

ECONOMIC SCIENCE AND NEOCLASSICISM

JÖRG GUIDO HÜLSMANN

For more than forty years, economists have routinely rejected the postulate that economic theory should be realistic. Ever since Milton Friedman (1953) sketchily outlined a positivistic methodology for economics, most students of our science have come to endorse Friedman's view and have claimed that the only quality standard of economic reasoning was its predictive power. Good theories yield fairly correct predictions whereas bad theories yield wrong predictions.

Today, the utter failure of this program is patent. Positivism has not improved economic forecasting. It has encouraged the preoccupation with purely formal problems in mathematical economics and game theory, and at the same time the multiplication of applied studies proving, in the words of Frank H. Knight, that "water runs downhill." Not surprisingly, more and more economists seek to find their way between the Scylla of formal irrelevance and the Charybdis of empirical irrelevance. Ever more economists have become interested in alternative approaches that point out avenues for gaining meaningful insights about our world.

One of the few schools of economic thought that has consistently adhered to the postulate of economic realism is the Austrian School.¹ It is therefore welcome that Bryan Caplan (1999) critically evaluated the tenets of the Austrians in a recent article. He concentrated on the writings of Ludwig von Mises and Murray N. Rothbard. The works of these two authors represent in his eyes a truly alternative paradigm within the economics profession, whereas the work of other Austrian scholars—in particular, Hayek, Kirzner, and their followers—has to be seen as complementary to, rather than altogether different from, today's neoclassical mainstream.²

JÖRG GUIDO HÜLSMANN is a Feodor–Lynen Fellow at the State University of New York at Buffalo. I thank the Ludwig von Mises Institute (Auburn, Ala.) and the Alexander von Humboldt Foundation (Bonn, Germany) for financial support.

¹See in particular Menger (1871; 1883); Böhm-Bawerk (1959; 1923); Mises (1998; 1985); Hayek (1931; 1937; 1979); Rothbard (1993; 1997a,b); Kirzner (1966; 1973); and Hoppe (1989; 1993).

²See Caplan (1999, pp. 823f., 836, n. 24). This view finds corroboration in recent studies by Austrian economists. See Rothbard (1997a, chap. 7); Salerno (1990b; 1993; 1999); Block and Garschina (1996); Herbener, Salerno, and Hoppe (1989); and Hoppe and Salerno (1999).

Caplan arrives at the startling conclusion that the Austrian approach, despite the efforts of its authors, is less realistic than the neoclassical approach that flourished in the age of benign neglect for realism.

A discussion of these views is highly useful given the growing interest in economic realism. In this article, we will show that Caplan fails to identify the important differences between Austrian and neoclassical economics. Caplan's errors seem all to be rooted in his failure to grasp that Austrian economics is a theory of action (praxeology) rather than some kind of applied psychology. We will therefore briefly characterize the praxeological approach toward the explanation of human behavior and then discuss Caplan's main tenets in some detail.

THE ESSENCE OF PRAXEOLOGICAL ANALYSIS

Human beings act. They employ means to attain ends, and they choose means and ends. These facts are evident, simple, and clear, and no reasonable economist denies them. What sets the Austrian approach apart is its way of dealing with them. Austrians base their all-encompassing economic theory exclusively on these and other such elementary facts. They stress that human beings make choices and that they use means to attain ends.

Yet how is it possible, one might ask, to explain human action by the fact that human beings act? To explain a thing means to point out a relationship in which the thing stands. We can explain the fact that a leaf falls to the ground by the existence of gravity. We can explain the fact that a bulb lights a room by certain laws of electricity. We can explain the fact that a car runs by the combined effect of certain properties of fuel, laws of combustion, etc. In all these cases we explain the fact under consideration by pointing out its relation to other facts. An explanation thus presupposes that the fact is a sequel or corollary of the other facts. However, Austrian economists contend that they explain human action by the very fact that human beings act. Is this not circular reasoning rather than an explanation of action?

The answer is that, strictly speaking, Austrian economists do not explain human action at all. They do not relate human action to other facts of which it would be sequel or corollary. What they do is to analyze what human action is. They point out that each human action contains relationships between realized and non-realized aspects of this very action. Movements of the human body (human behavior) and mental activities (thinking, listening, etc.) can then be explained by reference to these relationships inherent in human action.

In short, Austrian economics is based on the insight that human behavior and human thoughts are only a part of human action, namely, the part that is realized (that is "there"). Other parts of human action are not—or not yet—realized. These are, in particular, (a) the purposes in pursuit of which human beings act and (b) the foregone alternatives that could have been chosen. Purposes and foregone alternatives are obviously not part of the world in the sense that they are realized.

