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## ARTICLES

- The Insulation Argument in Neoclassical International Economics: 3  
A Critique

*Bogdan Glăvan*

- Hermeneutic Economics: Between Relativism 21  
and Progressive Polylogism

*Pierre Perrin*

- What Austrian Scholars Should Know About Logic (And Why) 39

*Steven Yates*

- The Gold Standard in Contemporary Economic Principles Textbooks: 59  
A Survey

*James Kimball*

## COMMENT

- Interest: In Defense of Mises 81

*J. Patrick Gunning*

## BOOK REVIEWS

- Energy: The Master Resource 93

Robert L. Bradley

*Reviewed by Pierre Desrochers*

- When States Fail: Causes and Consequences 97

Edited by Robert I. Rotberg

*Reviewed by Edward Stringham*

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## THE INSULATION ARGUMENT IN NEOCLASSICAL INTERNATIONAL ECONOMICS: A CRITIQUE

BOGDAN GLĂVAN

**A**mong the arguments advanced by mainstream economists in favor of independent fiat currencies, the thesis that the exchange rate completely insulates the economy from changes in foreign prices has a central importance. For example, “In a fiat money regime, in theory, monetary authorities could use open market operations, or other policy tools, to avoid the types of shocks that may jar the price level and real activity under a specie standard and hence provide short-run and long-run nominal stability” (Bergman, Bordo, and Jonung (1994, p. 68)).<sup>1</sup>

In particular, “there is a widespread belief that countries tied to a fixed exchange rate regime are more susceptible to foreign monetary disturbances” and “textbook open economy macroeconomic models suggest that a standardized foreign monetary policy shock will have a smaller impact on countries that maintain flexible exchange rates” (Kouparitsas 1999, pp. 48, 60). In other words, “one of the most telling arguments in favor of floating rates was their ability, in the theory, to bring about exchange-rate changes that insulate economies from foreign inflation” (Krugman and Obstfeld 1991, p. 539).<sup>2</sup>

The occurrence of changes or shocks emanating from foreign markets is not a sufficient condition, however, for monetary nationalism. Another condition for the independent fiat currencies to be desirable in mainstream literature, are the “asymmetrical” effects these shocks can have on different economies. That is because only an asymmetric shock requires asymmetric responses, that is, different exchange rate policies.<sup>3</sup>

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<sup>1</sup>This view is supported by Obstfeld and Rogoff (2002, pp. 631–34).

<sup>2</sup>Meyer (1997, p. 8) is also clear on this issue: “floating exchange rates tend to insulate a country from monetary shocks abroad.” See also Lahiri, Singh, and Vegh (2003).

<sup>3</sup>For instance, Corsetti and Pesenti (2001, p. 2) state:

Fixed exchange rates can be supported by optimal monetary policies only when all shocks are correlated worldwide or when local prices are

The aim of this paper is to criticize the foundation and the relevance of the insulation argument. In what follows, I will attempt to show that:

(1) The favor flexible exchange rates enjoy in the literature is in part a result of the confusion between devaluation and free exchange rates; (2) Asymmetric shocks cannot provide a basis for the insulation argument, for their meaning is either a definitional truism or simply absurd; (3) Devaluation cannot offset the impact of foreign trade shifts on the domestic structure of production, and it instead produces additional problems; (4) A policy of monetary nationalism cannot prevent foreign-engineered business cycles from affecting domestic economic conditions, even if this is the only (but neglected) instance when a case for insulation could be rightly made.

The system of independent fiat money has been criticized extensively by Austrian scholars. Since the publication of Mises (1912, pp. 261-62 and 453-76), the author has attacked the arguments of free-floating state-issued money advocates, showing that their main tenets express a fallacious inflationist doctrine. International considerations invoked by mercantilist-Keynesian theorists are also refuted, especially in the discussion of devaluation in Mises (1998, pp. 783-87), and in Hayek's (1989, pp. 35-54) masterpiece. Rothbard (1990; 1995, pp. 254-74) demonstrates the weaknesses of the case for fiat currencies and point to the peril of conflating Friedmanite flexible exchange rates with the free-market process.<sup>4</sup>

However, the rising importance of international considerations for mainstream defense of managed currencies was not anticipated by Austrians. Neither was the innocent view of floating currencies as providing a shield against foreign-engineered inflation. The following analysis attempts to reassess the insulation argument in the light of these developments and on the basis of the Austrian tradition.

#### FLEXIBLE EXCHANGE RATES VS. FREE PRICES

For a new student of economics, and even more for the public at large, the insulation argument sounds very appealing. For who would not wish his country (or the region he lives in) to be sheltered from foreign-induced turmoil? Indeed, what can be more satisfactory than to benefit from (foreign) trade, but to be isolated from any adverse market change originating beyond one's borders? In such wonderful clothes, the insulation argument seems very attractive.

Before addressing the details of the insulation argument, it is worth considering a fallacy frequently associated with the defense of floating currencies.

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fully inelastic to exchange rate fluctuations. Otherwise, the relative price adjustment associated with the implementation of the optimal policy requires exchange rate flexibility.

<sup>4</sup>Also see Sennholz (1979, pp. 136-45).

In some economists' minds, the case for floating fiat monies is equivalent to the broader case for free markets.<sup>5</sup> Fixing exchange rates between money, the argument goes, is similar to fixing any other price. By contrast, flexible exchange rates serve to equilibrate demand and supply, and allocate resources efficiently. This reasoning has erroneously induced many free market champions to support flexible exchange rates. Unfortunately, this claim is misleading. Fiat money is not an institution that emerged naturally on the free market; it degenerated from a money substitute through the breach of the contract that stipulated all money titles are entirely covered with money proper. It is an inflationary institution created by the state, and needs special regulations in order to survive on the market (Rothbard 1990, 1992; Hülsmann 1998). Although it is true that flexible exchange rates serve to balance the demand for and the supply of fiat money, people demand such money only because they are forced to do so.

In fact, mainstream economists are not interested in defending flexible exchange rates *per se*. Money is a commodity like any other good, therefore its value fluctuates as a result of changes in individuals' demands and the available stock. But this feature does not express any specific property of money, which might be relevant for our discussion. For instance, we can treat different kinds of money in the same way we treat various varieties of cheese. The price of different sorts of cheese varies as their particular conditions of production and subjective preferences of individuals change. But no economist has ever claimed that the flexibility of a particular cheese price "insulate"—whatever this could mean—the area in which it is produced or consumed. It is the same with money. As long as on the market there are a number of different monies produced in different conditions (it is not important if they are commodity money, like gold and silver in the past, or if we deal with the present situation characterized by the coexistence of independent fiat money producers), flexible exchange rates, i.e., free money prices, accomplish the same role as any other market price fulfills. No other specific property can be assigned to them.

