

## Rational Choice

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Three approaches from the field of general action theory fall into the category of rational choice theory (RCT). The groundwork is composed of the *theory of individual choice* between possible actions by single actors. This is the basis for the *theory of interdependent choice* about strategies of interacting actors (game theory) and the *theory of public choice*, which models choices among possibilities for the regulation of public affairs by actors in positions of political power.

Methodically, hypotheses are derived from the modeling of decision processes, which the approaches provide for. Due to the corresponding experimental tests, the paradigm developed dynamically (Binmore, 2007; Braun & Gautschi, 2011).

The combination of approaches offers possibilities to describe phenomena on the micro, meso, and macro levels of political communication, explain them coherently, and predict them precisely. This potential has only been taken advantage of rudimentarily in the research on political communication (e.g., Fengler & Russ-Mohl, 2008).

### General profile of rational choice theory

RCT entails the claim to create a *comprehensive explanatory model* for social phenomena of any kind, and thus for every form of political communication as well. The rational choice paradigm combines the micro, meso, and macro levels. At the core of the explanatory model are individual actions, which are then used to explain the creation of organizations and of social structures. In turn, organizations and social structures also shape individual actions. Descriptions, explanations, and predictions need to pass through the needle eye of individual actions (methodological individualism: Coleman, 1990). Actions are understood as decisions among possibilities under conditions of scarcity. This applies not only to economic decisions, such as the choice among consumer goods, but also to biographical and political decisions.

RCT tries to convert the explanatory claim *methodologically* by *modeling decision processes* in a formalized language. Thereby, the complexity of social contexts is reduced sharply. RCT allows for the analysis of structures of behavior and the formulation of precise predictions about the choices actors will make. The hypotheses are then tested empirically by means of experiments, surveys, and analyses of behavioral data. This leads to adaptations of the models.

## Political communication as individual choice

If the editor-in-chief of a newspaper can choose among several applicants for the position of an editor, who will he or she choose and why? To answer this type of question, it is necessary to explain and predict individual decisions.

This is accomplished by the foundation of RCT, the *theory of individual choice*—a theoretical approach that explains and predicts individual (communication) behavior by assuming that actors will in any situation choose the action whose consequences offer the best cost–benefit ratio, according to their beliefs. The approach focuses on that part of social action which follows an instrumental rationality. This is deemed the key to explaining actions and their coordination. According to RTC, people generally behave in a goal-oriented manner in order to reach a desirable state with the least possible effort. Following the tradition of utilitarianism, it is assumed that the principle of behavior increases the individual benefit. In general, actors suppose that other actors follow the same orientation.

Analyses in the framework of the theory of individual choice are based on 10 central concepts:

- The *actors* are decision-makers, namely individuals who decide for themselves or who are in a position to make decisions for others, for instance as head of a household or in a leadership position. They are endowed with the ability to choose rationally.
- *Choice* is understood as a decision among alternative opportunities of action. Choices follow decision rules depending on the degree of uncertainty, for instance: “Choose the opportunity of action which leads to the comparatively largest subjective expected utility!”
- *Opportunities of action* arise for the actor in accordance with the conditions of situations.
- *Consequences* are the results that arise from an action. They are expected by actors with varying degrees of certainty and are evaluated with regard to their costs and benefits.
- The *situation* is characterized by the conditions limiting the range of possible actions, mainly time, money, social relationships, reputation, and norms. If those restrictions change, actors can and will change their behavior.
- The concept of *beliefs* refers to the evaluation the actor makes of the situation, possible actions, and their consequences.
- *Preferences* express the ranking of opportunities by the actor according to the presumed costs and benefits. This can relate to the precise options in a situation as well as to goals or value orientations (e.g., prioritizing security over freedom and freedom over equality).
- *Utility* relates to the outcome which an actor attributes to a good or a condition. It can be embodied in a material dimension, for example, in money (narrow definition of utility), or in an immaterial dimension, for example, in social appreciation (broad definition of utility).

