instead, merely as a theory that applies a specific methodology.

As with other theories, simplification often distorts the RCT as a social theory. An example of such distortion is the allegation that the various social phenomena and institutions (including the legal institutions) are the sum total of the individuals’ rational and self-interested decisions to maximize their gains. Another distortion: as the preferences and motivations of individual decisions are excessively complex, the best method is to take into consideration as few as possible; that is to say, let us involve into the system as little information about individuals as possible. That applies mainly to the sociological rational choice theory, which strives to “cleanse” the theory of action from individual preferences and attempts to apply a less realistic theory of action that is still satisfactory for the phenomenon to be interpreted.\textsuperscript{38} The tendency itself is justified but the question remains: to what extent is it justified to ignore individual decisions in a theory of action approach before losing the chance to offer a realistic assessment?

The RCT as a theory of action examined phenomena at a micro-level. By contrast, the social theory approach analyses at a macro-level. As seen above, critics of the theory of action approach stated that individuals are not “isolated islands” - they are parts of society and bring their decisions in a social context. Hence it follows that an individual’s social standing exerts a strong, occasionally crucial influence on decisions that (or are thought to be) rational. In other words, the critics found fault with the fact that the macro-level influence (socialization and internalization) on the micro-level has been all but disregarded. It is also criticized that the factors felt in micro-macro relation are not adequately weighed, and that factors that are difficult to quantify (value norms and the impact of preferences on behaviour) cannot be measured at all.\textsuperscript{39}

\textbf{The object of the economic analysis of law is the rational choice theory as a social theory}

The theory of action approach, which we discussed above, showed that the object of research is the rational decisions of individuals - be it consumer decisions or decisions about obeying the law. On a macro-level the object of research cannot be all the decisions of all the individuals. The object of research has to be redefined. The primary object of the RCT as a social theory is not the individual that violates the law but public administration that responds to breaches of law. Viewed from the aspect of our analysis, the operation of public administration has to have the aim to push the rational consideration of options towards obeying the law. Sanctions have to be chosen in such a way so that this requirement should be satisfied.

However, the functions of sanctions are much more complex, as borne out by numerous scholarly papers on legal theory, administrative law and sociology of law. Earlier I named\textsuperscript{37} CSERNE (2005)
\textsuperscript{38} SCHLEICHER (2000)
\textsuperscript{39} SCHLEICHER (2000) quotes the critical remarks of Hannah
five possible functions (enforcement of law, general and special prevention, repression, compensation for damage and sanctions as the cost of the breaches of law). Those functions can work simultaneously, in synergy or by reducing one another’s effects. Often the legislator has in mind the potential offender’s “fear” rather than a rational weighing of options. Such logic factors in some measurable gain or damage. The economic reasoning that a stricter sanction makes a breach of law more expensive does not work in itself. In my opinion the regulation of the strictness of sanctions is related to the functions of sanctions only when offenders have to pay flat-rate damages and when it does matter “how much a violation of law costs.” Legislators can have a choice of several functions; sometimes they can opt for several sanctions. What really matters is not the strictness of the sanction but whether the right type of sanction has been chosen. Let me offer a practical example. Occasionally restaurants in inner parts of Budapest shock their foreign guests with exorbitant bills. In such cases the local authority routinely levies a massive fine. But however severe such a fine may be, it is without teeth because in most cases the local authority cannot enforce its punitive decision (that is, the money cannot be collected). By contrast, if the sanction is the forced closure of the restaurant for some time, then the restaurateurs concerned are prevented from continuing their illegal billing practice. Ostensibly both sanctions are purpose-rational but the one is inefficient and the other one works.

If we consider the rational choice theory as a social theory, then our analysis should only be aimed at major systems. But the further this method is removed from individuals, the further removed we find ourselves from the premises of the classical rational choice theory. Hence it follows that objective findings can only be realized if the objects of study are homogenous and are defined very precisely. In my view the method could be applied in two fields if the object of study is exactly defined. (1) To model the impact of new statutes before they are introduced. It could help to decide whether imposition of a fine or some other type of sanction should be chosen. In that function it is necessary to strengthen the theory of action features of the rational choice theory because the predictive function can only be used if we model individual decisions. That presupposes a kind of “normative rationality”40 - but those who apply that method have to be aware that this method is based on a hypothesis.

The other application would be closer to the theory of society approach: a monitoring function. When the operation of certain legal institutions is inspected from time to time, the approach of rational choice theory could be one of the methods - let me emphasize: not the only one. In the field of law, that would mostly mean a cost/benefit analysis. Such an examination would be, in essence, a sociology of law analysis, conducted by bearing in mind certain criteria. Rationality in this case would mean a “descriptive rationality” whose purpose would be to help us understand the structure of social action. Such approach stands closer to sociology of law that applies the rational choice theory and it should be used much more often than presently. Law is organized alongside other considerations. It is, on the whole, value-oriented, (although it has to be noted that administrative law includes plenty of technical norms too). The problem is that the rational choice theory approach is less usable for the analysis of value-oriented acts.

In Hungary Péter Cserne⁴¹ has discussed the economic analysis of law and in that connection the rational choice theory. He emphasizes the importance of the rational choice theory in the sociology of law. However, he considers the economic analysis of law - which is one of the possible applications of the RCT - a theory of law approach. Cserne states that the limits of the competence of the rational choice theory can be found in the normativity of law,⁴² and that theory cannot handle this problem. Cserne⁴³ divides the explanation of macro-level phenomena into three parts: employing a situational logic, he determines the actors’ opportunities and limitations on the basis of macro-level variables; employing a selective logic, he attempts to find out what options are chosen by those who act on the micro-level; finally, employing a transformational logic, he attempts to explain how micro-level acts are consolidated on the macro-level. In my opinion the RCT as a theory of action mostly employs the tools of situational logic, and the RCT as a social theory employs selective logic. However, it misses transformational logic (its methodology and explanatory tools) which it would need to offer meaningful explanations for social phenomena. Polansky⁴⁴ states about Posner’s analysis of law that Posner’s analysis of the behaviour of individuals and markets is almost fully free of distortions, his analysis of collective decision-making is less impressive, and he all but ignores the issues of social equity.