What neoclassical economists understand when they discuss the "advantages" of flexible exchange rates, is something different. They actually point to the "advantage" of arbitrarily decreasing the value of a national currency in a certain context. This reduction in the value of money is not a natural phenomenon occurring on the market; rather, it is a measure purposefully undertaken by policymakers. Our criticism of the insulation argument should

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<sup>5</sup>For example, Friedman (1999, p. 7) declares: "Pegging an exchange rate is a governmental price-fixing measure, no different from pegging the price of wheat or the price of anything else." See, also, Johnson (1970). McCallum (1996, pp. 208-09) provides a critique of this fallacy but his argument resorts to the still fallacious idea that money is a public good. It should be mentioned that fiat money is not an institution associated to the free market. It was established deliberately by the state, and needs to be permanently shielded against competition through special laws.

prove that such a policy cannot attain its goal, and has completely different consequences instead.

#### TRADE SHOCKS AND DEVALUATION

The importance of insulation is derived from the occurrence of unfavorable foreign changes in demand. However, the incidence of a negative shock is not a sufficient condition for a region to be interested in preserving monetary independence. In principle, if that shock also hit other regions, it is possible to initiate a coordinated monetary expansion (Hefeker 2000, p. 166). Floating money is supposedly needed because of the occurrence of the so-called asymmetric shocks, i.e., adverse market changes which affect in a different way various regions or countries.

Now, of course, no change in data could possibly identically affect each individual, therefore, all trade shifts are asymmetric by necessity. In deciding what goods to buy (and in what quantities), the consumer faces the constraints of a limited income. His choice to buy a certain quantity of X decreases his ability to acquire other goods on the market. By so acting in the market, individuals not only determine nominal prices for every good, but at the same time, they also determine relative prices of different goods. Their decision to demand more or less of a certain commodity inevitably leads to a change in the structure of relative prices, and to a change in the distribution of income. On the market then, changes in consumption preference, no matter how small, always alter the distribution of wealth, and consequently, the choices different people will make in the future. No one can insulate himself from the effects of the actions of his fellows, except by refusing to enter any exchange and embracing a complete autarkic existence.

When addressing the question of market changes in general, and that of international price changes in particular, the usual observation is that we cannot describe such changes as explosions, or abrupt disruptions of previous trade patterns and capital structures. On a free market, neither consumer preferences, nor supply conditions typically change drastically and unexpectedly. On the contrary, the process of adjusting production to consumers' wishes generally goes on smoothly. Therefore, most "disturbances" tend to be temporary and have small amplitude. Given this state of affairs, there is not much scope for devaluation.<sup>6</sup> However, as I will argue, it does not follow from this that there would be more scope for it as "a last resort" policy tool, in those (rare) extreme situations when abrupt trade changes could possibly occur. Independently of how important and severe market changes are, it should be clear that the exchange rate cannot offset them, that is, it cannot cancel the need for the adjustment of relative prices.

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<sup>6</sup>For an extended critique of "asymmetric shocks" and their importance for monetary independence, see Glăvan (2004, pp. 35-36).

The common neoclassical textbook emphasis on the crucial role terms of trade play in international adjustment springs from an extreme interpretation of Hume.<sup>7</sup> According to Hume's price-specie-flow mechanism, a deficit in the balance of trade leads to an outflow of gold, which in turn triggers a deflation. And since deflation "scares" mainstream economists, their shift to flexible rates seems only prudent. What they overlook, however, is that in a world with a consistent capital market, temporary disturbances affecting the exchange of consumption goods provide only a partial picture of the state of one region's external payments (Sennholz 1979, pp. 140–41). Under a gold standard, changes in trade patterns are in general correlated with (if not determined by) inverse movements of capital, so that gold need not be a significant variable in the adjustment process. Economic history in general, and the history of the gold standard in particular, teaches us that whenever a region (country) experienced significant trade deficits, it also experienced significant capital inflows. Therefore, the distribution of money among regions remained largely stable and the adjustment process entailed neither deflation nor inflation.<sup>8</sup>

Now, one might say, if there are negative trade shocks, there must be also positive shocks. Imagine the case of a region for which the demand of goods increases. Under a fixed exchange rate system, this development will result in an inflow of money and, consequently, a rise in prices. With a flexible rate, the region could very well protect itself against such foreign-induced increase in prices.<sup>9</sup> The additional supply of foreign currency resulting from exports expansion would leave the domestic money quantity unchanged, altering the value of local money in terms of foreign money instead. Nevertheless, it is one thing to accept that such positive shocks do occur, and quite another to maintain that the policymakers will let the exchange rate appreciate to the proper degree, preventing domestic money prices from increasing. As Mises noticed, governments make use of flexibility in one sense only.<sup>10</sup>

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<sup>7</sup>A good argument against the interpretation that a negative terms of trade shock, if not countered by inflation, may entail deflation and large-scale unemployment can be found in Calvo (2000, p. 6): "The main problem with the argument is that it ignores the financial angle . . . a devaluation may tend to solve the unemployment problem but it may deepen financial difficulties."

<sup>8</sup>See the "revisionist" paradigm advocated by McKinnon (1998).

<sup>9</sup>The reader must be careful not to confuse this phenomenon with so-called "imported inflation," supposedly due to the depreciation of the exchange rate, which is nothing else than domestically engineered inflation, and is the very reason for depreciation in the first place.

<sup>10</sup>Mises (1998, p. 781): "This flexibility, however, is practically always a downward flexibility. The authorities used their power to lower the equivalence of national currency in terms of gold and of those foreign currencies whose equivalence against gold did not drop; they never ventured to raise it."

## DEVALUATION AS A POLITICAL MAKESHIFT

We have seen that conventional emphasis on asymmetric shocks is misleading and the mainstream framework is deficient in this respect because, among other things, it completely overlooks the significance of the capital market. The fact is, nevertheless, that neoclassical economists consider such shocks to be an important source of disturbance in the economy. Further, I will present the standard case for insulation as expounded in mainstream literature, explain the essential connection between devaluation and monetary policy, and show the perverse effects of monetary nationalism.

Mainstream economists have traditionally seen in floating fiat money a shield against foreign-transmitted disturbances. As they have repeatedly emphasized, if this monetary arrangement had been in place during the '30s, then what we now know as the Great Depression could have been largely avoided. The theoretical foundation for the insulation argument goes back to Friedman's (1953) "Case for flexible exchange rates" where he shows that any external change in data will alter the balance of payments structure, and can be dealt with by means of a corresponding adjustment in the exchange rate.

