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Homo economicus 2.0

Rational behaviour reflects our own decision-making conditions

The philosopher Wolfgang Spohn, Professor for Philosophy and Philosophy of Science at the University of Konstanz from 1996 until 2018 and now retired, has been awarded a Reinhart Koselleck Project by the German Research Foundation (DFG) in the amount of EUR 500,000. Its intent is to revise and improve standard decision and game theory.

The University of Konstanz philosopher Professor Wolfgang Spohn is one of the leading analytic philosophers in Germany. His research interests range from epistemology, ontology and metaphysics, the philosophy of mind and language to the philosophy of logic and mathematics, amongst others. In Germany, he is considered a pioneer in the field of practical rationality, especially in decision and game theory. Having been awarded a Reinhart Koselleck Project in the amount of EUR 500,000 by the German Research Foundation (DFG), Wolfgang Spohn is now able to dedicate himself entirely to a project that has occupied him for many years: to expand upon and revise the concept of *homo economicus*, which has been critical to both decision and game theory for a long time. Spohn is the seventh University of Konstanz researcher to be awarded a Koselleck Project.

***Homo economicus*: Normative ideal or misunderstanding?**

Reinhart Koselleck Projects are awarded for a standard period of five years and enable researchers to pursue “exceptionally innovative, higher-risk” research projects. Spohn’s project conforms to these criteria in an exemplary way by aiming to fundamentally reformulate decision and game theory: “I believe both standard theories to be deficient from a normative point of view”, states Spohn. In doing so, he is challenging a more than 60-year-old status quo. “If my assumptions regarding the concept of *homo economicus* are correct, they will not only impact these theories. They may also have consequences for empirical research, considerably shifting the frame of reference in behavioural economics”.

In the social sciences, especially in microeconomics, the figure of *homo economicus* is considered a normative ideal. “In the widest sense, it describes how we as individuals and especially as economic agents *should* behave rationally”, explains Spohn. “Being rational, in this line of thought, means optimizing the chances of attaining one’s goals: it’s all about comparing and weighing possible alternative courses of action in order to make a decision that maximizes expected utility or subjective value”. However, the idea that *homo economicus* should be viewed as a rational agent who is primarily guided by self-interest is the subject of ongoing debate. “I believe this narrow idea

of self-interest to be a misunderstanding”, comments Spohn. “In a trivial sense we are naturally driven solely by our own interests. But this does not imply that I do not wish other people well. It just means that it is up to *me* whom I wish well and to what extent; it does not mean that my interests are limited to self-interest in the narrow sense of the word. Classic experiments in game theory like the ultimatum game have proven this point time and again, clearly showing that people are in fact guided by ideas of fairness and equity”.

While experts in behavioural, psycho- and neuroeconomics have worked to modify the idealised figure of *homo economicus* to reflect real human behaviour, Spohn is pursuing a different approach: Building on the standard theory, he intends to put forward a new, reflexive decision theory. “My basic idea is that the normative theory that has given rise to the idea of *homo economicus* and which has not been contested for more than 60 years is simply not adequate. While modern behavioural economics can highlight the discrepancy between the standard theory and actual human behaviour, I believe that it employs a flawed frame of reference, and that the normative concept of *homo economicus* must be fundamentally expanded and revised”.

Reflexive decision theory

Spohn terms this revision “reflexive decision and game theory”. In standard decision and game theory, the concept of strategy is crucial. Both assume that rational agents draw up plans that allow them to react to a range of external circumstances. In decision theory, it is therefore not only individual actions that are optimized but entire strategies. In this scenario, agents make themselves dependent on external circumstances. However, they can appropriately respond to them only by gaining prior knowledge of them. This is why decision theory deals extensively with the issue of how to obtain information. “In the strict sense, however – and we have to be strict – we must recognize that the agents do not directly respond to external circumstances but to future inner conditions, to future knowledge”, argues Spohn. “If we are to behave rationally, we thus need to also take into account future mental states that come about by other kinds of changes; desires and interests may also change, and we do not only form new opinions but also discard old ones. This means that tomorrow I may find myself in a radically different decision situation as compared to the present one. Standard theory is silent here, since it assumes that it is a single, unchangeable point of view that needs to be optimized”.

To fill this gap in the theory, Spohn has developed his concept of reflexive ascent. He continues: “The question that we need to ask is this: What should be deemed reasonable or unreasonable in changing decision situations and which decision-making criteria should be considered in order to be able to develop a coherent overall plan? One part of the answer is that agents also need to take into account any potential future desires and beliefs on which they are likely to base their decisions. This ‘reflexive ascent’ has not been systematically elaborated in standard theory. The constructive problem lies in developing optimality criteria for such extended decision situations”.

Another important aspect to consider is that agents’ desires and beliefs do not merely impact the social environment through their actions but also through their emotions and other forms of expressive behaviour. In economic literature, this form of interaction has been taken into account only insufficiently, although it may influence rational decision-making. It should, however, be considered when applying the concept of reflexive ascent. The question that needs to be answered according to Spohn is what constitutes optimal or rational behaviour under such circumstances: “This reflexive dimension – the fact that agents need to consider the consequences of their mental states beyond the effects of their actions – will also have an impact on game theory, which explicitly seeks to explain rational behaviour in social situations”.

Wolfgang Spohn’s Reinhart Koselleck Project begins in spring 2020 and ends in 2025. It will provide opportunities for two doctoral projects with an economic and mathematical focus,

respectively, as well as opportunities for collaboration with other researchers at the University of Konstanz. The project will also include an overall publication.

Facts:

- University of Konstanz philosopher Professor Wolfgang Spohn, now retired, is awarded a Reinhart Koselleck Project to revise and improve standard decision and game theory
- Funded by the German Research Foundation (DFG)
- Project duration: 2020 to 2025
- Funding amount: EUR 500,000
- Award honours “exceptionally innovative, higher-risk” research projects

Note to editors:

You can download a photo here: https://cms.uni-konstanz.de/fileadmin/pi/filesserver/2019/Bilder/homo_oeconomicu_2.0.jpg

Caption: Professor Wolfgang Spohn, retired Professor for Philosophy and Philosophy of Science at the University of Konstanz

Photo: University of Konstanz

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