On the Methodology of Economics

Richard DiSalvo
Dr. Schmitt
September, 2010
Introduction

The economist seeks knowledge of human behavior.

"Knowledge" can be interpreted as explanation or prediction. In the former, the economist is presented with a certain real event, and his goal is to answer the question "why is this?" In the latter, the economist is presented with a certain state of reality, and asks "to what shall this lead?".\(^1\)

There are in all such cases two ways to approach the study of human behavior.\(^2\)

The economist may break apart the "given" into its constituent parts, determine the general types of these parts as closely as possible, and from this conclude with the interaction these parts must hence produce, hence a prediction. If working backwards for explanation, the economist takes the given, breaks it into its constituent parts, and shows how the past particles interacted in order to form the present event. And so this method is applicable to both prediction and explanation, although in the latter case the complexity of phenomena may make its employment difficult. This method is oftentimes called analytic (or exact).\(^3\)

Alternatively the economist may instead synthesize the given information into a united whole, and determine the most likely events that may follow from this whole account. Thence a prediction; this is accomplished typically via a narrative that includes the context of past events that had conditions similar to the current event. If attempting an explanation, the economist takes the given and shows how this particular event followed in this case from a very wide account of the conditions in which it occurred. Clearly, this method seems more easily applied in explanation, rather than prediction. This method is often called synthetic (or historical).\(^4\)

For example, the trade cycle can be explained by abstracting from particular humans and formulating general laws regarding their behavior, adding the "types" that correspond to what we consider of primary importance in, say, monetary policy, and then concluding that such a combination leads to, first, a systematic increase in output, but a simultaneous systematic misallocation; hence first a boom, and then a bust. Provided that our abstractions match reality our theory will both explain and predict. This gets the heart of the analytic

---

\(^1\)There is a correspondence between these two possibilities and the two "Trains of regulated Thoughts" of Thomas Hobbes. See Hobbes, Leviathan, page 96.

\(^2\)I say two since the two method "types" clearly partition the set of all possibilities, although of course they can be "mixed" to understand a given part of human behavior. This dichotomy is in a correspondence with the processes of "dividing into many" or "uniting into one," which form a closed set of possible actions regarding how to organize the "given."

It is my understanding that although all economists use both methods in various proportions depending on the task at hand, economists who (whether by ideology or by stubbornness) claim indisputable superiority of one method over the other are ultimately bound also to defend doctrines that they are likely to consider quite bitter.

\(^3\)There is a close relationship between this method and the more general scientific method of abstraction discussed in my previous work.

\(^4\)The connection can be seen here as well: the economist transforms the scientific claim into a historical claim that can be shown for many cases.
method.

On the other hand, the trade cycle can be explained instead by considering the particular booms and busts, and showing that in each case a combination of various factors and their complex contextual relationships caused a boom and subsequently a recession. For example, certain overoptimism in the housing market was caused by cultural and psychological factors present in the American public, along with various complex relationships between government policies and financial firms, and so on, and together these factors form a story that effectively explains the boom and bust. If it can be shown that the "present" (more accurately: recent past) story can be constructed that corresponds in a rough way to the past stories regarding booms and busts, then we would then predict the next bust, for example. This is in its essential flavor the synthetic method.\(^5\)

Once these two methods are accepted as distinct in nature, although often times mixed in practice, a number of other methodological controversies begin to fall into place. Those I have considered in the paper that follows are controversies between:

- cause-and-effect or event-interdependency;
- instrumentalism or scientific realism; and
- human action or human reaction.

I will consider each of these in turn, taking into account the framework just constructed.

**Cause-and-Effect or Event-Interdependency?**

If all human behavior is determined by the laws of cause-and-effect, then economics is a human mechanics.

But if all human behavior is determined by an interdependent context and is irreducible to causal laws, then economics must be a subset of history.

