

BOUNDED RATIONALITY APPROACH AS AN ALTERNATIVE TO RATIONAL CHOICE: A CRITICAL PERSPECTIVE

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Abstract: Rational choice theory is a framework formed in order to explain organizational and economical behaviours in decision making process. Basically, it is claimed that people calculate costs and benefits of their actions before initiating to do any activity. Although Rational Choice Theory has a quite important background which various social science fields benefit from, it frequently confronts some criticisms especially coming from Human relations school.

Bounded Rationality Approach offers an argument by claiming that human being has limited mind to make optimum choices, therefore, tries to satisfy rather than optimize. There is still an ambiguity in the literature whether these two approaches should be used separately or mutually complementary. Accordingly, this paper discusses whether Bounded Rationality Approach can replace Rational Choice Theory by overcoming lacks of it. It is concluded that Bounded Rationality Approach is not able to substitute Rational Choice Theory, though its persuasive arguments provide an insight in order to comprehend the complex decision making process.

Keywords: Rational Choice Theory, Bounded Rationality, Decision Making Process.

KAMU POLİTİKASI SÜRECİNİN KARAR ALMA SAFHASI ÜZERİNE BİR SORUŐTURMA

Öz: Kamu politikası sürecinin bileőenlerinin oluŐturulması üzerine siyasa yapıcılarının bitmek bilmeyen arayıŐları, bu sürecin baŐlangıŐ aŐamalarından biri olan karar alma safhasını tartıŐmanın merkezine oturtmaktadır. Literatürde karar alma süreciyle alakalı rasyonel seėim teorisi ve sınırlı rasyonellik olmak üzere iki ana yaklaŐım bulunmaktadır. Birinci yaklaŐım yalnızca rasyonel Őekilde verilen kararların siyasaların faydalarını en uygun ve en yüksek seviyeye ulaŐtırabileceėini savunmaktayken, ikinci yaklaŐım ise siyasa kararlarını etkileyen biliŐsel yeterliliklerin optimum sonuėlara sahip olma Őansını sınırlandırabileceėini ortaya koyarak rasyonel seėim teorisine karŐı eleŐtirel bir bakıŐ aėısı sunmaktadır. AraŐtırmacıların bir çoėu birbirine karŐıt olarak görülen bu görüŐlerden yalnızca birine yakın bir duruŐu benimserken, bu yaklaŐımlardan ikisi arasında gerçekten bir seėim yapmanın zorunlu olup olmadıėı da tartıŐılabilir. Sınırlı rasyonellik yaklaŐımı, rasyonel seėim teorisinin eksiklikleri üzerine inŐa edildiėi için bu yeni yaklaŐımı tamamiyle kabul edip rasyonel seėim teorisini reddetmek çok yerinde bir tercih olmayabilir. Bunun yerine, iki yaklaŐım arasında bir duruŐu benimsemek, özellikle karar alma süreçlerinin uygulamasına katkı saėlaması aėısından iyi bir alternatif olarak önerilebilir.

Anahtar Kelimeler: Rasyonel Seėim Teorisi, Sınırlı Rasyonellik, Karar Alma Süreci.

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I. Introduction

One of the most preeminent and widely applied approaches to public policy decision making is undoubtedly Rational Choice Theory. Its achievement in intentional and profit-centric activities has won it a prestigious place and a strong reputation in public policy. The theory's achievements in the field of economics have also led to it being practiced in the administrative field (MacDonald, 2012, p. 551). However, a great deal of objections to Rational Choice Theory—especially from Herbert Simon, an American polymath who won the Nobel Prize for economics in 1978 with a new theory of decision making and who helped pioneer the idea that computers can exhibit artificial intelligence that mirrors human thinking—arose concerning the validity of the theory when transposed to the administrative area. In Simon's article, the Behavioural Model of Rational Choice (1955), he claims that Rational Choice Theory tries to support some arguments without considering human cognitive limitations.

From the Bounded Rational Theory point of view, a human has an inherently bounded capacity, and behaves according to his/her emotions. As such, people are more inclined towards satisfaction rather than optimization (Simon, 1997, p.24). Another problematic aspect of the Rational Theory is that it is impossible to practice in real life because of its theoretical, rather than practical, base (Jones, 2003, p.397). Simon did not theorise for its own sake; on the contrary, he worked to support rational theory by emphasising lack of the theories in administration.