However, it cannot be denied that they have some sort of existence, and this undeniable fact puts Austrian economists in a position to explain the realized manifestation of human action (behavior and thoughts) as a corollary of the non-realized part. For example, we can say that George went to work in order to earn his living, or that Judy crossed the street in order to get to the bakery. Or, when we observe a person play piano we can state that he plays piano rather than doing other things. We add another explanation by stating that he prefers playing piano to doing those other things. And so on. In all these explanations we use our knowledge of human action to explain the realized part by the not—or not yet—realized part.

Thus we see how Austrian economists can build all their theories on the mere facts that human beings use means to attain ends and that they choose means and ends. Neoclassical economists are not even aware that this approach is possible. In any case, they seek to explain human action in terms altogether different from their Austrian colleagues. They want to analyze how people act as a corollary or sequel of given circumstances; that is, they want to explain human behavior in terms of other observable and introspectively knowable facts. Clearly, to perform this kind of analysis one needs to have more than just knowledge of the relationships between realized and non-realized elements of human action. Thus, the neoclassical theory of value and choice seeks to explain how people should or would act by relating their behavior to feelings of pain and pleasure, or more generally to feelings of satisfaction. In short, neoclassical value theory not only stresses that what we feel determines how we behave. It presupposes that there are constant relationships between our feelings on the one hand, and our behavior on the other hand that can be studied and described by the neoclassical consumer theory.

Such are the problems that monopolize the attention of neoclassical economists. Their efforts and ingenuity have brought us a huge literature on game theory, on maximization problems in different market settings, on equilibrium paths, etc. However, all of this literature is based on the wrong premise that there are constant relationships between the conditions of action and action itself. The truth is that there are no laws governing which things people choose and which ends they pursue.³

Irrespective of whether one agrees to this apodictical condemnation of the neoclassical approach, the important fact is that this approach is categorically different from what Austrian economists do. The two camps offer entirely different types of explanations of observed behavior. The Austrians explain the realized elements of an action (observed behavior) in terms of non-realized elements of the same action. Since both realized and non-realized elements are part of the same

³We will later explain in more detail why this is so. Among the few neoclassical works which emphasize this problem is the seminal but largely neglected contribution of G.L.S. Shackle (1972). Significantly, Shackle saw no other solution than to pour out the economic-science baby with the theory-of-how-people-choose bathwater.

action, different aspects of the same fact, they cannot be studied separately. When I read a book, the other things that I could have done, and the purpose that I pursue in reading the book, are parts of my action. They are not existentially independent. They are not even real. The only reason to deal with them at all is that they are part of my action, which manifests itself in my behavior and in my thoughts, and that they therefore can be used to explain this behavior and these thoughts.

By contrast, neoclassical economists seek to explain observable phenomena (behavior) in terms of other observable phenomena (behavior of other persons, physical conditions of action) or of psychological phenomena ("degrees of want-satisfaction"). Since all these phenomena are existentially independent from one another, it makes perfect sense to analyze them separately. In particular, it is meaningful to state that an acting person might think that there is something like degrees of want-satisfaction and that, if he maintains such an idea, he might take three attitudes toward any two degrees A and B of expected want-satisfaction. He might think, indeed, that A is greater than B, or that B is greater than A, or they are equal. However, it is an entirely different question whether economic science must rely on such considerations, and what kind of economic explanation of the real world can be given by referring to them. These questions can be fruitfully discussed by examining Caplan's critique of Austrian economics in more detail, a task to which we shall now proceed.

INDIFFERENCE ANALYSIS

In his attempt to demonstrate the importance of indifference analysis, and the Austrians' lack of realism, Caplan starts by giving a somewhat imprecise account of why the Austrians reject indifference analysis. The Austrians, says Caplan (1999, p. 825), argue that indifference between two choices A and B is "nonsensical because it cannot be demonstrated in action."

However, it would be more precise to say that Mises and Rothbard consider indifference to be irrelevant for the explanation of human action. The fact is that an acting person always does something. This is the starting point for any science of human action. Our knowledge of the existence of choice alternatives and of purposes enables us to explain this fact. Thus when we see that Paul eats ice cream we explain this observation by relating it to possible alternative actions that Paul could have performed. We say that he preferred eating ice cream to any other choice he had had. Clearly, this explanation would be impossible if we assumed that Paul were indifferent between eating ice cream and other possible activities. We would still be faced with the undeniable fact that he does eat ice cream, but we could not explain it. Paul's psychological indifference is thus particularly unsuited as an account of what he does. And so is indifference in general utterly unsuited as an explanation of what people do.