The changes in the demand for and supply of goods exchanged on the market tend to alter the structure of relative prices. Some goods, and their factors, prices tend to decrease relative to the prices of other commodities, and vice versa. According to the mainstream assumption, domestic prices and wages show some downward stickiness, which can be mitigated by devaluation.

Consider the following case. Because of a decline in the foreign demand for a regional export, a deficit begins to develop in the balance of trade. In the view of Rolnick and Weber (1989, p. 3):

To bring the trade into balance, the prices of goods and services produced in the deficit country must fall . . . if the prices of goods and services are slow to adjust (as is often argued, at least for downward price adjustments) then the trade imbalance will persist. With floating exchange rates, the trade imbalance causes the value of a deficit country currency to fall . . . the terms of trade will decline . . . therefore, the demand for goods and services of the deficit country increases while the demand for those of the surplus country falls.

According to Larrain and Velasco (2001, p. 23):

The alternative is to wait until excess supply in the goods and labor market pushes nominal goods prices down. One need not to be an unreconstructed Keynesian to suspect that the process is likely to be painful and protracted.

As Hayek (1989, p. 36) summed up the insulation argument:

The main advantage of a system of movable parities is supposed to be that in such a case the downward adjustment of wages could be avoided and

equilibrium restored by reducing the value of money in the one country relative to the other country.

The decline in foreign demand entails a disequilibrium between the receipts and payments made by domestic residents with the rest of the world. This developing deficit in the balance of payments implies a net outflow of money, which under the gold standard, would reduce the quantity of money (gold) available. This reduction in the supply of gold would be the natural response of the market to the decrease in the domestic demand for gold, which actually happens every time individuals make payments in excess of their receipts. This process would be, however, only temporary, because there is no reason to suppose that people's demand for cash balances has declined. If exports decrease, that is, if the receipts from foreign trade have diminished, then, *ceteris paribus*, spending must decline also (imports should fall).

Under the present system of independent fiat currencies, this mechanism does not work. The obvious reason is that policymakers perceive the decline in spending as problematic, for it means that some industries for which there is less demand must contract. Their prices would consequently drop and, under present regulations of the labor market, workers would be laid off.<sup>11</sup> But this process is presumably what governments wanted to avoid when they replaced the gold standard with the present independent fiat standard. The insulation argument points exactly to the idea of keeping unchanged the "aggregate demand" in order to prevent a downward spiral of wages and employment. The central bank is called upon to offset the decline in the foreign component of aggregate demand through a "relaxation" of monetary policy, that is, through an increase in the quantity of money.

In the context of a new money relation, the old exchange rate between domestic and foreign currencies becomes obsolete, and would float downward. If the central bank tries to defend the value of its currency, it should sell foreign exchange from its reserves against the national currency. But the result of such intervention would produce opposite results to those pursued by the central bank. It would mean that a certain amount of national money should be withdrawn from circulation, in exchange for the foreign exchange reserves sold on the market. This entails a conflict of policies and is ultimately doomed to fail.

As Austrian economists<sup>12</sup> have repeatedly pointed out, there can be no devaluation without inflation. The objective of currency manipulation is to substitute the government adjustment of the value of money for the market adjustment of money prices. In mainstream economic thinking exchange rate

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<sup>11</sup>Through its labor policy—imposing minimum wages, distributing unemployment "insurance," accepting collective bargaining—the state harms the pricing process and makes unemployment unavoidable.

<sup>12</sup>See, for example, Mises (1998, pp. 771–78) and Rothbard (1990).

policy is not independent of, but rather embedded in the monetary policy.<sup>13</sup> For this reason, the insulation argument ultimately boils down to the same mistaken idea of macroeconomic tuning advocated usually by Keynesian theory.

It is important to stress that inflation would not solve the original problem of wage stickiness. Hayek understood the proper meaning of monetary policy when he wrote:

Now of course no monetary policy can prevent the prices of the product immediately affected from falling relatively to the prices of other goods in the one country. . . . Nor can it prevent the effects of the change of the income of the people affected in the first instance from gradually spreading. All it can do is to prevent this from leading to a change in the total money stream in the country. (Hayek 1989, p. 37)

A sustained policy of decreasing the value of the national currency would suppose an increase in the domestic money supply.<sup>14</sup> The injection of an additional quantity of money (increasing monetary base) would entail a proportionately higher expansion of credit, with subsequent misallocation and redistribution of wealth. Eventually, it means that the whole national structure of prices would be raised.

This is regarded as an advantage because it avoids the necessity to lower a group of particular prices, especially wages, when foreign demand for the products concerned has fallen and shifted to some other national region. But it is a political makeshift; in practice it means that, instead of lowering the few prices immediately affected, a very much larger number of prices would have to be raised to restore international equilibrium after the international price of the local currency has been reduced. (Hayek 1978, p. 110)

Devaluation brings about an unsustainable change in the spending pattern, distorting the allocation of resources. The rise of the foreign exchange rate will discourage imports and divert the demand toward those industries producing for the domestic market. The prices for their products will consequently tend to rise. Also, the exporting industries, which would otherwise have cut their prices, will benefit from devaluation because they will receive for their products almost the same prices in terms of domestic currency as before the change in demand.

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<sup>13</sup>Dehejia (2003, pp. 2-4) states this explicitly: "Monetary policy and exchange rate policy cannot sensibly be disentangled, so that it is misleading to refer to monetary policy without referring to exchange rate policy or vice versa. it is illogical to discuss monetary policy and exchange rate policy separately: for it is possible to fix the exchange rate, or the price level, but not both."

<sup>14</sup>Most economists agree that a central bank cannot target a higher exchange rate at the same time with maintaining the quantity of money unchanged through sterilization. Sooner or later, one of the two goals must prevail.

The manipulation of money has transitory effects only if market participants do not properly anticipate it. Neoclassical economists admit this when they emphasize the distinction between nominal and real price rigidity.<sup>15</sup> All the “benefits” of devaluation are purely temporary, and are possible only because not all prices (and especially the prices for factors of production) are equally quick to adjust. As long as the effects of devaluation on the money stream continue to work their effects, some industries (among which are, of course, the exporting industries negatively affected by the trade shift) will experience illusory profits. But once the change in spending has worked its effects throughout the economy, and all nominal prices have risen to match the old relative price structure, the real demand of the consumers cannot be hidden anymore. In particular, the cost-price structure of those industries affected by the foreign shock will make their contraction inevitable.

As such, the supposed “advantage” of floating is nothing more than the “advantage” of inflation. Not only that it will not relieve the pressure for relative prices to adjust to the new structure of demand, but it will also create additional disturbances within the system. Inflation falsifies economic calculation and leads to a malinvestment of still more resources and consequently, to an even slower adjustment of the production structure to the needs of consumers.