Accordingly, this article seeks to answer to the question of whether or not Bounded Rational Theory can cope with deficiencies in Rational Theory's deficiencies. Although Bounded Rational Theory gives plausible answers to Rational Choice Theory in terms of its theoretical aspect, it is difficult to say that it offers practical solutions. To this end, the first part of this article will consider the principles of Rational Choice Theory, while the second part highlights the tenets of Bounded Rational Theory. From there, the final part of the article focuses on whether assumptions on Bounded Rational Theory overcome criticisms of Rational Choice Theory, suggesting Mixed-Scanning Theory as a possible solution.

II. Rational Choice Theory

The origin of the Rational Choice Theory is based on the 17th century English philosopher Thomas Hobbes (Mill, 1994, p.285), but rational public policy ideas in today's context have been considerably influenced by Max Weber's 20th century rationalist philosophy (Parsons, 1995, p.272). Rationality as an essential method in economics was originally practiced in political science by rational scientists in the early 1980s. In the 1990s, political science and Rational Theory were envisaged as an indivisible whole in the USA. Also, 40% of articles published about political science between 1980 and 1990 referred to Rational Theory (Hindmoor, 2010, p.43). Rational Choice Theory, in this sense, was used not only by academics but also by politicians. John (2012) argues that "It seems that the spirit of the age celebrated individual choices. Whilst there is no necessary connection between new-right ideology and rational choice theory, they both may be part of a wider shift in ideas." This reveals that politicians

were also extremely interested in the idea of Rational Theory in their political work.

Rational theorists in political science make some key assumptions. First of all, decision makers should have full information regarding preferences, the background to the problem and possible alternatives (Simon, 1997, p.23) and suggest acquiring thorough knowledge by concentrating on just one or a few subjects as an expert (Simon, 1983, p.20). If state public policy is not complex, officials can make decisions reasonably and easily; basic research can provide the rationality behind those decisions (John, 2012, p. 103). However, when we consider today's complicated and increasingly globalized world, a complex and comprehensive rational analysis seems inevitable in almost every situation.

Secondly, Rational Theory assumes that individuals try to maximize their own benefits in any case—such as gaining re-election or obtaining profit. When people behave rationally and with self-interest, this can lead to easier and more reasonable forms of behaviour which in turn make predictions easier too (Hindmoor, 2012, p.42). For instance, we can consider political parties X and Y, and divide voters into two categories such as rich (R) and poor (P). During the run-up to the election, party X has an election pledge that it will not tax poor people, while party Y promises a 1% tax hike for all citizens, regardless of wealth. Under these conditions, party X seeks to increase its electorate by excluding rich people, who are a minority in the society. So the wealthier members of society will vote for party Y, and poorer people will vote for party X to get the optimum policies promised for them. Consequently, there are four sides involved in the argument now (both parties and electors), each of which will fight for its own aims. In the final analysis, what this means is that individuals examine all available information and then make a decision best suited for their preferences (John, 2012, p.103). As a rational person chooses one option by abandoning other decisions, new policies should logically be more efficient than policies that have been abandoned.

Additionally, as a basic foundation for Rational Choice Theory, if A B and B C exist as subsets, then a state of forward transition must be occurring between A and C (Satz, 1994, p.73). In the same vein, the Prisoner's Dilemma, which is a kind of game theory, presents a situation in which two prisoners are forced to decide on their interests without knowing the other prisoner's decision within the bounds of possibilities (Simon, 1983, p.87). However, such a simplification might remain limited when trying to represent Rational Choice Theory, as one of the main arguments of the Rational Theory is to take into account all potential alternatives and to have full knowledge about the situation (Simon, 1997, p.23). This proves that it is very difficult to take a decision with only limited information about other people's decisions.

III. Bounded Rationality Theory

Bounded Rational Theory (BRT) is a theory developed by Herbert Simon in 1955 in order to complement the weaknesses of Rational Theory (Bendor, 2012, p.181). Basically, it concentrates on people's limited mental abilities under the complex circumstances of the real world (ibid, p.2). According to Simon, unlike economic man, administrative man is a figure who has limited intellectual qualifications, resources and competences and is

someone who strives to satisfy instead of optimizing. For example, when you buy a car, you do not consider your daily budgets or how to invest your savings, that is to say, people are able to consider finite drawbacks in a bigger picture (Simon, 1983, p.18). Yet another pertinent example concerns negative externality. While waste emanating from a big factory can be considered in terms of straightforward externality, on the other hand, we are less aware of the damage done to our neighbours' flowers by car exhaust while we are using our cars (ibid, p.76). This argument is based on scale, and opposes to the assumption that individuals always behave in a rational way.

