

Situational Analysis beyond Neoclassical Economists

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Until quite recently some economic methodologists (particularly, those who began their careers in the late 1970s) were of the opinion that Karl Popper was misguided about economics. Some others claimed that Popper said little about economics. Yet, many economics students who began their appreciation of Popper after reading his *Open Society and its Enemies* have quickly realized how easy that book is to understand because it is a generalization of neoclassical economics in terms of both methodological individualism and situational analysis. While today it might be easy to complain that basing one's understanding of Popper on neoclassical economics leads to a narrow and useless appreciation of Popper, this too is misleading. The problem is not neoclassical economics but neoclassical economists. After all, Popper himself thought the best way to teach economists about his views concerning methodology was to emphasize that his views can easily be understood as a generalization of neoclassical economics.

Until quite recently many young economic methodologists (i.e., those who began their careers in the late 1970s) were of the opinion that Karl Popper was misguided about economics. Those less bent on criticizing Popper merely claimed that Popper never said much about economics. Of course, these young methodologists, being misled by Imre Lakatos (by way of Mark Blaug), thought the only way in which Popper could have said something would be only if it was about the falsifiability of economics. This false identification of Popper with so-called "falsificationism" (by friends and foes alike) has begun to break down. This breakdown has been fostered by both Bruce Caldwell and Wade Hands – they both seem to say that the problem was that Popper had a difficulty reconciling falsificationism with both situational analysis and critical realism. In the early 1980s I continually argued with these young methodologists that they did not understand Popper. My arguments were dismissed as being "idiosyncratic". All of this came to a head with the recent publication of Popper's 1963 lecture to Harvard's department of economics.

My appreciation of Popper began with my reading of the *Open Society*. I remember thinking about how easy it was to understand since it seemed to be just a generalization of neoclassical economics in terms of both methodological individualism and situational analysis. While today it might be easy to complain that basing one's understanding of Popper on neoclassical economics leads to a narrow and useless appreciation of Popper, this too is misleading. The problem is not neoclassical economics but neoclassical economists. After all, clearly Popper himself thought the best way to teach economists about his views concerning methodology was to emphasize that his views can easily be understood as a generalization of neoclassical economics.

In this short paper I wish to explain neoclassical economic methodology in a manner that separates the nature of neoclassical economics from the practice of some neoclassical economists.

1. THE ESSENTIALS OF NEOCLASSICAL EXPLANATION

There are only two essential principles of neoclassical explanation. One is methodological individualism and the other is that every choice can be *explained* as a rational choice.

Methodological individualism merely says that only individuals make choices, things do not choose. In effect, methodological individualism restricts the list of acceptable exogenous (viz explanatory) variables. In the extreme, some neoclassical economists choose to limit the list to only Nature-given constraints (which includes Nature-given psychological states of individuals). Note, however, such an extreme limitation is not necessary.

Rational choice is usually characterized as an instance of constrained maximization. While many critics of neoclassical economics are quick to focus on the realism of such things as utility maximization, it is easy to be misled by such criticism. That is, too much is being read into the notion of utility maximization, particularly whenever utility maximization is thought to be a psychological process. The relationship between the notion of rational choice and utility maximization is almost mundane. By "rational" choice we have always meant that one can specify a set of reasons from which one can logically deduce the choice in question (i.e., the choice being explained). Logical deduction

assures two important things: uniqueness and universality. Specifically, to be a logical deduction, the specified set of reasons will lead to a unique conclusion and, moreover, *anyone* accepting the specified set of reasons will reach the same conclusion. Neoclassical economists, as opposed to classical economists, chose to represent rational choice with the calculus notion of constrained maximization. Once the theorist has specified an objective function to be maximized and the constraints facing the decision maker, the implicit claim is that *anyone* facing those constraints and maximizing according to that objective function will make the same (unique) choice. It is important to keep in mind that it is the theorist who specifies both the objective function and the constraints and hence the veracity of an explanation is exclusively determined by this specification and not by the assumption of maximization. If an explanation turns out to be false, the neoclassical economist will always question the specification of either the constraints or the objective function.

2. THE POSSIBLE PROBLEMS OF NEOCLASSICAL EXPLANATION

There are two possible opposing problems with the practice of neoclassical economists. One concerns the success orientation of most neoclassical economists and the other concerns the posited determinants of the constraints.

2.1. Neoclassical Explanation as Whig History

A few years ago Paul Samuelson gave a talk to a luncheon meeting of historians of economics and argued in favor of what he called "Whig history".¹ Specifically, he was advocating that we see the history of economics as successfully culminating in the present state of economic theory. Interestingly, later in the same day, Axel Leijonhufvud argued the opposite, that the history of economics should be seen as an expanding tree with many decision forks where the history follows a path involving backtracking after failed decisions. In Whig history, there are no unintended consequences. In Axel's backtracking through a decision tree, there is constant evaluation of unintended consequences.

Modern neoclassical economists take Samuelson's perspective to an extreme. Since explanation takes place after the event, that is, after the choice they wish to explain has been made, neoclassical explanations are thus merely instances of Whig history. As such, the neoclassical theorist sees every choice made as a successful choice given the posited objective function and posited constraints. Specifically, the objective function and constraints are identified simply because the choice being explained would be successful. Thus, while superficially a Whig history-type of explanation does resemble a straightforward application of Popper's situational analysis, there is no room for unintended consequences. Moreover, since there is no role for learning in a Whig history-type of explanation, too many questions are begged about the realism of the explanation. How did the successful decision maker know all of the relevant constraints? How did the successful consumer know his or her entire utility function without prior testing of all points in the range of the objective function?