- Analogously, with regard to *costs*, one can distinguish between dimensions and thereby between a narrow and a broad definition.
- Costs and utility are conjoined in a *calculus*. The estimation can be learned by trial and error; however, the calculus can also be based on scientific methods and become transparent due to a formalized presentation.

## Political communication as interdependent choice

It is necessary to explain and predict interdependent decisions to answer the following type of question. A lobbyist wants to have as much influence on political decisions as possible and offers the politician selective information and limited political support in exchange. The politician wants as much valid information and strong support as possible and offers limited influence on political decisions in exchange. How can stable cooperation between both emerge from this combination of mutual and diverging interests?

This is accomplished by the *theory of interdependent choice*, generally called game theory—a theoretical approach that attempts to explain how cooperation can arise in a world of self-interested actors. In this pattern, all forms of trade-off or communication are modeled.

The core of the model is composed of *basic types of constellations of actors*. They differ in size, structure, and, especially, the relation between the outcomes for involved actors, the payoffs. Basically, for every participating actor in a constellation, there are two opportunities: An actor can cooperate or not cooperate (defect) with the other involved actors. The most famous example of a constellation of actors is the Prisoner's Dilemma. It models the divergence of individual and collective rationality. Other types are the Battle of the Sexes and the Game of Chicken.

Basic *differentiations of the constellations of actors* arise from five features:

- *Degree of complexity*. How many actors are involved, and of how many options do they dispose?
- *Decision time*. Are the different actors making decisions simultaneously or consecutively?
- *Divergence of interests*. Are the interests of the actors diametrically opposed (zero-sum game), or do incentives for a joint strategy unfold (mixed motives game)?
- *Degree of uncertainty*. Do actors know only the rules, or do they also know the preferences of the other actors and the probability of their behavior? Is this knowledge distributed equally or unequally?
- *Frequency of interaction*. Is it a one-time interaction, or is it being reiterated? Is it therefore possible to reward or punish other actors' behavior subsequently?

All actors in the given constellation choose a *strategy*, namely a commitment about which form of interaction they pursue. Thereby they can decide whether they will always cooperate or always defect or whether they will sometimes cooperate and sometimes defect, depending on the other actors. However, the choice depends not

only on the actors' respective preferences, but also on the presumed or prior strategic choices of the other involved actors, who also maximize their own utility. Hence, reciprocal expectations, and expectations of expectations, are included.

This results in *combinations of strategies*, which pay off differently for each actor and for all actors collectively, creating diverging amounts of utility. The determination of the so-called "Nash equilibrium" is of vital importance for the analysis. It describes the combination of strategies in which there is no incentive for rational actors to choose any other strategy under the respective conditions and expectations. It can result in combinations of strategy that represent a Pareto-optimal state: No actor can improve without disadvantaging another actor. However, it can also result in combinations of strategies that are states of dilemma, in which a suboptimal outcome arises for all actors. The cases can be solved by rules that bind actors with sanctions that are either externally imposed or arranged by all participants (Diekmann, 2010).

Hence there are *instruments* available which facilitate the analysis of social constellations and the conflicts associated with them as well as the formulation of predictions on interaction. For their empirical testing, mainly experiments and computer simulations are used. For instance, a test was performed to determine which fundamental strategies in iterating games led to cooperation with the highest probability (Axelrod, 1984). Thereby, in particular, the systematic search for possibilities for cooperation can be facilitated. Subsequently, institutional arrangements can be designed that feature transparent incentives and raise the probability of achieving Nash equilibria and avoiding dilemmas.

## **Political communication as public choice**

How can the dilemma be solved that democratic societies depend more and more on a plurality of information and positions for the formation of political opinion, but citizens are less and less willing to invest in securing the provision of that plurality? To answer this question, it is necessary to explain and predict collectively binding decisions such as those made in the field of media policy.

This is accomplished by *public choice theory*, which claims to explain macro phenomena through utility-maximizing decisions, such as the evolution of the system of public communication as a whole (Mueller, 2003). The creation of social structures can be partly attributed to political decisions that determine which incentives actors encounter in a given field. The approach explains the choice of rules from the interactions of actors in positions of power, for instance parties or governmental agencies. Such actors compete for political power and are in principle geared to their own utility, especially to maximizing of profit, budget, power, or reputation — depending on the type of organization. However, their choices are limited by restrictions that cannot be modified in the short run, in particular by the legal framework, the political situation, and the choices of those whose approval the actors depend on. For such decisions on public affairs, Nash equilibria can also be sought, generating Pareto-optimal results and avoiding dilemmas.