If the entire advantage obtained by floating consisted only in protection against adverse movement of some external prices, the discussion would be only of limited importance. It would parallel the discussion concerning the possibility of sheltering domestic producers from domestic decreases in demand. But can we imagine a situation when it would really be beneficial to insulate against foreign changes in market data? Yes, for example in the case of a boom experienced by a large region, which tends to affect the neighboring regions and, ultimately, the whole world market. If floating were but able

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<sup>15</sup>Murray (1999, p. 3):

Another necessary condition for flexible exchange rates to be both desirable and effective is that *real* prices and wages in the economy not (sic) be fixed or completely rigid. Flexible exchange rates help stabilize an economy by overcoming the stickiness that is assumed to exist in *nominal* prices and wages, thereby allowing *real* prices and wages to *re-equilibrate*. (emphasis added)

Compare this open statement with the view of Mises (1998, p. 783):

The objectives of devaluation were: 1. To preserve the height of nominal wage rates or even to create the conditions for their further increase, while real wage rates should rather sink. . . . However, neither the government nor the literary champions of their policy were frank enough to admit openly that one of the main purposes of devaluation was a reduction in the height of real wage rates. They preferred for the most part to describe the objective of devaluation as the removal of an alleged “fundamental *disequilibrium*” between the domestic and the international level of prices. (emphasis added)

to provide insulation, this would be very important in the case of preventing foreign business cycles from affecting domestic economic conditions. In this case, the gold standard would indeed present a serious shortcoming. However, it is not true that floating regional (national) money could be useful in this respect. As long as commodity trade and/or credit relations exist at all, no country could possibly insulate itself against the effects of boom and bust experienced by other regions. In what follows I will try to explain in more detail why this is so.

#### INSULATION AGAINST FOREIGN TRANSMITTED BUSINESS CYCLE

The natural trend of economic development is to extend the division of labor worldwide. Consequently, the prices of goods tend to reflect the preferences of consumers and the production conditions prevalent in various places around the world. Therefore, it is clear that government engineered inflation will have effects far beyond the borders of any one state.<sup>16</sup> Today, since there are a large number of states, and a corresponding number of independent monetary monopolies,<sup>17</sup> prices and the international distribution of wealth are simultaneously affected by a wide range of inflationary impulses, the separate effects of which cannot be discerned with precision.<sup>18</sup> Further, it is evident that the more open an economy is the more its prices and economic calculation will be impeded by the monetary distortions originating in foreign countries. In addition, if any country is a large part of the world economy, then the monetary distortions it can generate will have an even greater impact upon the rest of the world.<sup>19</sup>

Monetary expansion exerts its damaging consequences beyond the borders of the state that generates it either directly, because foreign people employ the respective currency as medium of exchange, or indirectly, through its effects on interest rates. From the very beginning it is important to point out that the Misesian-Hayekian theory is more helpful than the mainstream

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<sup>16</sup>Moreover, as Heilperin (1968, p. 164) notes: "Even in the absence of an international monetary system, however, inflation albeit primarily a domestic phenomenon of individual countries, is far from being exclusively that."

<sup>17</sup>See for example, Rothbard (1990, p. 88), where he calls the state an "inflation producing center."

<sup>18</sup>As Heilperin (1968, p. 170) shows, in the universe of flexible exchange rates, "it is possible to have a large number of national inflations going on simultaneously, differing in intensity and sheltered by exchange controls and import restrictions adopted by the respective governments."

<sup>19</sup>Heilperin (1968, p. 164) notes that "relatively small and weaker economies" can experience inflation, without its own monetary policy being primarily responsible. This assertion is however either a simple truism, or completely untrue, because it simply disregards the possibility a state has to isolate its economy from international fluctuations, by imposing high tariffs and quotas, or controlling the foreign exchange market.

approach in understanding the international mechanism of the transmission of economic fluctuations. This is so because mainstream research regards the international monetary order as an interaction between separate national monetary systems. It usually conflates the geographic dimension of the national economy with the region in which the domestic money circulates. The Austrian theory allows us to analyze the effects of a monetary expansion without presupposing the existence of a geographical area in which the circulation of a certain currency is confined. It recognizes that money is a commodity and, therefore, the distribution of different kinds of money in the world is in permanent flux, determined by the change of the public's preferences and the available supply.

Conventional economics draws arbitrary boundaries not only between different monetary systems, but between separate production structures as well. The fact that there is no regional (or national) division of labor independent of the world division of labor is entirely disregarded. The simple existence of interregional (which, incidentally, can be international) trade forces the economist to think about the transmission mechanism of price variations. The exchange of commodities, capital or consumption goods deepens the division of labor and favors the extension of exchanges in the future. This normal evolution of human society has been occasionally perturbed by political interventions that attempted to separate economically certain regions by prohibiting to a lesser or larger degree the freedom of exchange. While these interventions had always (and still have) as their main goal the increase of government's revenue, only recently a number of economists provided the argument that separation can serve to insulate a region against foreign economic fluctuations. Particularly one type of intervention, enacting floating fiat money, was defended as a cure for economic problems.

It is important to stress that there are no autonomous regional structures of production. These structures are not built to serve exclusively the needs of domestic consumers; particularly for small regions or countries, consumption and saving preferences of their inhabitants are not the most important factor determining the shape of the capital structure. Instead external considerations are dominant. Regional production structures cannot be understood if we ignore global factors. In such cases, they appear completely inconsistent. In fact, we can go so far as to say that regional (national) structures of production are nothing more than fragments of the market-wide (worldwide) structure of capital.

Let us now take a closer look at the developments that take place just after the new fiduciary media has been injected into the economy. We will build our discussion upon the pathbreaking analysis of Hayek (1989, pp. 17-35).

The injection of the new money will increase first the incomes of the initial recipients. With an unchanged demand for cash, they will increase their spending, transmitting the inflationary impulse to other recipients. Since domestic individuals and industries are integrated in the global structure of production, it is clear that at some point in time, the increased spending flow

must leak onto remote (foreign) individuals and industries. They benefit also from the increased demand, for their prices are now rising relative to their buying prices, which are by and large the same as before the change in demand. The more open the inflating region, the sooner will the flow of spending spread to neighboring areas and contaminate foreign industries. In this case, commodity prices in the inflating area (country) need not rise too much, for only relatively few of its residents will manage to obtain a portion of the newly issued money.