Caplan (1999, p. 825, n. 3) refers to Robert Nozick's claim that Rothbard implicitly uses indifference analysis when stating that the units of a good are "interchangeable

from the point of view of the actor" and that "any concrete pound of butter was evaluated in this case perfectly equally by the individual" (Rothbard 1993, pp. 18f.).⁴ This is a good criticism of Rothbard's reasoning in this particular case. But it is easy to reconcile the existence of homogeneous goods with the praxeological insight that each of the homogeneous goods has a different value. As Mises stated:

action does not differentiate between concrete definite quantities of homogeneous means. But this does not imply that it attaches the same value to the various portions of a supply of homogeneous means. Each portion is valued separately. To each portion its own rank in the scale of value is assigned. But these orders of rank can be ad libitum interchanged among the various portions of the same magnitude.

If acting man has to decide between two or more means of different classes, he grades the individual portions of each of them. He assigns to each portion its special rank. In doing so he need not assign to the various portions of the same means orders of rank which immediately succeed one another. (1998, pp. 119–20)

Thus, already in 1949 Mises anticipated and elegantly refuted Nozick's criticism. Let us notice that Nozick singled out one passage from Rothbard's work (which is by the way contradicted by many of his other statements) to formulate a criticism on behalf of Austrian methodology in general. Yet, whereas Nozick's non-acquaintance with the Austrian economic literature is explicable, the same excuse does not apply to Caplan who is after all an economist.

Caplan further claims that Mises and Rothbard make "the crucial assumption . . . that all preferences can be revealed in action" (1999, p. 825). This must be a tacit assumption, for Caplan does not quote Mises and Rothbard making it. But, again, the starting point of the Austrian analysis is not a freely floating choice theory, which is then somehow applied to the real world, but real human action. Choice theory refers to the relations which link realized and non-realized parts of human action, and when applying choice theory we can thus explain any given activity by relating it to other elements of the same action. We can relate an activity to foregone alternatives ("Paul prefers eating ice cream to all other alternatives") or to purposes ("Paul eats ice cream in order to grow fat and ugly"). In both cases we explain a real-world phenomenon in terms of the relationships in which it stands.

It is against this background that we have to understand Mises's critique of the behaviorist perspective on phenomena like "rush hour at the Grand Central Station." There are no laws relating the behavior of people rushing back and forth to previous or later behavior. However, we can explain their behavior by relating it to the underlying purposes, like getting from home to the train, and from there to work, etc.

Having this in mind, it is easy to give an economic account of the psychic phenomenon of indifference between two events. For example, Paul might be

⁴Nozick's critique is in Nozick (1997). On Nozick see Block (1980).

indifferent between buying the red or the green sweater. An economic analysis of Paul's action could stress that he prefers to be indifferent rather than choose either the red or the green sweater (which implies of course that he does choose a third option—standing around and gazing at the various sweaters). It could also stress that Paul does not choose to buy either a red or a green sweater for a certain reason, for example, because he wants to keep his money or because he wants to deliver a (futile) proof of the importance of indifference in human action. In short, indifference as we know it by introspection is a fact to be explained. It is not and, as we have argued, cannot possibly itself be an explanation of human action.

It is also easy to deal with Caplan's counterexample of a preference that is not revealed in action. Says Caplan (1999, p. 826):

my preference for ice cream at the current instant cannot be revealed, since by the time I managed to find an ice cream vendor the current instant would have passed. Buying ice cream ten minutes from now only reveals a preference for ice cream then. And yet, I have introspective knowledge that I want some ice cream right now.

This description of a "non-revealed preference" is interesting only as an account of Caplan's mental state of affairs (that is, of a fact to be explained). But it is irrelevant for the explanation of what Caplan does. It does not tell us why he sits in his office and thinks of a "preference" for ice cream that does not materialize in action. Economic science can explain his behavior only by relating what Caplan does to what he might have done instead. It states that Caplan prefers to spend his time imagining a satisfaction that he cannot obtain.

CARDINALITY

Caplan sets out to criticize Rothbard's rejection of the theorem that "in equilibrium the rate of the marginal utilities of the various goods equals the ratio of their prices" (1999, pp. 826f.). But, astonishingly, Caplan gives no counterargument whatever. He stresses that one can try to "represent" an agent's preferences by a utility function, and that the same preferences can also be "represented" by any other function that leaves the order of preferences unchanged. This is true. But so what? The crucial fact is that one cannot divide preference ranks by one another and then compare the result to a ratio of prices.

It is obvious that equality between the ratio of marginal utilities (preference ranks) and the ratio of the prices could only exist under two conditions. One, if preference ranks and prices had the same dimension (that is, if they were the same kind of thing), then their ratios could undoubtedly be equal. However, this condition is not given since preference ranks and prices are different kinds of things. Thus we are left with two, if both preference ranks and prices were by their nature somehow extended so that their ratios would be cardinal, then these ratios could be equal, too. However, this condition is also not given because preference ranks are non-extended entities. One can therefore simply not say how high a preference rank is. One can say that a preference rank A is higher than a preference

rank B and lower than a preference rank C. That is all. The expression "preference rank A divided by preference rank B" has therefore no cardinal dimension and, as a further consequence, one cannot even possibly say whether it equals other ratios.