BRT makes some assumptions that contrast those of Rational Choice Theory. The first is that BRT claims that a person satisfies and seeks "good enough" solutions while Rational Theory assumes that a person optimizes (Simon, 1976, p. 76). The assertion is compatible with a real world situation. If a selection is made in a limited situation or is approximate solution, the selection of an appropriate option will please us enough (Simon, 1997, p.24). For instance, a chess player decides on the fittest approach to the game rather than playing all moves rationally. To put it another way, the player does not try to play the best possible path, s/he only chooses a safe and pragmatic way that will prevent him from losing (Simon, 1955, p.107). The second assumption is that individuals have limited capacities in decision making in terms of their consciousness, habits or goals (Bendor, 2012, p.163). The important point here is how these limitations can affect the administrative man. The administrative man tends to simplify the problems he faces in order to consider numerous options. As a classic example; "If we were to model a barn fire —whose fault it was that the match was carelessly dropped—we would need to put in all the conditions that could have been relevant to the actual fire and those possibly relevant at that barn...from poor electric wiring to an ill-fitting door" (Dowding, 1991, p.22). However, people are only inclined to look at the match as the fundamental cause. In this sense, such an analogy can be taken as an example from administrative fields. Country Z finds itself with a budget deficit a few months after the election. While representatives and supporters of the current government blame the previous government, that previous government will respond by claiming that the current government has followed the wrong policies. However, there may be other, deeper causes such as corruption or the transfer of extra funds to a developing region in the wake of unpredictable events. But individuals will inherently deal with the most obvious and basic reasons due to their own mental constrictions.

The final element of BRT is the task environment in which environmental factors shape peoples' decision-making mechanisms (Jones, 2003, p.398). To be able to make a rational decision all vagueness and intangibles should be eliminated. In other words, knowledge of ex-ante outcomes and of subjects which will be implemented should be rational and proper, "not ill-structured". (Jones, 1999, p.308) Otherwise, if there are still failures within the realm of ideal conditions during the decision making process, the mental and emotional responses of individuals should be paid considered (ibid, p.318). Accordingly, based on Simon's BRT theory, task environment is a feature affected by cognitive constraints and is a feature that influences those cognitive constraints as well.

IV. Criticisms of the Rational and Bounded Theory and Some Suggestions

More than fifty years ago, Simon started a radical reform in the decision making process (Bendor, 2012, p.181). Some people claim that at the end point of the decision making process, all decision makers—both bounded and rational—will come to virtually the same decisions. However, others argue that decision-makers guided by Rational Theory are not able to take a decision implicitly (ibid, p.117). In this section, it will be explained that while Bounded Rational Theory normalises Rational Theory as a theory, it does not bring innovation to Rational Theory. A solution is proposed at the end of this section to resolve the short comings.

Almost all of the arguments of Bounded Rationality—such as limited mental ability or satisfaction—make a significant contribution to the imperfections of Rational Theory. If a problem is solvable using perfect information and sufficient time, a rational approach to the problem is the usual attitude (Simon, 1997, p.25). In other words, as long as an issue is sufficiently easy, satisfaction might well converge with optimization; constraints may be unforeseen until the situation becomes more exacting (Bendor, 2012, p.51). Let's take as an example Simon's scissors metaphor. This principally states that the rational decisions of individuals are covered by the task environment and people's cognitive abilities. If scissor blades are considered as two factors that affect decision making, task environment and brain abilities should be in accord with each other, working together to make the right decision and vice versa, which may result in steering away from the right decision (ibid, p.39). However, generally speaking, individuals tend not to make rational decisions. According to remarkable research propounded by Tversky and Kahneman (1981), individuals may exhibit different behaviours under the same conditions because of their cognitive constraints. In the first case study, of a group of people who bought \$10 theatre tickets and subsequently lost their tickets when they arrived at the theatre, 88% of people bought a ticket again, while the remaining 12% did not choose to repurchase. In the second case scenario, people who bought tickets for \$10 lost their tickets, but when they entered the auditorium they saw that their seats were not reserved for them, and tickets were nonreturnable. Under these circumstances, while 46% of people preferred to buy tickets again, the remaining 54% did not purchase tickets being under the influence of more adverse conditions (Tversky, 1981, p.457). As seen from the example, people need to pay extra \$10 in either case; however, people's desire to buy tickets diminished when they realised the more complex conditions of the second scenario. In other words, the two blades of the Simon's scissors diverge because of inconsistency between task environment and cognitive ability.