The change of the price structure is difficult to predict, and this problem has been noticed by Hayek. As he explains,

we can see this more clearly if we picture the series of successive changes of money incomes . . . as single chains, neglecting for the moment the successive ramifications which will occur at every link. Such a chain may very soon lead to the other country or first run through a great many links at home. But whether any particular individual in the country will be affected will depend whether he is a link in that particular chain, that is whether he has more or less immediately been serving the individuals whose income has first been affected, and not simply on whether he is in the same country or not. (Hayek 1989, pp. 21-22)

The array of relative prices as shaped by the spending flows is unsustainable because it is not backed by a similar change in the pattern of demand. The distortion of the price structure redistributes wealth from those whose receipts are increased only late in the development of the inflationary process to those whose selling proceeds rise earlier. It is very possible for the monetary expansion to exert stronger effects upon the foreign industries than upon the domestic ones, if the former are among the first advantaged by the monetary injection. Eventually, the shift in prices would reverse itself to match the consumers' demand.

The monetary expansion will damage the economy not only through its direct influence on prices, but also through the deviation of the interest rate from the unhampered market level. Any (additional) quantity of fiduciary media impacts the capital market and leads to a considerable expansion of credit. The unexpected change in loan market conditions tends to put downward pressure on the rate of interest, and artificially stimulates the economy. The artificial fall of the rate of interest by one bank, in one sector, or in one segment of the capital market will spread step by step throughout the market. This development is caused by the competition among banks on the loan market.<sup>20</sup> Banks will search for the most profitable uses for their new money funds and, *ceteris paribus*, will direct additional loans toward businessmen acting in those regions where a higher interest rate prevails.

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<sup>20</sup>"The forces of competition obliges other lenders to follow their example," Mises (1981, p. 390).

In addition to the previous consideration, the fall of bond yields in the inflating region will cause investors to shift their attention to other investment opportunities. The differential between local and foreign interest rates will induce companies to sell securities in the first location affected by the monetary expansion, and buy securities in remote areas. Spatial arbitrage will reallocate commodity credit among regions in order to accommodate an increased external investment demand at a lower interest rate. Finally, the reduction of the interest rate will start a process of shifting production factors from their old employment, according to each national production structure, to longer processes, feeding an artificial global boom.

It is immaterial for the growth of the business cycles as to the geographical location of the inflationary impulse. The occurrence of errors is not conditioned by the physical determination of the money producer or of the members of the community of money users. As long as individuals are interconnected through the market they will be simultaneously exposed to the harmful effects of inflation.

Abroad, production is affected by the inflow of credit in the same way it would have been altered by an increase in genuine savings. With more funds available, entrepreneurs will undertake new investments and enlarge the capital base. Nevertheless, unlike in the case of genuine savings, this pattern cannot endure. In this case, the conflict over (always limited) production factors will become increasingly intense as entrepreneurs try to finish their investments while the consumption pattern requires a different allocation of resources.<sup>21</sup>

Acknowledging the errors committed in the past, entrepreneurs will attempt to borrow more from the banks, in a vain attempt to avoid insolvency. On the loan market then, the interest rate will tend to rise, providing more incentives for entrepreneurs to liquidate the malinvested capital. As Hayek explains, the different regions or countries affected by the previous boom cannot avoid the subsequent depression, even if they hinder (by any means) the rise in interest rates:

It will probably not be denied that a considerable rise in the rate of interest will lead to a fall in the prices of some commodities relatively to those

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<sup>21</sup>Mueller (2001, p. 17) makes a similar characterization:

International credit inflows allow a lower monetary interest rate than otherwise, and thus make economic agents overestimate the availability of real funds. The accumulation of foreign debt, which opens the chance for the borrowing country to acquire and maintain higher standards of capital goods, comes along with the expectation of future prosperity that accompanies the extension of the elevated level of production and consumption. Only when credit contraction occurs will it become clear that investors and consumers have extended themselves and that the presumed economic wealth lacks foundation.

of others, particularly of those which are largely used for the production of capital goods . . . compared with those which are destined for more or less immediate consumption. And surely, in the absence of immediate adjustments in tariffs or quotas, such a fall will transmit itself to the prices of similar commodities in the country in which interest rates are not allowed to rise. (Hayek 1989, p. 70)

To resume, the interregional transmission mechanism supposes two separate but complementary channels: the capital market and the commodities market. Over the last decades, technological progress and the international economic liberalization movement have made the international capital market the main transmission mechanism of “economic turmoil.” As we argued above, the integration of national financial markets into a common worldwide market makes much easier the transmission of fluctuations from an economy to another via capital flows.<sup>22</sup>

At this point we have to ask if floating fiat money could be useful as a tool for insulating a region against foreign inflation. The proper answer stands on an accurate understanding of the nature of fiat money. The state can arbitrarily introduce a fiat money in its territory by enacting a legal tender law specifying that only government’s currency can be used as a medium of exchange. Fiat money separatism means not only monetary disintegration, that is, the multiplication of money, but also monetary isolationism. In the separating region only the new money decreed by the government can circulate, the old commodity or paper money being legally excluded from transactions. This gives the government the control over the quantity of money and indirectly over the level of money prices in the region. However, the structure of prices will continue to reflect the pattern of demand resulting from the valuations of all market participants, regardless of their location. Most important, monetary disintegration need not be correlated with the breakdown of the capital market. The multiplication of currencies will lead to a similar multiplication of money interest rates. Each currency will have its own interest rate, the height of which will reflect the pure rate of interest plus the expected inflation rate of the respective currency. Because the last component differs across the regions, there will be many market interest rates, all of them based on a common foundation—the originary interest rate. Therefore, infecting the originary interest rate with fiduciary media, regardless of the location or the size if the money issuer will induce entrepreneurs to malinvest the existing capital goods.

The international flows of credit are of paramount importance in explaining the recurrence of boom and bust some countries have recently experienced.<sup>23</sup> In this context, one could rightly ask if in the absence of capital

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<sup>22</sup>The argument that capital flows facilitate the international transmission of disturbances even under flexible exchange rates has been developed in the mainstream literature by Mundell, Fleming, Cooper, Miles, Dornbusch, and Krugman.

<sup>23</sup>See the Asian crisis. On the importance of international banking and capital market in the transmission of present cycles, see Obstfeld (1998, p. 1) “Indeed it is fair to say

mobility it would not be much easier for regional economic units to preserve their stability. Disintegrating the capital market seems for many thinkers the best way to escape the harmful consequences of inflation. Clearly, the impossibility to conduct exchanges undermines the process of price unification. The decomposition of loans and capital markets would certainly give rise to a multiplicity of different regional interest rates. Therefore, contaminating one regional interest rate with inflation need not have direct repercussions abroad. However, even in a repressed capital market, the artificial expansion fueled in a region by paper money injections would reverberate much beyond its borders. This is true because of the worldwide integration of commodities markets. When entrepreneurs begin to bid higher order production goods, using the money newly created by the monetary authority, the prices of these producers goods tend to rise everywhere. As long as the raw materials and capital goods' prices will not be uniform throughout the world, speculators will make a profit by importing them cheaper and exporting them to the places where prices are higher. Thus, monetary induced distortions in relative prices in one part of the world will quickly spread over the whole (world) market, even if free exchange of capital goods is confined to small areas.