This is also evident from the problems that we encounter once we try to interpret the meaning of "preference rank A divided by preference rank B." What precisely does the expression "to divide" mean in this context? We venture to submit that nobody can say what it means. It is just as meaningless as "a rabbit divided by a piano concerto," or "a combustion engine divided by a prayer," etc. All we can say about the dimension of "preference rank A divided by preference rank B" is that it is "preference rank A divided by preference rank B." But this is obviously an idiosyncratic expression, and since idiosyncratic expressions by their nature have no common denominator there is no possibility ever to ascertain equality between them.

The same problem appears on the side of price ratios. The common view that sees no difficulty in the comparison of price ratios is unwarranted. The problem becomes obvious once we recall that prices are themselves ratios. A price is not just "3 dollars" but rather "3 dollars / 1 hamburger." Now consider the ratios of this price with two other prices, say, "1 dollar / 1 banana" and "2 dollars / 1 coke." The ratio of the hamburger and the banana prices would be "3 bananas / 1 hamburgers," and the ratio of the hamburger and the coke prices would be "3 cokes / 2 hamburgers."

It is clear that we encounter here exactly the same problems as above in the case of ratios of preference ranks (see Hülsmann 1996, chap. 6). The first problem is to interpret the meaning of the different units. What does (banana / hamburger) and (coke / hamburger) actually mean? But the most important problem is that all these ratios are incommensurable. They are idiosyncratic just like the ratios of preference ranks. It is impossible to tell whether any number of the dimension (banana / hamburger) is equal to another number of the dimension (coke / hamburger).

Thus the central proposition of neoclassical price theory, that in equilibrium the ratio of the preference ranks of the various goods equals the ratio of their prices, is fallacious in all its parts.

CONTINUITY

Next, Caplan deals with the assumption of continuous supply and demand functions. Interestingly, he makes no attempt to defend this assumption. He does not even try to prove that it is realistic or necessary for certain analytical purposes. His only point is that Rothbard himself uses this assumption and that he therefore cannot object to neoclassical economists who assume the same thing. Caplan observes that the lack of continuity in the demand and supply functions is a strong argument even "against the use of simple algebraic constructs—like intersecting supply and demand lines—that fill Rothbard's works" (1999, p. 828).

This is a pertinent observation. Yet, if anything, it rather strengthens the case for Austrian price theory.

First, the only purpose of using those simple diagrams is to facilitate communication with neoclassical economists in the first place. And in distinct contrast to his neoclassical peers, Rothbard (1993, chap. 2) applies utmost caution to emphasize that an intersection of supply and demand curves in the real world is an unlikely—although possible—case.

Second, equilibrium has much less importance in Austrian economics than it has in the neoclassical analysis. Mises (1998, pp. 244ff.) emphasized that the only role of equilibrium is to help explain one component of income, namely, profit and loss. This contrasts sharply with the neoclassical paradigm, in which equilibrium is an analytical panacea that permeates all instances of theorizing about the market. Thus, even granted that Rothbard contradicts himself in attacking neoclassical economists for the continuity assumption, this is but a small contradiction that does not affect the bulk of his work. For the Austrian rejection of the continuity assumption merely implies that market equilibrium (which is of very limited importance in the first place) cannot be represented as the intersection of supply and demand curves. By contrast, for neoclassical price theory the rejection of the continuity assumption is fatal, since the very essence of this approach is to describe (that is, represent) equilibrium in terms of algebra and graphs.

Third, and most importantly, Austrian price theory does not depend on the shape of supply curves at all. For equilibrium to be possible it is unimportant whether we can represent it as the intersection of curves. Therefore, one can meaningfully speak about profit and loss without any graphical representation that has to rely on unrealistic assumptions like continuity.

A short glance at *Human Action* reveals that Mises's analysis of the market and prices does not make use of curves and algebra. A superficial reader might consider this to be a sign of stylistic conservatism but in fact it relates to the very essence of Austrian price theory. Mises is genuinely uninterested in the questions that absorb the creative powers of neoclassical economists. He does not seek to explain why and under which conditions the actions of the market participants are "coordinated" so that equilibrium results. Rather, the main theme of his chapter on the market is that consumers are sovereign because their buying decisions steer the market (Mises 1998, p. 270). This is true irrespective of what consumers buy and irrespective of the reason why they make these purchases. Therefore Mises does not deal with the question of what they buy, under which conditions, and why. In his chapter on prices, Mises states that the number of market participants determines how narrow the margins are within which prices are determined. Yet, irrespective of the number of market participants, market prices are always determined by the decisions of marginal buyers and sellers (p. 324). Thus, all prices can be explained as a result of the mere fact that market participants prefer one good A over another good B (pp. 328f.).