## Recent developments in rational choice theory

The development of the RC paradigm has been promoted by a fundamental change in methods. The main focus shifted from the discussion of models to the experimental testing of modeled assumptions. This not only led to confirmations of the explanatory approach, but also revealed anomalies, namely significant deviations from the basic theoretical assumptions (Plott & Smith, 2008). The solutions to these problems led to two major expansions of RCT which relate to cognitive biases and fairness as the motive for action, respectively. Additional changes concern a stronger provision for reciprocity and for evolutionary processes in RCT. All of this was included in the advancement of the models (e.g., Bolton & Ockenfels, 2000).

### *Advancement with respect to cognition: Bias of perception*

Empirical tests demonstrated that individuals process information in ways not predicted by classic RCT, which led to the introduction of the concept of “bounded rationality” (Simon, 1982): Actors do not choose the ideal possibility of action, but choose that possibility which, from the respective aspiration level and with regard to the limited possibilities for information and calculation, appears to be satisfying (“satisficing”). Consequently, they use decision heuristics, that is, rules of thumb, to solve problems and make decisions (Gigerenzer & Todd, 1999). This empirical view of human decision behavior was systematically sharpened by studies in which four distortions of information processing became apparent (“prospect theory”: Kahneman, 2011):

- Information on the amount of loss has a greater influence on the decision than information on probability (*representative bias*).
- Information from available practical examples has a greater influence on the decision than information on abstract features such as probabilities (*availability bias*).
- Information on possible losses has a greater influence on the decision than information on possibly missed gains (*loss aversion*).
- Information on the close future has a greater influence on decisions than information on the distant future (*myopia*).

### *Advancement in motivational respect: Fairness as incentive*

Using experiments, RCT researchers also tested whether the maximization of utility actually drove action and constituted the crucial criterion for decisions (e.g., Fehr & Gächter, 2000). It became evident that an unexpectedly large share of subjects chose an action that was characterized by fairness towards the other players, even though strictly self-interested actions were possible. On the one hand, the actors abandon their own advantage to treat others equitably (fairness preference); on the other, they invest resources to punish others for unfairness (unfairness aversion). Actors also have a clear idea of what others consider fair. However, the extent of social control is relevant for the proportion of fair behavior. There is accordingly a genuine motive to treat others fairly, but it depends on the social situation how strongly this motive is applied.

## Political communication research and rational choice theory

The theoretical developments mentioned point to the potential of the RCT approach, which is, however, used much more cautiously in communication research than in other social sciences. In fact, the basic elements of RCT were taken on in a strongly diluted fashion by some communication scholars, for instance in the research on media use (uses and gratifications approach), in journalism theory, and in media economics (Picard, 1996). As indicated with the respective questions, fields of application abound in political communication research.

Conversely, a tighter connection to communication research also provides *opportunities for RCT*. On the one hand, political communication is an interesting and relevant test case for RCT in theoretical, methodological, and empirical respects. On the other hand, a (political) perspective on communication would reasonably extend RCT models and strengthen their explanatory power by allowing answers to questions like these: Which ideas of reciprocity are being taken as a basis of speech acts? Which norms of fairness are valid in mass communication? How do actors signal their intentions during negotiations?

By means of RCT, a *unification of social sciences* is pursued explicitly. Consequently, using the concepts and procedures facilitates a connection to a theoretical direction which shapes large parts of economics, sociology, and political science. Thereby RCT competes with other basic theoretical approaches, such as systems theory and critical theory, that understand political communication differently. It is necessary and promising to test under which conditions each paradigm can better describe, explain, and predict political communicative actions in future studies.

SEE ALSO: Communication Theory; Media as Political Actors; Media Policy; Political Communication Research; Public Choice

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