---

\(^5\)As an aside, it seems that, generally, works developed using the analytic method are not easy to read since their conclusions are formulated with a mathematical precision and rigor; whereas those developed following the synthetic method are easy to read, since they are formulated in but so many narratives. But the ideas of the analytic method, if studied carefully, can be held in the mind much more easily, since they are typically short and general; whereas the ideas of the synthetic method are long stories that cannot be easily be recalled in their full. The economist as a professional then has two ways to impress those who are ignorant of the study: first, the economist may present analytic arguments formulated so cleanly that the deduction is practically impossible to follow; second, the economist may present synthetic arguments which are such deep and particular explanations that it is nigh impractical for the other person to have equivalent knowledge of those particulars. The economist's behavior is to cover up ignorance about the future: in the former case, the economist baffles the opposition with models; in the latter case, the economist baffles the opposition with statistical figures and historical facts; in both cases, the economist does not really know the future with much more clarity than the opposition, though he pretends he does. Of course, the economist may legitimately desire to explain his position in full; but this requires either getting on the same analytic level as the opposition and demonstrating the full deduction, or alternatively telling the whole synthetic story, and not just unconnected particulars.
Opinions on this matter have never reached consensus among economists. Perhaps the conflict between the two was strongest in the late nineteenth century. Indeed, the doctrines of Marxist economics hold that human action is social action, and must be understood in social context and cannot be understood otherwise. The doctrines of Austrian economics hold that human action is individual action, and must be understood as an attempt by the individual to pursue his own welfare. Institutional economics is largely a successor to the Marxist view; and Neoclassical economics is largely a successor to this Austrian view.\(^6\)

From the Austrian school, we have this quote of Carl Menger:

All things are subject to the law of cause and effect. This great principle knows no exception, and we would search in vain in the realm of experience for an example to the contrary. Human progress has no tendency to cast it in doubt, but rather the effect of confirming it and of always further widening knowledge of the scope of its validity. Its continued and growing recognition is therefore closely linked to human progress.\(^a\)

\(^a\)Carl Menger. Principles of Economics. Available at the Mises Institute, http://mises.org/texts/menger/one.asp

A pretty powerful claim. Menger's work deals with purely theoretical constructions of categories such as good, scale of values, money, and wealth. He argues that his method (the "exact" method) of abstracting from reality, choosing the important characteristics of the things he abstracts from, and deducing conclusions from these characteristics, is the major method by which human knowledge progresses.

On the other hand, we have this argument of Fredreich Engels:

\(\text{[C]ause and effect are conceptions which only hold good in their application to individual cases;... as soon as we consider the individual cases in their general connection with the universe as a whole, they run into each other, and they become confounded when we contemplate that universal action and reaction in which causes and effects are eternally changing places, so that what is effect here and now will be cause there and then, and vice versa.}\)

\(^a\)Fredreich Engels, Socialism: Utopian and Scientific. Available at the Marxists.org website: http://www.marxists.org/archive/marx/works/1880/soc-utop/ch02.htm

And this one from Karl Marx:

"[E]very form of production creates its own legal relations, form of government, etc. In bringing things which are organically related into an accidental relation, into a merely reflexive connection, [bourgeois economists] display their crudity and lack of conceptual understanding." \(^a\)

\(^a\)Karl Marx, in Hausman's anthology, The Philosophy of Economics, page 123.

\(^6\)Of course, both of those examples overrode their respective parents to a large extent. Modern statistical Keynesian and Monetarist schools, which together compose modern macroeconomics, are of a questionable nature: they tend to think that human behavior is determined by some contextual "rules of thumb," but that there is nevertheless some causal mechanic behind the interaction of these socially-determined aggregates.
We can justify Engels' argument. Suppose the economist applies the analytic method in order to understand a certain human behavior. This economist argues that this individual behaved in this way because the effect of his action was what he desired. That is, the individual equated the effect of the action with the end he was seeking. But the end of an activity is clearly the cause of the activity. So the effect of the activity is a cause of the activity. Of course, the application of the means also causes the effect. (See the figure below.)

Max Weber put this as follows:

From our viewpoint, 'purpose' is the conception of an effect which becomes the cause of an action. Since we take into account every cause which produces or can produce a significant effect, we also consider this one. Its specific significance consists only in the fact that we not only observe human conduct but can and desire to understand it. 


Because the effects are in this fashion the causes of human action, then the economist following the causal mechanic will tend to face difficulty in explaining complex phenomena where this causal circle is prevelent. Indeed, it is quite the paradox for the principle of causality to explain effects that are causes of themselves. Causal arguments require that we divide cause from effect, or at least determine that "expectations" of the result of certain action influence the action only in a definitely determinable way, such as geometrically. This explains why macroeconomic theories have been so awkward; they have attempted to deduce the future from causal forces, but future output is determined by the expected future output, investment quantity is determined by the expected investment quantity, and so forth.