INCOME AND SUBSTITUTION EFFECTS

Caplan (1999, pp. 828f) points out that occasionally Rothbard refers to income and substitution effects in his discussion of the shape of demand and supply curves. His criticism that Rothbard, unable to derive these neoclassical concepts from his own utility theory, borrows them on an ad hoc basis. It is therefore evident, concludes Caplan, that neoclassical economists gained new and intuitive insights that even Austrians cannot get around.

There are probably few Austrian economists who would claim that nothing of value could be learned extra muros. However, Caplan's conclusion is premature. The fact that Rothbard occasionally refers to income and substitution effects does not warrant the claim that these effects correspond to anything real. And it does not make the Austrian theory of the price formation of land and labor dependent on neoclassical insights. We have already pointed out that Mises did not bother about the shape of supply curves or the underlying motivations of market participants. His price theory stresses a much more fundamental feature of price formation, for example, that all exchanges are (at least ex ante) beneficial for both parties and that entrepreneurs appraise factors of production in terms of their expected relative contribution to the monetary income generated by the production process. It follows that consumers steer the allocation of resources in a market economy. Nothing of this depends on the shape of supply curves, or on the existence of income and substitution effects.

UNCERTAINTY AND PROBABILITY

Caplan sets himself the truly heroic task of refuting the opinion that acting man is confronted with non-quantifiable risk.⁵ As he (1999, p. 829) states, uncertainty in neoclassical analysis "means that there exists a known probability distribution (objective or subjective) with more than one possible outcome. Choice in the real world of uncertainty is no different from playing a game with known rules and multiple possible outcomes." Caplan notices that in the eyes of Mises this neoclassical "uncertainty" is no uncertainty at all, but must be considered as class probability and sharply distinguished from case probability. Most importantly, human action is genuinely characterized by the unique and therefore non-quantifiable case probability. It follows that the choice of the market participants cannot be adequately described as the outcome of a probability calculus.

Based on a single work on probability theory (Weatherford 1982) and without discussion, Caplan attacks this fundamental distinction between class and case probability by claiming that "every event is unique; if quantitative probability does

⁵It was the pioneering achievement of Chicago economist Frank H. Knight (1921) to point out the existence and significance of non-quantifiable risk, which he baptized uncertainty. Mises (1949, chap. 6) elaborated on Knight's distinction between (quantifiable) risk and uncertainty, introducing the notions of class probability and case probability. Today the Austrians are by and large the only standard-bearers of the Knight–Mises theory of uncertainty.

not apply to unique events then quantitative probability never applies to actual specific situations" (1999, p. 830, emphasis added).

Let us first point out that, even if the Weatherford–Caplan thesis were correct, it would be a confirmation rather than a problem for the Austrian approach. It is after all not Mises, but his neoclassical colleagues, who base their theory of choice on a probability calculus.

But can Mises's theory of choice do without quantitative probability? This is a big pill to swallow for economists raised in the neoclassical tradition, and Caplan is obviously incredulous when he states: "Action absent any knowledge of probabilities of different events is hard to conceive. If you could either have \$10 with certainty, or \$100 with an unquantifiable probability, it is unclear how you would decide" (1999, p. 832).

However, common sense is clearly on the side of the Austrians. Few people outside of economics departments consider it problematic that they cannot quantify the probabilities of future events. The average businessman does not calculate his expected future selling proceeds. Rather, he judges them to be such and such, and based on this judgment he comes to the market and buys factors of production (see Hülsmann 1997, pp. 46f.). It is not practical people but university professors and other persons with much time to spend on the solution of cognitive puzzles who see a problem here. Let us therefore restate the obvious: human beings act; faced with uncertain and non-quantifiable alternatives they do choose one of them. There exists no theoretical problem as far as these facts are concerned. And economic science can explain behavior under uncertainty by relating it to the choice alternatives and to the purposes of the acting person under consideration. A problem emerges only once we venture to determine theoretically how this person should choose or how he would choose as a corollary of given circumstances. But even if we cannot solve this problem—and below we will explain why this is so—this does not prevent us from applying (Austrian) economic analysis. In short, there is no need to solve the problem that Caplan alleges is so important.

Caplan has another argument against the Austrians. Quoting Weatherford out of context, he asks: "could anyone convince a working astronomer that . . . there might be no probability that a star is a red giant . . . when we know that many are red giants?" (1999, p. 832). Caplan insinuates that this is not meaningful and that, therefore, the Austrian denial that probabilities in human action are quantifiable is unjustified. However, this conclusion is unwarranted. Mises admits that events in the sphere of human action have probabilities. He even uses the expression "probability" to describe this fact. Only this probability is case probability that cannot be quantified.