Total insulation against a foreign induced business cycle can be achieved only by a complete prohibition of all exchanges, that is in an autarkic economy. Because the freedom of exchange allows individuals to specialize in production and thus contributes to the formation of an elaborate structure of capital, the isolationist region rejects the benefits of the division of labor. Thus, the counterfactual price to be paid by the protectionist would be a complete economic backwardness.

### CONCLUSION

In this paper I have tried to prove that the insulation argument for independent fiat currencies is flawed, both because of its lack of sound theoretical foundation, and because of its empirical irrelevance. We have seen that the confusion about essential monetary notions makes the case for monetary independence look intuitively appealing. However, the occurrence of asymmetric trade shocks cannot be a good reason in its favor, for such shocks are more an illusion due to an incomplete knowledge of economic history and to a weak understanding of the adjustment mechanism in a worldwide integrated economy. Moreover, regardless of the importance of such trade changes, devaluation cannot offset the need for relative prices and wages adjustment to match the impact of the change. And by the additional inflationary effects it entails, devaluation harms the structure of production and makes the adjustment even more difficult. Finally, we have seen that even if it

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that for developing countries, exogenous fluctuations in capital flows have once again become a dominant business cycle shock. They remain a potential problem in developed economies as well."

is desirable to insulate a region against a foreign shock—when this shock is the manifestation of a boom—it is impossible to do it. The insulation idea should therefore be eliminated from the field of international monetary economics, together with the policies advocated on its behalf.

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# HERMENEUTIC ECONOMICS: BETWEEN RELATIVISM AND PROGRESSIVE POLYLOGISM

PIERRE PERRIN

Confronted with the limitations of formalism, many economists have adopted alternative epistemological approaches which are supposed to favor a better understanding of economic phenomena. Among those, hermeneutics has enjoyed a certain success. Hermeneutics is a general theory of understanding based on the interpretation of an external reality testifying to an internal subjective reality. In economics, the interpretive act (or the process of theorization) consists in the ongoing dialogic confrontation between what contemporary economists know and what the individuals under scrutiny express of their own interpretation of the world.<sup>1</sup> However, as some have shown (Albert 1988; Gordon 1986; Smith 1990), this approach appears to lead to a dead end (for instance, radical epistemological subjectivism).<sup>2</sup> This paper agrees with the criticism addressed to hermeneutics and develops a new argument built upon the Misesian criticism of polylogism.<sup>3</sup>

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<sup>1</sup>A detailed definition of hermeneutics endorsed by most economists is offered in order to make my demonstration, see especially "From Hermeneutics to Progressive Polylogism" below.

<sup>2</sup>Epistemological subjectivism is understood here as any theory of knowledge holding that knowledge varies with individuals, groups (intersubjectivism), and their environment. From a strictly logical point of view, it denies any objective value to propositions and concepts. I will employ the more colloquial term *relativism* for *epistemological subjectivism*. Although I regard relativism as absurd, the aim of this paper is not to refute it. Therefore, my personal view on relativism does not question the main argument of the paper.

<sup>3</sup>The term *polylogism* seems to have been coined by Mises (1998).

Polylogism is an epistemological view based on the proposition that the logical structure of the mind is *substantially* different between human groups. It thus implies that the logical laws of thought (i.e., the law of noncontradiction, *modus ponens*, etc.) are different between groups to which individuals belong.<sup>4</sup> Few authors have explicitly endorsed this view. Moreover, most of the authors quoted by Mises are minor or forgotten ones (Tirala, Dietzgen). However, although polylogism is no longer defended as such, it is interesting to question whether it can be of logical consequence to some contemporary epistemological schools.

This paper shows the possible existence of what I call progressive polylogism into the epistemological works of Austrian economists influenced by hermeneutics. By denying the charge of *relativism* that logically follows from one of the hermeneutics' fundamental assumptions (the intersubjective and contextual nature of knowledge), these economists endorse a particular variant of polylogism. This crucial argument strengthens the conclusion that the hermeneutic conception of knowledge should not be applied to the field of theoretical economics.

"Two Kinds of Polylogism" presents the different types of polylogism described by Mises and their criticisms.<sup>5</sup> "Marxist Historicism and Progressive Evolutionary Polylogism" is an extensive study of Marxist polylogism that defines the general meaning of progressive evolutionary polylogism. (Although there are many non-Marxist sources of evolutionary polylogism, the Marxist version provides a very clear illustration.) "From Hermeneutics to Progressive Polylogism" precisely argues that those Austrians influenced by hermeneutic philosophy can unintentionally be led to defend progressive evolutionary polylogism.

## TWO KINDS OF POLYLOGISM

Although no one can be *a priori* absolutely convinced that others possess logical categories of the mind identical to oneself, this does not allow one to assert that the categories of the human mind are substantially different from person to person, group to group, society to society, culture to culture.<sup>6</sup> However, the polylogists have asserted just this (often *a posteriori*, it should be

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<sup>4</sup>What is usually meant by *logical* is something epistemological—e.g., the categories of the mind that give form and intelligibility to what the senses present. Sometimes these are called *conceptual schemes*, *paradigms*, or *exemplars*. The literal and technical sense of *logic* and *logical* is used here to avoid ambiguities.

<sup>5</sup>Although Mises proposes many arguments against polylogism, I will mention a few recent criticisms that hermeneutic economists could develop. This allows me to show that the interpretative methodology endorsed by these economists must not be entirely rejected and only needs to be kept within the relevant field of application.

<sup>6</sup>It is shown that the efficiency of the scientific debate involves a necessary presupposition which questions an epistemological foundation of hermeneutic economics.

noted), by bringing forth two radically incompatible conceptions of polylogism. The less restrictive conception is the one called logical *relativism*. The relativist variant involves the impossibility of any universal social science (i.e., explanations of principles independent from particular circumstances of time and place). According to Mises (1998, pp. 84-85), this polylogism has been endorsed by ethnologists. It usually results from their misunderstanding of the behaviors of individuals belonging to specific social groups.