No theory can address every problem of reality - neither can the rational choice theory. Economists sharply criticized the rational choice theory as early as in the 1970s because it simplified human acts, including acts that seek economic gain. Even the social theory approach of the rational choice theory is rigid because it supposes that every actor (in this case: the offenders) breaches law having the same preferences and that their behaviour can be influenced by the same methods. The rational choice theory considers all actors equal, which is not true. I have pointed out in some of my earlier papers⁴⁵ that a considerable part of the violations of law are committed not by individuals but people who act under the auspices of organizations. Although there are overlaps between violations of law committed by individuals and natural persons, the differences are also numerous. In a similar manner, the breaches of law committed by smaller organizations and multinational companies differ. The social theory of the RCT cannot handle those differences. Its theory of action can hardly handle it either. (In the theory of action of the RCT it is possible to set up categories for so-called “organizational interests”. But even the category of organizational interest cannot take into consideration elements that derive from subjective human motivations. Neither can it address the problem nowadays in Hungary a considerable part of the incorporated organizations are fictitious companies. In those cases individual breaches of law occur in the name of organizations.)

An important weakness of the social theory of the RCT is that it ignores that there are formal and informal levels of mediation between the acts of individuals and their social consequences. The micro-macro relations cannot be analysed without a meso-level.⁴⁶ For the

⁴⁶ SCHLEICHER (2000) quotes the critical remarks of Hannah
time being, the economic analysis of law cannot handle the meso-level. It is possible that the organizations in the name of which violations of law occur function also as this meso-level - but in my view the issue is more complex than that. As based on economics, management theory has made an attempt to analyse decisions within organizations. Based on neoclassical economics, management theory considers individuals as people who pursue their self-interests within the framework of organizations (i.e. companies)⁴⁷, and their readiness for cooperation seems to be a viable option only as long as that coincides with their self-interest. That approach fails to factor in organizational culture even though such culture encourages obeying norms.

Our examination of organizations should not be confined to business organizations. There are various levels of mediation between individuals and the state and they can exert an influence on obeying norms. When obeying norms is examined from the aspect of human ethology, we find that individuals tend to follow norms especially of groups that they can identify with. Each individual can feel attachment to more than one group. That can vary from culture to culture.⁴⁸ For example, in Oriental societies with Confucian traditions the family has been traditionally exerting an immense (almost exclusive) influence. In Japan, however, which also has a Confucian tradition, the internal desire to adjust to the culture of the workplace is even stronger. People in the United States, a country with Protestant roots, young people move out from the parental home relatively early but they are ready to adjust to behavioural patterns offered by Churches, civic organizations, the Armed Forces, gun clubs, women’s clubs etc. It seems therefore that the methodology of other disciplines should be applied to those levels of mediation, as for instance, the sociology of organization, social psychology, group dynamics and perhaps human ethology, to attain realistic research findings.

The RCT as a social theory is often used to measure or assess the efficiency of public administration. In my view it is not suitable for that purpose as the efficiency of public administration is a much broader idea than the object of a cost/benefit analysis. A cost/benefit analysis can be a component of the quantification of efficiency but, on the whole, the efficiency of public administration can only be measured if the object of regulation is analysed from various aspects: empirical and theoretical alike. The social context and the resources that are available for public administration also have to be taken into consideration. There is no single method for measuring efficiency - the right method has to be chosen upon considering the nature of the administrative purpose concerned. In other words, efficiency is context-sensitive; it can only be defined clearly if the circumstances of the enforcement of law are known.

Often when the RCT approach is applied, adjectives like “objective” and “value free” are used. They are mentioned because this method has mathematical foundations. As efficiency is defined bearing economic success in mind, it is easy to commit the mistake of supposing that if something is efficient economically, it is also “objective” and “value free”. It should be remembered however that in Posner’s economic analysis economic efficiency is a fundamental value of the efforts to maximize wealth in the United States, which necessarily

⁴⁸ FUKUYAMA (2007)
means that it includes some value judgment. Economic efficiency can indeed be one of the characteristics of legal regulation. However, in law the fundamental question of a regulation is whether or not it is just? Hence it follows that applying the rational choice theory to the analysis of law does not replace traditional methods of analysis - only complements them. That prompts us to consider what further considerations of research other disciplines can offer.

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SUMMARY

The Application of Rational Choice Theory in the Study of the Administrative Enforcement of Law

MARIANNA NAGY

The paper applies the methodology of economics in the study of violations of law. The rational choice theory is the central category of the economic analysis of law; and the author explores the fields of its application and its limitations. Employing a theory of action methodology, the author examines issues related to the violations of administrative law in connection with, among other things, information processing, risk management, preferences and gain. Then, employing a theory of society approach, she examines the limitations of public administration in its responses to violations of law. The author confronts our ideas of rationality with findings of modern neurobiology and analyses the consequences for the enforcement of law.

RESÜMEE

Die Anwendbarkeit der rationalen Entscheidungstheorie in der Untersuchung der Geltendmachung des Rechts in der Verwaltung

MARIANNA NAGY