The crucial theoretical question is, of course, why there is such a thing as case probability or uncertainty in the Knightian sense. Caplan asks "why should economists believe that any more radical (that is, non-quantifiable) type of ignorance

exists?" (1999, p. 831). One simple answer is: because as a matter of fact there exists something like genuine novelty and discovery. Israel Kirzner is entirely justified in insisting on this fact, even though he does not explain it in more fundamental terms. But Caplan could have found such an explanation in the writings of Mises and Rothbard, and also in the writings of contemporary economists. Mises (1985, pp. 74ff., 186ff.) argued that the invention of new ideas again and again changes the way human beings act under otherwise equal circumstances. As a consequence, there are no constants but only variables in human action. The very existence of the innovator prevents any attempt to establish regularities of what human beings choose. Rothbard (1997a, chaps. 1–6) argued that man is free to change his mind and act in a different way under otherwise equal conditions.

Recently, Hans-Hermann Hoppe has rigorously demonstrated that any deterministic theory of choice (like the probabilistic approach) implies an inescapable contradiction.⁶ He argues that such a theory must presuppose some constant relation between the action under consideration (the event to be explained stochastically) and other actions or other events (the conditions under which the stochastic distribution is supposed to exist). This in turn presupposes that man cannot learn because any adoption of new ideas would change the way he acts under given circumstances and thus invalidate the regularities postulated by the previous set of probabilities. However, presupposing that man cannot learn contradicts the necessary assumption of any research activity, namely, that research will make a difference. Whoever sets out to develop a model of human behavior necessarily assumes that his findings will have some impact on either his own action or the actions of other persons (otherwise this research would be senseless). If models of past behavior change the behavior of only one person, this will change the conditions of action of all other persons as well. Everybody will sooner or later change his behavior to adapt to the new circumstances, which are brought about by the model of past behavior.

From this it follows that there are no constant relationships between human action and the conditions of action that could be described by stochastic laws. In short, there are no stochastic laws governing human behavior. No human being can therefore base all of his decisionmaking on probabilistic insights. Ex post he can classify past events in stochastic models, but these models cannot solve the main problem of his decisionmaking, which is to anticipate a unique constellation of the future. Hence, such modeling is also irrelevant for the scientific explanation of human action.

Common sense and theoretical rigor are again on the side of the Austrians.

⁶See Hoppe (1982; 1989, pp. 112f.; 1993, chap. 7; 1995, pp. 36ff.). For less elaborate statements of the same insight, see also Jewkes (1955, p. 83); Haberler (1963, pp. xiii–xiv); Morgenstern (1976, p. 467); Rothbard (1997a, p. 6); and Popper (1964, p. vi–vii).

It should be noted that Hoppe's critique of the assumption of constant relationships in human action any refers to relationships between realized elements of human action. As we have seen, this is not the same thing as to assert that there are no constant relationships in human action at all.

DEMONSTRATED PREFERENCE, SOCIAL UTILITY, AND WELFARE ECONOMICS

Rothbard bases utility and welfare theory on the principle of demonstrated preference. This principle stresses that one cannot tell what the preferences of an acting person are other than by looking at what he actually does. Caplan sees a problem already on this elementary level. He objects:

When two people sign a contract, do they actually demonstrate their preference for the terms of the contract? Perhaps they merely demonstrate their preference for signing their names on the piece of paper in front of them. There is no ironclad proof that the signing of one's name on a piece of paper is not a joke, or an effort to improve one's penmanship. (1999, p. 833)

It is true that occasionally it might be difficult to identify a person's purposes by merely looking at what he does. However, Rothbard's point is much more fundamental. Irrespective of all problems linked to the interpretation of people's preferences, these preferences can only be gauged from what people actually do. In short, real human action is a necessary condition for analyzing preferences.

On a more substantial level, Caplan argues that the overall effect of violations of property cannot be estimated in terms of utility without interpersonal comparison of utility. He states: "Since the victim loses and the intervener gains from the application of coercion, it would be impossible to [identify the overall effect on social utility] without a verboten interpersonal welfare comparison (1999, pp. 833f.). This is a good point. However, Caplan should have noticed that Austrian economists have recognized this problem before him, and at least one of them has developed a creative solution.

The solution we have in mind is Hoppe's "argumentation ethics," the central claim of which is that only private property can be justified, whereas all arguments in favor of violations of property are necessarily self-refuting.⁷ Clearly, any form of social cooperation presupposes some kind of agreement, and Hoppe shows that in all cooperations, people agree on the existence and respect of individual self-ownership. Even a slave owner uttering a command, by this very command, recognizes that the slave alone actually controls (that is, owns) himself. This is not to say that argumentation ethics postulates that there are no violations of self-ownership. The point is that slavery, murder, theft, robbery, etc. cannot be justified without contradiction because any such justification would presuppose that even those who seek to justify murder would have to endorse the principle of self-ownership, lest they would be unable to take part in the debate.

