scheme would probably require a growing share of our GNP: a constant share invested abroad could probably do no better than to postpone temporarily an ever-increasing import surplus. If our balance of goods and services does not or cannot turn passive, defaults will ensue when the gold and other acceptable means of international payments of the debtor countries are exhausted. As we cannot easily base a policy for tomorrow on a set of expectations involving the loss by default of the foreign investment we are encouraging today, the eventuality of a United States import surplus may have to be accepted.

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Praxeology: Reply to Mr. Schuller

Rather than prolong my discussion with Mr. Schuller¹ unnecessarily by engaging further in a point-by-point refutation, I think it important to clarify the nature of praxeology and its applicability to historical events.

The fundamental praxeological axiom is that individual human beings act. Praxeology reveals the implications of the concept of "action." Action results from the fact that the individual "actor" believes that there are other states of being preferable to the one in which he is at present, and from his belief that he may take certain steps which will bring him to a more satisfactory state. Given these preferences and "technological" ideas, the individual acts upon them in order to arrive at a more satisfactory state. The preferred state which the actor expects to attain is his "end"; the steps by which the actor attempts to attain his goal are the "means." It is this praxeological concept of action that distinguishes the observed movements of men from those of inorganic matter.

This axiom of action is indisputably an important truth, and must form the basis for social theory. To deny it would be absurdity. How has our knowledge of the truth of this axiom been attained? In this way: an individual reflects, discovers the concept of action and its applicability to all human individuals, analyzes its components, and then sets it forth orally or by the written word. Each individual, upon reflecting on the axiom of action, must agree to its truth and to its importance. It is in this respect that the action axiom must be "universally recognized as true." What name we apply to this method of obtaining knowledge is basically unimportant and involves

¹ American Economic Review, Vol. XL, No. 3 (June, 1950), pp. 418-22; Vol. XLI, No. 1 (Mar., 1951), pp. 181-90.

² Although he did not use the term, Professor Talcott Parsons engaged in profound praxeological analysis in his *Structure of Social Action* (Glencoe, Ill., 1949). *Cf.*, especially, Chapter II, pp. 44-50.

³ The difficult case of animal behavior, ranging from the lower organisms to the higher primates, cannot be discussed here.

⁴ Schuller's questioning of the validity of the praxeological axioms and procedures on the basis of the possible inability of the vast majority to grasp them is an old problem for the physical sciences. How can Einstein's theory of relativity be true if the mass of the people cannot understand the demonstration of its validity? Whatever solution physical science has developed for this puzzle may be adopted by praxeology as well.

irrelevant philosophical problems; thus, it may be called "introspective," "empirical," "a priori," or "reflective." The important consideration is that it is certainly a different type of "empiricism" from the study of historical events and is definitely "a priori" to those events, and that such a situation has no parallel in the physical sciences. The physical sciences are not in the fortunate position of positively knowing their fundamental axioms. On the other hand, the physical sciences are in a position to isolate causal factors in experiments. The physical sciences, then, have to arrive at their axioms by hypothesis and by experimental testing of conclusions deduced from these hypothecated axioms. In the "social sciences," the fundamental axioms of praxeology are known from the beginning, so that substantive conclusions may be drawn by means of logical deduction. In human historical events, however, causal factors cannot be experimentally isolated, so that the historian must explain by the use of judgment which praxeological laws apply in the particular situation.

Explanation of the rôles of praxeological laws and historical judgment or "understanding" may be provided by the following example: If the supply of a medium of exchange increases; and if the demand for that medium remains the same; then, the purchasing power of that medium will decline. This is a praxeological law. How may an historian apply this law? He must first determine whether or not a decline in purchasing power (increase in prices) has taken place. This involves difficulties of an historical-statistical nature; it is not a problem for praxeology or for that elaborated division of it known as "economic theory" or "catallactics." Once he has determined that a fall in purchasing power of the medium has taken place, he searches for an explanation by applying the praxeological-catallactic law. He investigates the historical situation to discover whether there has been an increase in the supply of the medium. If he finds a considerable increase in the supply, he is then in a position to assert three truths:

- A. It is an historical fact that the purchasing power of medium X has declined to such and such an extent.
- B. It is an historical fact that the supply of the medium X has increased to such and such an extent.
- C. The praxeological law just mentioned. It is therefore concluded: that a significant cause of the decline, A, was the increase in supply, B.

If he finds no increase in supply, then he deduces that a fall in demand for the medium was the cause of the fall in purchasing power.

Such is an example of what is involved in the work of historical explanation. The work of the "economic theorist," or praxeologist, is to elaborate the laws (such as C) from the various axioms and according to the rules of logic. Clearly, neither Mises nor myself has ever cited "facts as if they provided support for his conclusions and for the axioms, postulates, and logical procedures." I cited facts such as "dollar gaps" not as proof or test, but as illustrations of the workings of praxeological laws in (modern) historical situations. It is a praxeological law that if the government (or any other agency exercising the power of violence) intervenes in the market to establish a valuation of any commodity below what would be the market valuation, a shortage of the commodity develops. Gresham's Law is a subdivision of this

law applied to media of exchange, which, in turn, leads to the explanation of the "dollar gap." The historian sees a shortage of dollars in relation to pounds develop in England, and, using praxeological laws, explains it as the consequence of governmental over-valuation of the pound in relation to the dollar. In no way does he test or "prove" the theory.