In his study of magic rites within primitive African ethnic groups, Lévy-Bruhl (1922) explains that these rites are not logically and causally understandable to the ethnologist. Therefore, the primitive mentality would be *pre-logical*. Lévy-Bruhl thus assumes a hierarchy between the logical structures of the mind. This refers to a restricted conception of polylogism, also defined by Mises.<sup>7</sup> In such a view, there is a “scale” of logical structures of the mind. Individuals at the top of the “scale” belong to the group possessing *the* logic. Members of this group are “superior” human beings who make less deductive errors than members of groups in which logic is seen as inferior.

According to Mises, this position was precisely that of the orthodox Marxist and Nazi ideologists.<sup>8</sup> They thought that any scientific claim opposite to theirs could only be false theories sealed with the evils and the “under-logic” of the bourgeois or Jewish mind. But, as Mises (1998, p. 75) writes:

Neither the Marxians nor the racists nor the supporters of any other brand of polylogism ever went further than to declare that the logical structure of the mind is different with various classes, races, or nations. They never ventured to demonstrate precisely in what the logic of the proletarians differs from the logic of the bourgeois, or in what the logic of the Aryans differs from the logic of the non-Aryans, or the logic of the Germans from the logic of the French or the British.

Yet, many authors could call for some indirect proofs in favor of polylogism. Indeed, the Marxist polylogists weakly explain that the non-Marxist theoreticians’ psychology or class-interest leads them to construct some theories that a sound proletarian logic should reject. However, as Mises (1998, pp. 75-76) writes,

it is not enough to reject a theory wholesale by unmasking the background of its author. What is wanted is first to expound a system of logic different from that applied by the criticized author. Then it would be necessary to

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<sup>7</sup>According to Mises (1998, pp. 36-38), the writings of Lévy-Bruhl argue more against polylogism than in its favor. In my view, even if Lévy-Bruhl rightly acknowledges that the prelogical reasoning—based on the so-called law of participation—is coexistent with the logical, the superior frequency with which the primitive uses the first one rather argues in favor of the polylogist thesis.

<sup>8</sup>Lévy-Bruhl does not profess these ideologies (and does not define himself as a polylogist). Moreover, even if Mises stresses the cases of Marxists and Nazis, he *does not* say that all polylogists are Marxists or Nazis.

examine the contested theory point by point and to show where in its reasoning inferences are made which—although correct from the point of view of its author’s logic—are invalid from the point of view of the proletarian, Aryan, or German logic. And finally, it should be explained what kind of conclusions the replacement of the author’s vicious inferences by the correct inferences of the critic’s own logic must lead to. As everybody knows, this never has been and never can be attempted by anybody.

More seriously, Lévy-Bruhl’s observations can be interpreted as a support of the polylogist thesis. For instance, as Boudon (1986; 1990) argues, they reveal that the primitive rain-makers do not seem to master the laws of statistical inference (as their magic rites attest),<sup>9</sup> whereas the Western man usually does. Even the Western man in the street possesses a basic statistical knowledge which allows him to limit his mistakes in reasoning. A proof of polylogism would possibly lie in such a difference.

This polylogist interpretation of Lévy-Bruhl’s works is open to criticism. Of course, Boudon (1986; 1990; 1995) acknowledges that the functioning of thought relies on mistaken modes of inferences in many situations. He also admits that many of them occur more frequently within specific social groups. However, basing his argumentation on famous experiments made by Tversky and Kahneman (1972; 1973), Boudon (1986, pp. 100–18; 1990, pp. 80–100) observes that the nonmastering of statistical inference within primitive ethnic groups does not prevent the contemporary Western man from failing to master it in analogous situations.<sup>10</sup> Confronted with a little more complex experiment, *most men are mistaken*.

Stressing this point still suggests that the failures of the human mind do not exactly occur in the same situations according to groups. It would be then theoretically possible to claim that some groups of people either always think “illogically” on some subjects or sometimes think “illogically” on some subjects. However, these endeavors are still not a proof of polylogism. Indeed, in the case of statistical inference, its mastering requires a learning process that any man has to undergo. If this is not the case, the individual shall not adopt the correct way of reasoning that statistical inference presupposes. Two empirical observations can be useful in stressing this argument.

Observation 1: Currently, statistics and probabilities appear in most of the information learned by the Western man. Then, unsurprisingly, he masters

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<sup>9</sup>Although these laws are *inductive*, they must be logically consistent with the axioms on which they are based. Therefore, as such, they must be consistent with the logical laws of thought.

<sup>10</sup>Boudon explains that these errors do not result from the irrationality of individuals. A mistaken mode of inference comes from the fact that it appears to be satisfying in usual situations. Since the men involved in psychological experiments perceived the situation as sharing several important characteristics with concrete situations in which this mode of inference works, they are lead to be excessively trustful in it. Thus, whatever social groups they belong to, they are used to following it into situations where it is not relevant.

statistical inference a little more correctly than the primitive man.<sup>11</sup> This is also why the statistician probably masters the statistical inference better than the nonstatistician, as the logician makes fewer deductive errors than the non-logician, and so on. The fact that the primitives are often mistaken on many subjects, whereas their Western brothers are not, does not prove the existence of differences into the fundamental and logical structures of their minds.

Observation 2: The offspring of the primitives adopts the same modes of reasoning in the same situations when it is brought up within a really Westernized environment, as common-sense experience attests. This observation leads to two conclusions: first, that the above-mentioned learning process is decisive in such a matter and, second, that there is no difference of nature between the logical structures of the mind among individuals.

*In fine*, polylogism falls into the trap of inextricable historical paradoxes. For example, is it not true that technology and science developed under the impulse of the Nazi state had to rely on scientific propositions demonstrated by Jewish scientists whose minds were seen as inferior and incapable of real science? Such cases blatantly undermine the epistemological foundations of the polylogists' view.

More generally, the fact that the social scientist does not succeed in interpreting a given behavior does not mean that any reasons cannot explain it.<sup>12</sup> First, the incomprehensibility can result from the fact that specific modes of reasoning have not yet been acquired by the observed. Or, it may also result from the fact that the intersubjective knowledge on which numerous collective behaviors are based is not equally shared in every group. It is then no longer a problem of logic. The problem follows from an unknown cognitive context and a holistic and contextual nature of specific knowledge:<sup>13</sup> within

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<sup>11</sup>Why do the primitives progress slower than Western men in the mastering of statistical inference? It is not because the primitives are not too smart. Many factual reasons may explain the fact that some groups master specific knowledge or sciences whereas some others do not. For instance, it may result from the pressure of a radical environmental change, or an unintentional institutional framework favorable to abstract research, etc.

<sup>12</sup>Mises (1998, pp. 84-85) does not deny that some differences in behavior and civilization between races exist. "However, Mises explains, these considerations refer only to the motives determining concrete actions, not to the only relevant problem of whether or not there exists between various races a difference in the logical structure of mind" (p. 85).