Very similar considerations apply to other pieces of property (apples, chairs, land, music lessons, etc.) that human beings acquire with the help of their bodies. Only those forms of appropriation that respect self-ownership can be justified, whereas all other forms of appropriation contradict self-ownership and, therefore, the necessary basis of social cooperation. For example, homesteading can be

justified because the homesteader transforms an unowned piece of land with his body (which he owns) and thereby makes it an extension of his self. By contrast, using land without the consent of its homesteader—owner cannot be justified any more than violations of self-ownership can be justified, for the very reason that the homesteaded land is an extension of the homesteader himself.

And so no violation of property can be justified because in every single case it does not respect self-ownership, which is the necessary ingredient of any cooperation. Violations of property might occur in pure forms such as murder. Or they might exist side by side with social cooperation, partially obstructing it, as in the case of a slave economy. Yet in all cases, by their very nature, they contradict life in society.

Let us briefly indicate how these insights can be applied to create the foundations of an Austrian welfare theory that does not rely on interpersonal utility comparisons. In order to apply argumentation ethics to welfare economics, we merely have to realize that all welfare theories deal with action within the framework of society. No welfare theorist has ever tried to take account of the welfare effect of human action on monkeys, or of the welfare effect of the behavior of ants on human beings. Now, as Hoppe has shown, invasions of private property have to be rejected as incompatible with the factual prerequisites of social interaction. In short, private-property rights serve as a filter to distinguish actions that are part of life in society from those which are incompatible with civilized intercourse. A violation of property is no social behavior, but a partial obstruction of society, comparable to the onslaught by a wild animal. From this it follows that only those actions that are compatible with life in society can possibly be the subject of welfare—theoretical considerations. And violations of property must diminish social welfare below the level it would otherwise have reached, since there is now less civilized intercourse taking place.

Such are the outlines of a consistent welfare theory that is based on demonstrated preference and a theory of justice. However, Caplan contends that another route is more fruitful. He thinks that welfare economics can build on the criterion of Pareto-superiority; that is, from the idea that reallocations are efficient as long as they are potentially Pareto superior. Says Caplan:

While justice and efficiency are not the same, this criterion . . . has many advantages over Rothbard's approach. In particular, it allows one to make efficiency judgments about the real world—to judge, for example, that Communism was inefficient, or rent control is inefficient, or piracy was inefficient. (Caplan 1999, pp. 834f.)

However, Caplan does not explain how and why efficiency judgments are possible. In particular, Caplan fails to address Rothbard's (1979) argument that the crucial question is for whom Communism, rent control, or piracy are efficient and inefficient. A communist leadership might consider Communism a very efficient

⁷See, in particular, Hoppe (1989, chap. 7; 1993, pt. 2 and appendix).

way to legitimize all-around government planning. Certain politicians might see rent-control laws as an efficient way to promote their careers, and rent control might also be efficient from the point of view of current tenants.

The term "efficiency" refers to the relationship between means and ends. One cannot tell whether a means is efficient without considering the end to be reached. But ends are always the ends of individuals, and in political questions (Communism, rent controls, etc.) these individual ends are always conflicting. Therefore, one cannot say whether a disputed policy is efficient. All one can state is that it is efficient for some persons and inefficient for others.

There are but two possibilities to overcome this problem. The first one is to make inter-individual comparisons of value. If the efficiency of a policy for one person is greater than the inefficiency of the same policy for another person, one could argue that the policy increases overall efficiency in the economy. However, neither Caplan nor any other author has demonstrated how such comparisons can be performed. In particular, nobody has solved the problem of comparing non-extended entities like value, utility, preference ranks, etc.

Thus one is led to the second type of solution, which consists in abandoning all attempts at building welfare economics on the theory of value and to look for other foundations. This is where Hoppe's theory of justice comes into play. Presently, that is, as long as nobody solves the problems of the value-theoretic approach, this seems to be the most promising route for welfare economics.

PUBLIC GOODS

The Austrian view of the public-goods problem is based on three arguments. First, there is no way to judge whether people really want a good, and how much they want of it, other than by looking at their actions. It is therefore unwarranted to call for government action to provide a good that otherwise would not be produced in sufficient quantities. If people are willing to sacrifice enough of their resources, any good can be produced without government intervention.