How may praxeology be applied to forecasting, to the prediction of future historical events? The process is essentially that of the historian, except that the difficulties are greater. Thus, using the above example, the forecaster may see a considerable increase in the money supply take place. He asserts B: C he knows as a praxeological truth. In order to forecast the probable future course of purchasing power, he must make an estimate of the probable course of the demand for money in the period under consideration. If, on the basis of his judgment, he decides that the relative change in demand will be negligible, he is in a position to predict that the purchasing power of the money unit will decline in that period. With the help of praxeology, his judgment is the best he can offer, but it is still inexact, dependent on the correctness of his estimates—in this case, of the movement in the demand for money. If he wishes to make a quantitative estimate of the change in purchasing power, his estimate is still more inexact, for praxeology can be of no help in this attempt. If his prediction proves erroneous, it is not praxeology that has failed, but his judgment of the future behavior of the elements in the praxeological theorem. Praxeology is indispensable, but it does not provide omniscience. It furnishes laws in the form of: If X, and if Y remains unchanged, then Z. It is up to the historian, and his counterpart, the forecaster, to determine the specific cases in which the law is applicable. It should now be quite clear that there are no praxeological laws of historical development, and that neither Mises nor myself need "reconcile" any "dilemmas" in setting forth such a law. If there were, then the task of the historian would be far easier than it is. Historical events are complex results of numerous causal factors: praxeologic, psychologic, physical, chemical, biological, etc. The historian must determine which science and its laws apply, and, more difficult, the extent to which each causal factor operated in the events he is attempting to explain or predict. Historians will legitimately differ on the order of importance to be attributed to each factor. Thus, various factors, praxeologiceconomic, military, moral, and psychologic might be enumerated as causes of the Bolshevik Revolution. But there is no exact, scientific way of deciding the precise extent of importance to be assigned to each factor.

What of the relation between praxeology and economic theory per se? Economic theory as has been developed is a component part of praxeology. It is deduced from the apodictic axiom of action, and most of economic theory, including the laws and implications of Uncertainty, Time Preference, the Law of Returns, the Law of Utility, etc. can be deduced directly with no further assumptions. With the help of a very small number of subsidiary axioms which are rather more "empirical" in nature—such as "the disutility of labor"—the rest of economic theory can be deduced.

The categories of praxeology may be outlined as follows: *Praxeology*—the general, formal theory of human action:

A. The Theory of the Isolated Individual (Crusoe Economics)

- B. The Theory of Voluntary Interpersonal Exchange (Catallactics, or the Economics of the Market)
 - 1. Barter
 - 2. With Medium of Exchange
 - a. On the Unhampered Market
 - b. Effects of Violent Intervention with the Market
 - c. Effects of Violent Abolition of the Market (Socialism)
- C. The Theory of War—Hostile Action
- D. The Theory of Games (e.g., Von Neumann and Morgenstern)
- E. Unknown

Clearly, A and B—Economics—is the only fully elaborated part of praxeology. The others are largely unexplored areas.

A concluding word on all the pother about democracy, dictatorship, and government. Clearly, the praxeologist qua praxeologist cannot advocate any course of action. As a citizen, however, he may, along with other citizens, try to decide on the proper course of social policy, and, in making that decision, he will be likely to use the aid of praxeology and call attention to its usefulness. For socio-political problems, praxeology presents the citizen with one great lesson, i.e., that the use of violence for purposes of plunder injures not only the victim (which is self-evident) but, in the long run, the plunderer also. The goal of the good citizen, then, is to try to eliminate, or at least minimize, violent plunder in the society.⁵ The problem of how to arrive at this goal is still unsolved, as a glance at the state of the world today will make dramatically clear. The great problem is how to convince or persuade the would-be plunderer to consult his long-run rather than what he might interpret as his short-run interests. The traditional laissez-faire solution was to establish a government that would have an effective monopoly on the means of violence, and would use these means solely to prevent and punish attempts at violence within the society. This largely (although not completely) ended the problem of sporadic social violence, but created a new problem: quis custodes custodiet? Who will guard the state itself from using its effective monopoly of violence for plunder? The most ambitious attempt to solve this problem was the "Jeffersonian" one—to establish a government that would be tightly and securely ringed with definite constitutional restrictions to confine it to its "anti-invasive" function, to instill into the people a spirit of perpetual vigilant distrust of the government and particularly the appointed bureaucracy, and to keep the government small and local in order to permit direct popular control and vigilance. In the light of the history of the past century, it is possible that this method is impracticable, and that some other means may have to be found.

Finally, may I state that though I share Schuller's hope that my interpretation of *Human Action* agrees with that of Mises, there is no warrant for any assumption to that effect.

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 $^{^5}$ This is aside from any moral considerations which might also lead the citizen to the goal of eliminating or minimizing the use of violence.

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