

HOW BEHAVIORAL ECONOMICS CAN ENRICH THE PERSPECTIVE OF THE AUSTRIAN SCHOOL

MALTE TOBIAS KÄHLER*

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I INTRODUCTION

Economists early felt that something was not quite right with equilibrium economics and its corresponding «feature», the rational *homo oeconomicus*. Critique came from the Austrian school (see for instance: Huerta de Soto (1998), Kirzner (1997), Mises (1940, 1957), Rothbard (1962, 1997), yet from other sides, as well.

Complexity economics (Arthur 1999) was built on physics — just like León Walras' equilibrium approach (Walras 1874). But it added interdisciplinary findings from biology, psychology and computer science. It views the economy not as a deterministic, predictable and stable system, but as an *evolving* process (see Arthur (1999, 1995, 2013) and Beinhocker (2006) for a review of the paradigm).

Furthermore, behavioral economics (Kahnemann and Tversky 1979 and Kahnemann 2011), showed that real human behavior often times falls prey to systematic errors, so called *biases*, and that the mind may take mental shortcuts (*heuristics*) when weighing decisions. Behavioral Economics (BE), thus attacked the model of *homo oeconomicus* from another angle and eventually,

* Senior Consultant with EY Advisory — University of Münster: Magister Artium (Master equiv) in Political science — Universidad Rey Juan Carlos, Madrid: Master of Arts — Economics.

Kahnemann received the Nobel Prize in economics for his achievements in 2002.

This rising critique against the mainstream model could have been applauded by Austrian scholars, for it finally seemed to shake the walls of the neoclassical dominance. Yet, contrary to the Austrian perspective, the new model of human beings was not an entrepreneur, but an often erring *homo heuristicus* that even needed paternalistic policies for his guidance. At least this is the culminating conclusion implied by the book «Nudge» in which Thaler and Sunstein (2009) even argued for a libertarian paternalism.

The behavioral school of economics and especially their implications for public policy were instantly criticized by Austrians — see for example (Shostak 2002), but the aim of this paper is to show how adding psychology can, in fact, *enrich* the Austrian paradigm and that the critique against BE from the Austrian side should be evaluated with a closer look. For instance, findings of the most prominent opponent of Kahnemann, the German psychologist Gerd Gigerenzer (Gigerenzer 1996), suggest that men indeed act rational and that they do so using the mind to gather and evaluate many chunks of information simultaneously in a bottom-up way. Thus, «Fast-and-frugal» rules of thumbs beat top-down algorithms in that model and resemble the mechanisms of free market dynamic.

II ADDING BEHAVIORAL ASPECTS TO THE AUSTRIAN PARADIGM

In order to show how and where the behavioral perspective can enrich the Austrian paradigm, this section builds on Huerta de Soto's excellent comparison between the Austrian and the neo-classic approach (Huerta de Soto 1998) and it will comment on its most important facets (see **table 1** for a summary). The contribution of this paper is to add a drain of «behavioral thinking» to these facets and to show how that approach can indeed inspire and extend Austrian scholarship.

TABLE 1
COMPARISON BETWEEN THE NEOCLASSICAL,
THE AUSTRIAN AND THE BEHAVIORAL PARADIGM

<i>Dimension of comparison</i>	<i>Neoclassical Paradigm</i>	<i>Austrian Paradigm</i>	<i>Behavioral Paradigm</i>
General perspective	Study of rational decision and maximization under constraints	Study of human action	Study of human behavior and the mental processes involved
Role of Information	Complete and objective type of information	Tacit knowledge and subjective information	Subjective stance, but importance of cognition as the act of processing information of one's surrounding
Concept of men	Homo oeconomicus (rational agent)	Entrepreneur (sometimes erring, incomplete information, creates new information)	Sometimes rational but often erring man (heuristics); yet capable of fast-and-frugal decisions in uncertain environments
Equilibrium	General equilibrium	Economy as a dynamic process of coordination (Kirzner, Hayek, Huerta de Soto)	(Social) learning, evolution, adaptation through interaction between individuals and environments
Method	Mathematical formalism (symbolic)	Verbal logic (abstract and formal)	Use of experiments and statistics; triangulation as combination of quantitative as well as qualitative methods on the same research object

First: Decision vs. action — or: *add behavior*

Whilst early neoclassicists tried to mathematically construct a theory of individual decision making (Walras 1874), Austrians study human action in an approach that they call praxeology (Rothbard 1997; Mises 1940). Starting from the axiom that all human beings act intentionally and use means to achieve their imagined ends, further laws can be deduced.

BE agrees with the Austrian critique of mainstream decision theory. It studies *actual* human behavior as well as the cognition, i.e. thoughts, motivations and feelings that *lead* to certain decisions. Simon (Simon 1972) introduced the concept of «bounded rationality» and «satisficing» instead of a strictly maximizing decision making.

Furthermore, cognitive psychologists found how limited the mind's capacities are, when maintaining attention or even when processing information of the environment (Simons and Chabris 1999). By studying these cognitive processes and the limited capacity of decision making, psychology can help Austrian scholars to better connect the inner (subjective) and the outer (observable) spheres of their specimen: the acting man.