However, those who defend the principles of causality still have an ace up their sleeve: such statements regarding the dependency of the present on expectations of the future are in fact causal laws. But by showing that in human action effects are causes, they have shown that a clear mechanic of this happened, and so then that happens is hardly obtainable in human behavior. Instead, we have a system "where all the variables are determined at once," as Samuelson writes:

The paradox of causality in human action.
Within the framework of any system the relationships between our variables are strictly those of mutual interdependence. It is sterile and misleading to speak of one variable as causing or determining another. Once the conditions of equilibrium are imposed, all variables are simultaneously determined. ... [t]he only sense in which the use of the term causation is admissible is in respect to changes in external data or parameters. 


This "interdependency of events" framework has also been closely associated with the basic premises of the institutionalists, as expressed by Dugger:

"Individuals, pursuing their own interests as individuals, count for very little in the modern scheme of life. This is not to say the individual is no causal significance. But it is to say that individuals realize their potential (or fail to do so) in going concerns, because it is through collective action that an environment is provided for effective individual action." 


He also writes that institutionalists follow the psychology of behaviorism, which proposes that:

"[T]he roots of human action [are] in institutional structure (norms, working rules, use and wont) rather than in individual preferences, which are considered to be either largely derivative or unreliable due to their introspective or subjective nature. ... [I]ndividual preferences [are] largely derived from the cultural-institutional milieu into which the individual is born. Hence, an explanation of human behavior should start there." 

"Ibid.

By studying the relationship between institutions, these economists are studying the particular in an interdependent framework without abstraction. Thence, one can easily see how the institutionalists differ methodologically from the neoclassicals—the former follow a synthetic methodological structure, whereas the latter follow an analytic.

The relationship between these two methodologies has not been answered here in full. Still, we can conclude with some general insights regarding the two methods. First, cause-and-effect is more efficient than event-interdependency explanations, because cause-and-effect isolates certain relationships from the rest of complex social reality. Then cause-and-effect explanations can be reused since they deal with abstract, isolated notions, rather than particular cases. On the other hand, event-interdependency explanations, such as the Marxist arguments, must deal with particular cases and hence do not easily form adequate generalizations; they must instead appeal constantly to history. But second, when dealing with human behavior, cause-and-effect arguments contain an inherent contradiction, as aforementioned.

There is a correspondence between our discussion so far: cause-and-effect is an instance of the analytic method, and event-interdependency is an instance of the synthetic method.

General relationships between cause-and-effect and event-interdependency.
Instrumentalism or Scientific Realism?

Determining the goal of the science in large part determines the method to be applied.

The instrumentalist economist claims that the goal of science ought to be to construct theories that are empirically verifiable and can be used for valid predictions. Friedman’s essay in Hausman’s anthology is a classic example of a defense of this instrumentalist position. In that essay, Friedman claims that:

[T]heory is to be judged by its predictive power for the class of phenomena which it is intended to “explain.” Only factual evidence can show whether it is “right” or “wrong” or, better, tentatively “accepted” as valid or “rejected.” ... [T]he only relevant test of the validity of a hypothesis is comparison of its predictions with experience. (Friedman 184)

On the other hand, the scientific realist claims that the goal of science is to find and declare theories that are as close to the truth as possible. This is clearly not the same philosophy as instrumentalism. For the instrumentalist is satisfied even if the premises of his theoretical constructions are contradictory or unrealistic, as long as the deduced conclusions match reality as experienced.

It is important to note that, although the scientific realist sees as the ultimate goal of science the attainment of theories closer to the truth, one with such a value system does not ignore the value of ugly or contradictory theories for their simple utility. Scientific realists are just not satisfied with such theories. Scientific realism is therefore a more stringent condition on a scientist’s value-system than instrumentalism.

It seems with only a cursory glance that the analytic methodology is primarily applicable to the construction of useful instruments. This claim is expressed by Friedman’s essay, which I quote at length:

---

7Here we assume that the “truth” is a natural given that we have not yet obtained fully.
8See Hausman, The Philosophy of Economics, pages 4 and 5.
The difficulty in the social sciences of getting new evidence for this class of phenomena and of judging its conformity with the implications of the hypothesis makes it tempting to suppose that other, more readily available, evidence is equally relevant to the validity of the hypothesis - to suppose that hypotheses have not only “implications” but also “assumptions” and that the conformity of these “assumptions” to “reality” is a test of the validity of the hypothesis different from or additional to the test by implications. ...