The cognitive constraints of individuals can be utilised in the public field. While the right side of the human brain is described as 'intuitive, emotional', the left is characterised as

'analytical' (Simon, 1983, p.24). The right side of the brain, which affects our decision-making, can find solutions through knowledge which has accumulated with experience (Ibid, p.27). For example, a player who learns chess is inept until he is taught the rules of the game, but with the acquisition of

knowledge, the limitations of the moves decrease progressively (Bendor, 2012, p.42). Public administrators can apply the same conditions. Leaders in public institutions are able to channel employees in the direction of goals, thanks to administrators' experiences and employees' cognitive limitations (Jones, 2003, p.401). Taking part in a group and showing a willingness to be helpful (altruism) may tend to minimize lack of mental ability (ibid, p.205). In a nutshell, establishing Bounded Rationality might contribute to normalization of Rational Theory which ideates the metaphor of the fully equipped individual.

However, Bounded Rational Theory in political science has been criticized on the grounds of its extremely scientific and impracticable approach (Jones, 2003, p.397). Although BRT still has strong arguments asserting to fulfil the incomplete features of Rational Theory, it is not as successful in practice as it is in theory. According to research done by Foss (2003); "Bounded Rational Theory is a theory much cited but less used". In a sense, BRT reveals problem resolution after determining its claims, as opposed to setting a course for actions. Also, it is not wrong to say that as rational theory has some problems, BRT finds it difficult to discover practical solutions. Accordingly, mixed-scanning theory may be integral in order to obviate lack of practicability.

Mixed-scanning theory, an approach improved by Etzioni, combines the theories of Rational Choice Theory and Incrementalism, which have different tenets (Etzioni, 1967, p.385). While incrementalism is mainly a process related to decision-making with gradual changes without taking into account any theory (Parsons, 1995, p.284), rationality is a short way to reach the best results with the best capacity (Simon, 1997, p.23). Etzioni's mixed scanning theory tries to reach the equilibrium point by using incrementalism to smooth off the radical aspects of the Rational Choice Theory in a decision-making process, while Rational Choice Theory also remedies the status quo in the direction of the incrementalism (Etzioni, 1967, p.385). This article suggests that by using Mixed Scanning Theory, it is possible to attain optimum decisions by diluting Rational Theory with Bounded Theory.

For instance, a forecast observatory should be established. Whilst simple observation should underpin the Rational Theory point of view, an incrementalist perspective will make small and stepped researches by consulting past experiences to anticipate further directions. Mixed scanning strives to achieve the most reliable information by searching at all scales in order to converge these two theories (ibid, p.389). However, in the sense of Rational Choice Theory, conditions observed by people do not present a proper prediction because of human incomprehension. Therefore, we can examine the sample with regard to bounded theory in order to make more sensible choices and predictions. We can substitute Bounded Theory with Rational Theory provided that Incrementalist Theory remains unchanged, and it can be said that even when a strict maximization of Rational Theory principles is generally highlighted, mental constraints of human beings, in this process, obtain maximized satisfaction. In this parallel, from the point of public policy process, mixed scanning theory can be exercised during preparation of annual budgets. From the incrementalist viewpoint, it is logical to get results via experience based on future expectations (Bendor, 2012, p.65). On the other hand, it is almost impossible to maximize rational decisions in the process when many

people join. Hence, replacing Rational Choice Theory with Bounded Theory provides a way to follow good policies and consider a more realistic decision making process.

V. Conclusion

This article has presented the tenets of both theories to examine whether or not Bounded Rational Theory copes with the gaps in Rational Choice Theory. It is likely that while Rational Choice Theory can be replaced by BRT providing some theoretical corrections on Rational Choice Theory are made to some extent in practical terms, there is no claim that BRT is able to refute Rational Theory. Bounded Theory cannot deal with all Rational Theory criticisms, including lack of pragmatism. At this point, Mixed-scanning theory can be suggested as an ideal model with small revisions, blending Incrementalism and Bounded Rational Theory instead of forming an alliance between Incrementalism and Rational Choice Theory. Incrementalism is a model which can overcome practical lacks in Rational Theory by bringing its own set of pragmatic characteristics. Also, theoretical features of the Rational Choice Theory, such as human abilities, limited time and resources which have not previously been considered can be evaluated using Bounded Theory. In the last instance, decision-making is a process that needs common ground and aims to obtain the optimum outcomes. For these reasons, it is not wrong to imply that the decision-making process can be catalysed by benefiting from several theories to reach the ideal results rather than trying to get the most useful decision relying on just a single theory.

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