Second, there is no criterion by which public goods can be distinguished from private goods. This difficulty arises on a level that is even more basic than the common definition of public goods, which stresses non-rivalry of consumption and the impossibility to exclude other users. Fundamentally, a good can possibly be a public good if it brings about desired or undesired effects on people different from its owner (externalities). Yet, these externalities are clearly not a feature of a good as such, but depend exclusively on the subjective feelings of those other people. Whenever any person other than the owner takes an interest in a good, it becomes ipso facto a public good. As a consequence, there is no means to clearly distinguish between public and private goods. All goods can be public goods. And even more awkward is the implication that the status of a good can change from one second to the next by mere subjective whim (see Hoppe 1993, pp. 7f). This makes the criterion of "being public" unsuited as a basis for policymaking on behalf of the good.

Third, even if a good could properly be identified as a public good, it would not follow therefrom that government should provide it. In other words, it would still be necessary to justify state activity by a separate normative argument.

Caplan criticizes this theory on two accounts. He observes that “the argument follows from Rothbard’s utility theory [which] as previous sections argued, is mistaken” (1999, p. 835). However, for reasons outlined above, Caplan’s objections against Rothbard’s utility theory miss the point.⁸ We can therefore proceed to Caplan’s second admonition. He claims that

Rothbard’s a priori rejection of the concept of public goods was simply the wrong route to take; it would have been more productive to point out the public goods problem of government along with the surprising ability of free markets to supply voluntary solutions to genuine public goods problems. (1999, p. 836)

Now, it is necessary to remind oneself that the original purpose of public-goods theory was to establish a rational criterion for government intervention. The whole point of the public–private distinction was to delimit the conditions under which it is useful or necessary that government takes action. Clearly, against this background Rothbard’s a priori rejection of the public-goods concept makes perfect sense, for the concept does not fulfill the role it was promised to play in the first place.

Seen from the present state of public-goods theory, which admits the possibility of government failure to produce public goods, the whole debate has become pointless. If government and market can fail to produce public goods, then public goods are no relevant subject for policy-oriented research at all. Rather one has to come up with other criteria that could fulfill the role of delimiting a field for government activities. The analysis of these criteria would then be a truly relevant occupation for economists. Caplan is apparently unwilling to draw this conclusion. His suggestion “to point out the public goods problem of government along with the surprising ability of free markets” is symptomatic of the present lamentable situation in which economists consume their energies in self-serving “analyses” without practical import.

CONCLUSION

A sober look at the assumptions underlying neoclassical analysis reveals that they are either not realistic (continuity, cardinality, etc.) or not applicable in economic analyses of the real world (for example, psychological indifference). And pre-Caplan neoclassicists hardly ever claimed that they were. Insofar as mainstream economists cared about realism at all, they maintained that their assumptions were a useful approximation of reality and that, in any case, there was no better alternative theory.

⁸Even if Rothbard’s utility theory were mistaken, it would not follow, as Caplan claims, that the Austrian theory of public goods would therefore be wrong. I am indebted to David Gordon for this point.

It seems clear, however, that such a better alternative exists in the Austrian approach insofar as it can rely on the work of Mises and Rothbard. This is not to say that these two authors have led our science to a state of perfection. But that they have pointed out a thoroughly realist approach toward the economic analysis of our world cannot be denied.

This approach is hardly an "uncharted alternative," as Caplan (1999, p. 837) claims. The mainstream of economists still has to absorb the lessons contained in the collected works of Mises and Rothbard, and this alone will take a while. Moreover, it is a matter of fact, even if Caplan ignores it, that many contemporary economists have made substantial contributions that rely in their best parts on the Misesian framework. For example, in monopoly and price theory: Selgin (1988a), Block (1990), Salin (1996a,b), and Armentano (1999); in comparative economic systems: Hoppe (1989), Salerno (1990a), and Huerta de Soto (1992); in welfare theory: Sennholz (1987), Thornton (1991), Cordato (1992), and Herbener (1997); in industrial organization: Klein (1996); in money and banking: Salin (1982; 1990), White (1989), Selgin (1988b), Hoppe (1994), Huerta de Soto (1998), and Nataf (1997); in public-goods theory: Hummel (1990) and Holcombe (1997), and Campan (1999); in the theory of the entrepreneur: Kirzner (1973; 1992); in public-choice theory: DiLorenzo (1988); in the theory of privatization: Salerno (1982), Hoppe (1991), Herbener (1992), Selgin (1996). These are only examples, and they refer only to the field of theory. Contemporary Austrians have made substantial contributions also in methodology, in the history of thought, and in applied work.

The very existence of these works counters Caplan's concerns that the time might not yet be ripe for a paradigm shift. The truth is that economic science, if it develops at all, will have to shift to the great tradition of realist analysis which the Austrian economists helped develop for more than hundred years and of which they are currently the only representatives. Future economists will have to become Misesians just as today's astrophysicists had to become Einsteinians.

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