In so far as a theory can be said to have “assumptions” at all, and in so far as their “realism” can be judged independently of the validity of predictions, the relation between the significance of a theory and the “realism” of its “assumptions” is almost the opposite of that suggested by the view under criticism. Truly important and significant hypotheses will be found to have “assumptions” that are wildly inaccurate descriptive representations of reality, and, in general, the more significant the theory, the more unrealistic the assumptions (in this sense). The reason is simple. A hypothesis is important if it “explains” much by little, that is, if it abstracts the common and crucial elements from the mass of complex and detailed circumstances surrounding the phenomena to be explained, and permits valid predictions on the basis of them alone. To be important, therefore, a hypothesis must be descriptively false in its assumptions; it takes account of, and accounts for, none of the many other attendant circumstances, since its very success shows them to be irrelevant for the phenomena to be explained.”

---

Milton Friedman in Hausman’s anthology, Philosophy of Economics, page 188.

So economic theories ought to predict certain outcomes with certain specific premises regardless of the realism of the assumptions; they ought to accept valid implications even if the assumptions used are extremely unrealistic abstractions. Hence, economic theories are instruments to be used for prediction, and regardless of how well they explain the “underlying reality” we should be happy with them as long as they work. If sunspot theory predicts business cycles, we should leave it at that.

However, if a theory is to be correct at all, the abstractions on which it is based must somehow correspond to reality. There are two possibilities. The connection may be accidental, which means it could dissolve at any point in the future; or the connection may be universal, which means it follows because of certain factors “really” existing in the things discussed. So, for example, the sunspot theory may predict some sort of business cycle in an agrarian economy that worships a god which requires sacrifice during the sunspot period, but then such a theory in its bare form would be inapplicable to the modern economy. I claim, then, that this “instrumentalist” stance leads to very weak theories.

A scientific realist, on the other hand, attempts to form robust theories that have assumptions which, although possibly heavily abstracted from, do to a sufficient extent correspond to reality. And here is why I claim that

---

9By “robust,” I mean that the theory fits with a paradigm that the realist presently accepts; if the realist accepts a paradigm that fits not with this theory, then the realist must choose between accepting the theory and rejecting the paradigm, or rejecting the theory as a true depiction of reality.
the analytic method is not incompatible with scientific realism. Although the premises postulated in a deductive analysis of economic reality may not depict reality in full, they can nevertheless depict reality in part and therefore explain reality in a logically consistent, and hence more likely "true," fashion.

The synthetic method, of course, does not confront this problem, since it is impossible to unite the particulars into a synthetic whole and simultaneously not seek a realistic understanding of human behavior. Dugger, for example, is very proud of this fact.¹⁰

My claim that an analytic economist can indeed seek scientific realism is bolstered by Hausman's counter to Friedman's view; Hausman writes:

I suggest that Friedman uses [the] view that science aims at narrow predictive success as a premise in the following implicit argument:

(1) A good hypothesis provides valid and meaningful predictions concerning the class of phenomena it is intended to explain (premise)

(2) The only test of whether an hypothesis is a good hypothesis is whether it provides valid and meaningful predictions concerning the class of phenomena it is intended to explain (invalidly from 1)

(3) Any other facts about an hypothesis, including whether its assumptions are realistic, are irrelevant to its scientific assessment (trivially from 2)

... This is a tempting and persuasive argument. But it is fallacious. (2) is not true and does not follow from (1). To see why, considering the following analogous argument:

(1') A good used car drives safely, economically, and comfortably. (oversimplified premise)

(2') The only test of whether a used car is a good used car is whether it drives safely, economically, and comfortably. (invalidly from 1')

(3') Anything one discovers by opening the hood and checking the separate components of a used car is irrelevant to its assessment (trivially from 2')


The fallacy that Hausman exposes in Friedman's logic is sufficient to conclude as follows: the analytic economist may value good predictions as well as realistic assumptions, i.e., the analytic economist may also be a scientific realist.

Human Action or Reaction?

Do humans act? Or do humans merely react? The answer to this question has important implications for probably the most vital part of the economic science-welfare economics.