Second: Objectivism vs. subjectivism: *add cognition*

Austrians stress subjectivism and the notion that men — in acting — impose meaning on the things, goods and the tools they use. It is therefore not by their *objective* nature, but by subjective *construction* that value is linked to a good. This is highly compatible with psychological research. For instance, prospect theory (Kahnemann and Tversky 1979) states that people tend to weight relative losses higher than gains of the same magnitude and that the validation depends on *subjective* and *relative* terms instead of objective ones. Also, humans use what is called «mental accounting», i.e. connecting consequences and costs to different mental accounts and thus weighing gains and losses differently, respectively to their mental construction.

Furthermore, ultimatum games (Güth, Schmittberger, and Schwarze 1982) have shown that the value of a choice is affected by

altruism and reputation, i.e. by how someone believes to be seen by others.

Costs, from the Austrian perspective, are subjective and evaluated by the entrepreneur (the acting man) and not objective and observable by a third party like under the neoclassical assumption. Also, Austrian scholars explained how the market creates new information (Huerta de Soto 2001) and how processing many different subjective valuations through the market mechanism is possible (Kirzner 1997).

Thus, both approaches, the Austrian School and BE agree about the subjective matter of economic information, yet the latter stresses the study of cognition as a mechanism of how information is processed by an organism. Understanding cognitions can thus help Austrian scholars to better understand the psychological phenomena that lead to validations, decisions and ultimately to action.

Third: *Homo oeconomicus* vs. entrepreneur: *add heuristics*

As already mentioned above, the rational *homo oeconomicus* was under attack from many sides. Yet, as Berg, Gigerenzer and Samson point out (Berg and Gigerenzer 2010) (Samson and Gigerenzer 2016), this very welcomed critique of the old neoclassical model went too far and eventually led to Kahnemann's «homo heuristics» who appears to be suffering under too many biases. The research program that followed Kahnemann was so obsessed with finding new biases that this tendency could itself even be called a «bias bias» (Samson and Gigerenzer 2016).

Here, an important point of the current article becomes clear: adding psychological findings to economics has helped to gain a better understanding of decision making and economic behavior. Yet at the same time, Austrian scholars seem to hold prejudices against behaviorism, because of the prominence of the «heuristics and bias»-program and its asserted conclusion that men act irrationally and would need government intervention or nudges for better decision making.

But knowledge needs to spread within the Austrian camp, that this apparent conclusion was criticized early even from *within* the behavioral paradigm itself: Berg and Gigerenzer (Berg and

Gigerenzer 2010) argued that BE has not shown empirically that the decisions based on heuristics make humans worse off than a «rational» agent would be. In fact, they provide examples where the mental shortcuts even «beat» very sophisticated, rational models in their outcome.¹ Their findings cast doubt about the claim of BE that people often make «bad» choices when relying on their heuristics. Rather, humans have evolved to be adapted to uncertain environments where not all information and probabilities are available and where decisions are necessary and time for decisions is short.

To emphasize that point: Gigerenzer's so called «fast-and-frugal» decisions (the decisions based on heuristics or biases) are rather an efficient adaption of the mind. They even resemble the market as they *simultaneously* gather all *available* information in uncertain environments instead of relying on *all* information, with the result of producing economic outcomes with less (cognitive) effort (Gigerenzer, Dieckmann, and Gaissmaier 2012). The main difference is that Kahnemann's heuristics focus heavily on decisions under risk, when options, their probabilities and outcomes are known or at least can be calculated, whereas Gigerenzer seeks to study choices under circumstances that are much closer to everyday life, i.e. in environments dominated by uncertainty, when outcomes cannot be calculated.

To sum up, Gigerenzer's perspective is very compatible with the Austrian viewpoint that entrepreneurs do indeed err from time to time — but are still capable of making good choices under uncertainty.

Fourth: Equilibrium vs social coordination: *add learning*

The neoclassical model is static and mirrors the model of a closed physical system that tends towards equilibrium. This direct

¹ One example is the «churn» rate. Churning is the process of a former customer abstaining from further purchases. Analytical models that were built on past buying behaviors (detected, for instance, via credit card purchases) and supplementing factors, were actually worse in predicting than the simple management rule of thumb that states «a customer will be inactive if he or she did not purchase the last nine months» (Berg and Gigerenzer, 2010).

application of mechanical physics by Walras (Walras 1874) had been criticized by scientists from the field of complexity economics (Arthur 1999). These scholars would view the market economy as an open and non-equilibrium system in which processes of change and adaption constantly take place (Beinhocker 2006).

Kirzner (1997) and Huerta de Soto (1998, 2001, 2009) have also built on Mises' praxeology to show that the market is much better understood as a *process* of social coordination. Finally, to bring in the behavioral perspective means to stress the importance of *learning, evolution and adaption*.