2.2. Neoclassical Explanation as Mechanics

Fifty years ago there was an ongoing debate in neoclassical literature about the realism of assuming that a firm could or would ever try to make the fine measurements necessary to determine if profit maximization is being achieved – even if we could ignore the questions concerning how the firm has acquired the necessary knowledge. In 1950, Armen Alchien argued, in effect, that this debate missed the point. It does not matter whether or not the firm is a deliberate, conscious maximizer – the realism of the maximization assumption is irrelevant. His reason was that in a long-run equilibrium, only profit maximizers can survive and this is regardless of whether they are deliberately maximizing or just maximizing by accident. This, he claims, is just a straightforward application of Darwinian evolution. In a long-run equilibrium, no firm will be making positive profits since otherwise this would induce new entries and thereby upset the equilibrium. That is, any firm not maximizing (even unintentionally) must be making less than zero profit and will eventually go bankrupt. Once a long-run (general) equilibrium is reached, all firms must be making zero excess profits and this will be the best they can do.

Alchien's clever ploy is merely an instance of the more general character of neoclassical long-run equilibrium-based explanations

that presume that the only constraints are those exogenous variables given by Nature. If all exogenous variables are Nature given, then the nature of the ultimate long-run equilibrium (i.e., the long-run prices, outputs and the income distribution) is a matter of mere mechanics – much in the spirit of the eighteenth century. This means that a neoclassical theorist can build a model of the logic of the situation facing all decision makers and then, by means of simple calculus, calculate the ultimate equilibrium.

If the equilibrium is to be an explanation of long-run prices, etc., then the equilibrium must be unique. But, this then begs a question concerning the autonomy of the individual that is the essential characteristic of methodological individualism. If the ultimate equilibrium is predetermined by the mechanics of all the Nature given exogenous variables, what is the role of the individual? What if individuals make mistakes?

Compounding this problem of mechanics is the tendency to address the issue of how decision makers acquire the knowledge needed to assure the successful achievement of maximization by making learning a mechanical affair. Specifically, it is presumed that there is a logic of induction which allows one to reach true knowledge after obtaining a finite set of observations of Nature. In this sense, learning is also assumed to be a mechanical exercise such that all people making the same observations will (within acceptable mechanical tolerances) reach the same conclusions. This is the basis for the modern neoclassical school of rational expectations. Of course, as students of Popper are all aware, there is no logic of induction that could ever provide the needed mechanical means of learning.

3. OVERCOMING THE PROBLEM OF NEOCLASSICAL EXPLANATION

There are thus two crucial decisions made by neoclassical economists that turn economics away from the notion of situational analysis that Popper wished to teach them. Both concern the question raised by Hayek sixty years ago: How does every decision maker know what they need to know in order for there to be a stable equilibrium that would coordinate the actions of autonomous individuals?

3.1. Post Hoc Success versus the Learning Process (Each Decision is a Test of One's Knowledge)

The answer to this question is that they cannot know a priori. Instead, they must test their knowledge with every decision they make. That is, the theorist must abandon the success orientation discussed above and see that decision making is thereby a process not an event. Note well, though, abandoning success orientation does not preclude so-called rational decision making. Moreover, the process of testing one's knowledge is also a matter of situational logic, one with many opportunities for unintended consequences that will have to be dealt with when making the next decision.

3.2. Methodological Individualism with Macrofoundations (Avoid Presuming Psychologicistic Individualism is the Only Individualism)

Avoiding success orientation is somewhat less important than avoiding the extreme form of methodological individualism that turns neoclassical explanations into mechanical exercises. The extreme form I have in mind is what we call psychologicistic individualism. This form both identifies the individual with his or her Nature-given psychological state and thereby allows only Nature-given exogenous variables. This means that any non-individualist, non-natural variables must be explained. While an individual decision maker may face given prices, the individual's decisions are not explained until those given prices are also explained. Obviously, such a requirement means that the complete explanation of any one individual's decisions is not obtained until one explains the general equilibrium of all individuals who have influence on the prices. Only in a state of long-run, general equilibrium is it possible to satisfy the requirements of psychologicistic individualism where all constraints facing individuals are explained as epiphenomena, that is, explained as consequences of successful decisions made by all other individuals in the economy.

A less ambitious form of neoclassical explanation would recognize that, in the mind of the decision maker, there are non-individualist, non-natural variables and constraints. Thus, any explanation of the logic of the situation must also specify how the individual views the logic of the situation that he or she faces. It is virtually impossible to conceive of a decision maker who is not

facing or including macroeconomic variables in the logic of their situation. For example, to what extent does the current (or expected!) inflation rate influence one's decision to rent or buy a house? Or the current rate of unemployment affect one's employment or wage decisions? Again, including macrofoundations in one's microeconomics does not violate Popper's situational analysis.

The major problem with neoclassical economics today is not something inherent in neoclassical economics but instead a limitation caused by methodological decisions made by neoclassical economists who want to think of a world where governments cannot change the course of an economy except in a detrimental way. In other words, if there is a problem with neoclassical economics today, it is due to the ideology of some neoclassical economists and not due to the essential nature of neoclassical economics itself.

NOTE

¹ Samuelson's reasons for advocating Whig history was that this is what customers want and so, if historians of thought want their sub-discipline to thrive, they should recognize that there is no market for discussions of the trials and tribulations of famous economists. Moreover, every effort should be made to write histories of the thoughts of famous economists in the most up-to-date terms – i.e., from a modern perspective, looking backward.

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