¹⁰See Dugger's statements in The Philosophy of Economics, page 319.
It has been remarked in passing that the assumption that humans actually choose their actions is equivalent for all positive purposes to the claim that their actions are merely predetermined by conditions in reality. The logic behind this argument is straightforward: economists desire to predict future events, and the material they have to use for the construction of such predictions is present data. Hence, all economists can say regarding the future is this: the future is some function of the present, that is, the "change" mapping that "transforms" the current reality to the next reality maps realities to realities, that is, the mapping does not change with some other nonconstant supernatural variable. Hence, if humans do choose, their present choice is determined by present reality, and the economist can choose out of the infinite multitude of choices a specific choice that the individual will follow if every other variable is already known. In other words, if humans choose, then their choice is predetermined. But then it follows by the definition of human choice that humans don't choose. That is, humans merely react, they do not "act" in the strict sense of the term. Which is to say that these two assumptions are equivalent because the logically positive economist chooses the latter assumption.

But I claim that the former assumption, that humans do act, does indeed change the positive and normative consequences of economic thought, and shapes what constitutes proper policy, and so on.

First, we need to have some basic conceptualization of the problem at hand. To say that humans act is to say that there exists a period of liberty during which an individual, weighing various forces pushing him this way or that, still has not set his will. This period is sometimes called the period of free will. What we then claim by this is that the scientist, no matter how much he knows about past human action, the present state of reality, and the causal ("natural") laws that are presumed constant everywhere, can never predict with certainty the result of any particular human choice. The premise of human action says that such a prediction is impossible. Since we cannot predict any particular human choice, then we cannot predict general human choice with certainty either. We might rephrase this by saying that there is always a large "error term" that we can never eliminate in our predictions and explanations, since these events are largely determined by particular human choices that would be unpredictable even if we had knowledge of all other circumstances. (If we consider recent economic history, this error term is indeed quite large.)

To elucidate this even further, I follow Hobbes' structure. In this framework, humans act through their determination of what is good and what is evil. They do what they think is good, and they avoid doing what they think...

---

11 Dr. John Kane, personal conversation, 2009.
12 Hobbes is generally remembered for his "pessimistic view" of human nature. But that was merely one of his various conclusions. The most valuable part of Hobbes, I claim, is in his definitions for various social and philosophical concepts.
13 But whatsoever is the object of any mans Appetite or Desire; that is it, which he for his part calleth Good: and the object of his Hate, and Aversion, Evil... For these words of Good, Evill,... are ever used with relation to the person that use them: There being nothing simply and absolutely so; nor any common Rule of Good and Evill, to be taken from the nature of the objects themselves; but from the Person of the man (where there is no Common-wealth)
There is a precise relationship between his framework and some of our modern terminology, as depicted in the table below:

<table>
<thead>
<tr>
<th>categories of liberty</th>
<th>Good</th>
<th>Evil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ends</td>
<td>Utile (Appetite)</td>
<td>Inutile (Aversion)</td>
</tr>
<tr>
<td>Means</td>
<td>Profitable (Hope)</td>
<td>Unprofitable (Despair)</td>
</tr>
</tbody>
</table>

Then by human action we mean that there exists a period of liberty, which means that the individual must choose what is good or evil for his own person, and shall act accordingly.\(^1\) In this period of liberty, the individual concerns himself with all the effects of his possible action, and whether these effects are preferable in sum to the alternative action (i.e., he weighs the benefits against the opportunity costs). The individual also concerns himself with the chance his action has at obtaining the end he desires (i.e., he concerns himself with the uncertainty of the efficacy of the means for the attainment of the end in his analysis). There is no way of us knowing a priori what precise choice the individual will make, because we cannot know before the fact what the individual will consider, at that moment, good and evil; we cannot know if his appetite for the end will outweigh his aversion, nor can we know if his hope will outweigh his despair. And, the human action assumption adds as well that we would be foolish to think that we could have exact knowledge of this unless we were actually that person at that particular moment.

Indeed, the argument of human action claims that there is some supernatural and purely subjective factor that determines appetite, aversion, hope, and despair and each particular instant of human activity. And although we may in fact claim the categories of good and evil in a general way for typical people, arguing that typical individuals in a typical society will have an appetite for money and an aversion to death, for example, this still does not ameliorate the situation much. For typical people acting in a general way do not change the future course of history. Nor do typical people acting in a general way increase their happiness by altering their habitual activities. It matters little to my happiness that I purchase bread in a regular way from the supermarket; however, it matters much to my happiness that I have chosen to study mathematics rather than history. In the period of liberty I had weighed the good against the evil of this course of action; and only I had access to the weights that I assigned to these various factors at that moment. These good and evil weights are not determined in any straightforward way by reality as it has been

\(^{1}\)There is a clear and obvious correspondence between the general theory of the good and this framework for thinking about human action.