Learning takes place individually as well as socially (i.e. through peers in a group and through social feedback) and people learn by reinforcing those actions that had performed well (Camerer 1999). Learning processes have been a field of research in social psychology for a long time (see Bandura, 1999) and can be of further merit for Austrian scholars investigating individuals as well as institutions that foster or facilitate free market exchange.

Fifth: verbal logic vs. formalism: *add experiments*

Huerta de Soto (1998, p. 84) argues that mathematical formalism works well for expressing the states of equilibrium which the neo-classical economists study. Yet, it would *not* allow to adequately describe the subjective reality of time, and much less the entrepreneurial essence. In particular, Austrians criticize that economic variables are mathematical aggregates of magnitudes which are in fact *heterogeneous* in kind. With that critique at hand, is there still room for formalism and mathematics in economics?

A brief notion of another *methodenstreit* could lead to a fruitful discussion among scholars of the Austrian school. It took place in psychology and can only be touched on here briefly, but it could be of high interest for further research.

In Germany, psychological research began with the laboratory of Wilhelm Wundt in Leipzig (Wundt 1977). His method was the experiment, but the preferred approach to collect data was introspection. Test subjects were asked to articulate and describe their feelings or inner states. Thus, Wundt saw the merit of *introspection*,

yet *still* practiced empirical research and his approach inspired more laboratories, even in the United States.

An opposite approach was later taken by Sigmund Freud and other psychoanalyticians (Breuer, Freud 1999) who rather used «case studies» of individuals and deep interviews. A bitter *methodenstreit* took place in psychology as well as in economics and it casts its shadows into our times as a still existing distinction between qualitative (*verstehen*) and quantitative (*measure*) methods.

But Freud (1994, p. 77) himself, back when he tried to detect inner states by questioning his patients, was well aware of the limits of his qualitative approach and he wondered if, in the future, there would be methods available that could detect and measure the inner «energies» (like in fact neuropsychological tools have begun to do). So even if the interview was only a *provisional* method for him, he urged his colleagues not to deny that method entirely as there «currently are no better» (*ibid.*) methods available. Researchers in psychology today aim at using the right method for the *appropriate* context or even combine different methods and use them on the same research question as done in «triangulation» (Bryman 2011). This relative openness, one could argue, is something that distinguishes the *methodenstreit* in psychology from the one in economics, particular between the Austrians and the neo-classicists, but further research to compare that field seems necessary at this point.

That excursion should help to set the following into perspective: Camerer (1999) argues that during the *methodenstreit* in economics and psychology, both disciplines were trying to make their fields more scientific by formalizing it, but they split and went «along different paths». One trend with economic theorists like Samuelson, Arrow, and Debreu was inspired by sciences like physics and mathematics, and the other trend included the psychologists were influenced by «experimental traditions rather than mathematical». He goes on to conclude that for an economist, a «theory is a body of mathematical tools and theorems. To a psychologist, a theory is a *verbal construct* or theme that organizes experimental regularity.» (Camerer 1999, p. 10575, emphasis is mine). Both approaches meant to be formal and used natural science as a model, but still they are not equal. This difference is narrow but important: Even though

experimental designs use statistics and mathematical formalism to standardize the description of procedures as well as the *interpretation* of results, their advantage is the possibility to actually study causality by appropriate designs. In these experiments, independent variables (the treatments) are introduced temporally *before* the dependent variable is measured, and the use of control groups and standardized procedures further help to isolate that causal relationship. Thus, the well-known *ceteris paribus* statement of theoretical economics actually has meaning in psychological experiments and hypothesis that are deduced from theories can be tested empirically.

III

LIMITATIONS AND CONCLUSION

As a limitation, it is admitted that the current paper cannot dive deep into the methodological debate between «theory and history» (Mises 1957). Rather, the goal of this article is humble, as it merely aims to provide insights of how psychological research can help to better understand the *acting man*. Also, it seeks to give a hint towards a debate within the behavioral paradigm (the debate between Kahnemann and Gigerenzer) that is of interest to Austrian scholars. The arguments of this article are: First, the decision model of a *homo agens* is enriched by introducing a (limited) cognitive capacity and bounded rationality. Second, behavioral economics is compatible with the Austrian notion of subjective information. Especially the prospect theory enhances the perspective on how individual losses and gains are weighted relatively and subjectively. Third, in behavioral economics, the *homo oeconomicus* is replaced by a man relying on heuristics. These heuristics can be harmful sometimes (when they lead to errors), but they also constitute a very efficient, bottom-up and simultaneous processing algorithm that leads to spontaneous results. In their efficacy, these mental processes resemble the spontaneous order of markets. Fourth, static equilibrium is rejected by the behaviorists as they — just like Austrian scholars — emphasize (social) learning, adaption and evolution. Finally, it is important to notice that the *methodenstreit* took place in both

disciplines, economics and psychology, but went down two similar yet different roads. Further research seems highly promising in this area. These findings lead to the advice that Scholars of the Austrian School should see Behavioral Economics as an *enrichment* to their own approach, test the hypothesis that can be deduced from praxeology with new experimental methods and generally that they should be aware of many knots at which a connection and joint research between both fields is possible.

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