\(^{2}\)When in the mind of man, Appetites, and Aversions, Hopes, and Fears [despair], concerning one and the same thing, arise alternately; and divers good and evil consequences of the doing, or omitting the thing propounded, come successively into our thoughts; so that sometimes we have an Appetite to it; sometimes an Aversion from it; sometimes Hope to be able to do it; sometimes Despair... the whole sum... is that we call Deliberation. ... And it is called Deliberation; because it is a putting an end to the Liberty we had of doing, or omitting, according to our own Appetite, or Aversion." Hobbes, page 127.
but rather by some supernatural and subjective “inspiration” at that moment. The great minds that invented the Calculus could not have been predicted by econometric models. The efficacy of the production of personal computers could only have been the result of the hope of a few who, in the face of stiff resistance and opposing opinions, still remained inspired by some force to choose in one way and not the other.

The alternative premise, that humans react and do not act explicitly, can now be stated. If humans merely react, then there is no period of liberty in which the good is weighed against the evil. Indeed, attempts to determine whether something is desired or hated are merely attempts to grasp reality on the exterior of the human conscious in a way sufficient to answer a physical question that is just very complex; it is not a battle to subjectively determine what exactly is “the good” and “the evil” for the particular individual at the particular moment, but merely an attempt to gather enough information (that any presently-omniscent person who was not this particular person would already know anyway) to figure out what is objectively good and evil. In other words, values are objective. Hence it follows that the future is predetermined by the past.

The implications for welfare economics now fall in a straightforward way. If by “welfare” we mean the conceptual sum total of all of the “good” that individuals obtain in life, however that could possibly be added, then these two assumptions lead to different conclusions. If humans act, then they can choose what is good from their own perspective and position at any given moment, and if another chooses for them, this man cannot possibly weigh the good and evil in the same way, since these “good and evil” are entirely subjective to the individual at that place and time. If humans merely react, then good and evil must be objective concepts determined by the human condition and present reality, and good can be objectively maximized by a benevolent dictator in charge of all human behavior, provided that dictator was sufficiently knowledgeable (an “expert, benevolent dictator,” to qualify the phrase).

For a specific example, consider the obesity “epidemic.” Let us suppose a benevolent naturally-omniscent\footnote{That is, perfectly knowable by all constant natural laws as well as the present condition of natural reality.} dictator was put in charge of all of society. This dictator has two options for each individual: he can order them to exercise, or he can order them not to. If humans react, then the benevolent dictator can take into account all the conditions of present reality and determine if the individual in question should exercise or not in order to maximize that individual’s total sum welfare, or “good.” But if humans act, then each individual at that particular moment has a certain weighing of what ends are desired and what means would be efficient to produce them, and this weighing is not approachable by any natural means. The dictator cannot discover these weights at any given moment; hence, he must substitute his own weights in the decision. One can see how this argument can be applied to the weighing of present and future satisfaction, or the weighing of the possibility of certain endeavors being successful (profitable), and how in each one the benevolent dictator would be unable to maximize individual welfare?
answer the call satisfactorily, if humans are assumed to act.

Indeed, if humans act, then there is a course of history ahead of us that is unpredictable, because at any moment, some individual out there could determine (somehow) a change in his weights and have a remarkable (unexplainable) inspiration and hence quit his job, leave his family (irrational acts!) and then subsequently find a means to traverse the stars. Deterministic economic theory would be at a loss to explain such a result. Hence why deterministic economic theory (which as oftentimes been the pessimistic theory as well, predicting the end of the world numerous times in the past) has had difficulty with its prediction of history, although its mechanic is nevertheless valuable for typical affairs. Deterministic economic theory presumes humans react, which seems false by experience and, probably more importantly, introspection.

Conclusion

In this work I have outlined the key methodological division in economics, considering the synthetic and analytic method types. Then I have discussed three major methodological controversies within the framework thus provided: the controversy between cause-and-effect versus event-interdependency in human behavior; the controversy between instrumentalism and scientific realism in the economic science; and finally, the controversy between human action and human reaction as the main avenue by which we understand human behavior. These issues of method form a great battle and confusion swirling like a fog about the very base of the economic science, and there they shall remain until they are satisfactorily answered.