<sup>13</sup>Indeed, the reality of many different behaviors is an *a posteriori* proof that the nature of many pieces of knowledge is holistic or contextual (a view endorsed by hermeneutic economists). To this regard, it seems to be paradoxical to use an argument—that of the contextual nature of shared social knowledge—to confound polylogism, since as shall be explained, the excessively contextual conception of knowledge is one of the main causes of polylogism to which hermeneutic economics leads. In fact, hermeneutics can be criticized because it gives this assumption (the contextual nature of knowledge) an excessive range, *entirely conditioning* the manner of acquiring knowledge in the social sciences.

the particular circumstances of time and place in which they perceive and act, individuals belonging to specific groups can have some *good reasons*<sup>14</sup> to collectively adopt beliefs and behaviors incomprehensible to the outside observer. Nevertheless, the observer can make them intelligible, as the works of Weber (1995) or Boudon (1986; 1990; 1995) can testify.

It may now be useful to more carefully examine the mechanisms of polylogism, particularly those based on Marxist evolutionary thought. This study leads me to define the concept of progressive evolutionary polylogism and constitutes a necessary stage because the rest of the analysis will show that hermeneutic economists could be charged with progressive polylogism.

#### MARXIST HISTORICISM AND PROGRESSIVE EVOLUTIONARY POLYLOGISM

Those who call themselves “realists,” only interested in facts, often evoke the refusal of aprioristic and deductive methods. By collecting historical facts, they hope to discover the laws of social and human evolution. Some, like Marx or Comte, claim to discover those laws with which many agree, forgetting that the stroke of inspiration often comes from a naïve selection of more or less salient appearances.<sup>15</sup> But, above all, the fact that the explanation of the evolution of global systems presupposes the change of all the elements that constitute a system (this being justified by a collection of appropriate facts) easily enables the deduction that man himself, as an integrated part of the system, is deeply changing (Hayek 1979, pp. 132–39). Such an approach is adopted by Marxist historicists who implicitly assume that the mind of the bourgeois cannot be the same as that of the rising visionary class, the proletariat avant-garde. However, as Hayek observes (1979, p. 137):

Through the theory of the variability of the human mind, to which the consistent development of historicism leads, it cuts, in effect, the ground under its own feet: it is led to the self-contradictory position of generalizing about facts which, if the theory were true, could not be known. If the human mind were really variable, so that . . . we could not directly understand what people of other ages meant by a particular statement, history would be inaccessible to us.

In order to immunize their theory from logical criticisms, Marxist historicists satisfy themselves with an explanation that only people with “class-consciousness” (i.e., the Marxist social scientist and the proletariat avant-garde)

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<sup>14</sup>As Boudon (1995) explains, *good reasons* do not mean objectively valid reasons. These terms rather mean that some ideas, values, etc. are able to convince people more easily according to their historical and sociological position, even if these ideas or values are objectively wrong.

<sup>15</sup>It should be noted that Marx was not a pure empiricist. His approach seems to be aprioristic. It is grounded on the *a priori* “nature” of the man as a producer (*homo faber*). See Engels and Marx (1976).

can transcend those stages of false-consciousness specific to the capitalist class. Actually, Marx never took the risk of proposing several graded conceptions of rationality and logic although, according to Mises (1998, p. 74), some of his successors did. Moreover, conscience and logic are two different concepts.

However, Marx and Engels explicitly write that man is a product of the evolution of matter and then of the successive modes of production. According to Marx and Engels (1976, p. 71),

[W]hat [individuals] . . . are coincides with their production, both with *what* they produce and *how* they produce. The nature of individuals thus depends on the material conditions determining their productions. (italics added)

Likewise, Engels and Marx (1976, pp. 77-78) write a few pages later:

Conceiving, thinking the mental intercourse of men, appear at this stage as the direct efflux of their material behavior. The same applies to mental production as expressed in the language of politics, laws, morality, religion, metaphysics, etc. of a people. Men are the producers of their conceptions, ideas, etc.—real, active men, as they are conditioned by a definite development of their productive forces and of the intercourse corresponding to these, up to its furthest forms. Consciousness can never be anything else than conscious Being, and the Being of men is their actual life-process.<sup>16</sup>

These quotations implicitly display many trends of evolutionary polylogism. From a general point of view, evolutionary polylogism can be described as follows: with the irreversible flow of time, the logical structure of the mind continuously evolves. In other words, it simply assumes a “long run” radical change in the very nature of mankind.<sup>17</sup> *Lato sensu*, this polylogism can be

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<sup>16</sup>Original capital letters are in the French edition.

<sup>17</sup>Paradoxically, although Mises condemns polylogism, he thinks that the laws of thought are the product of biological evolution. Then, it is as if Mises (1998, pp. 33-34) admitted the possibility of different laws of “logic” in the (biological) long run:

There were beings which, although not yet equipped with the human faculty of reason, were endowed with some rudimentary elements of ratiocination. Theirs was not yet a logical mind, but a prelogical (or rather imperfectly logical) mind. Their desultory and defective logical functions evolved step by step from the prelogical state toward the logical state. Reason, intellect, and logic are historical phenomena. There is a history of logic as there is a history of technology. Nothing suggests that logic as we know it is the last and final stage of intellectual evolution. Human logic is a historical phase between prehuman nonlogic on the one hand and superhuman logic on the other hand. Reason and mind, the human beings’ most efficacious equipment in their struggle for survival, are embedded in the continuous flow of zoological events. They are neither eternal nor unchangeable. They are transitory.

interpreted as relativism. Notwithstanding this interpretation, the notion of material progress is evident in the orthodox Marxist theory (see below). On this basis one can define what I call progressive evolutionary polylogism: with the irreversible flow of time, the logical structure of the mind continuously evolves and *improves*.

It is now useful to show to what extent such orthodox Marxism is a progressive polylogism. If reason and will are entirely subject to the laws of evolution of matter, this logically means that everything in Marx's mind can only be the product of the inner contradiction of the production mode of his time period. However this does not allow him to claim that he possesses the truth of the very historical laws. In fact, since orthodox Marxists are never able to *prove* that history wanted them to have information about its plan of evolution, there can be no necessary logical inference between the idea of historical materialism and that of intellectual knowledge of objective stages of history. A possible exit is to postulate a superior logic inaccessible to any critic of orthodox Marxism, which history makes appear in the nineteenth century, and which establishes this logical inference into the Marxist minds! This is the first kind of progressive polylogism. It enables a better understanding of why orthodox Marxists always answer to critics that they were the product of an ideology (i.e., systems of thought polluted by class interests).

But most of all, if thought is a product of the brain and thus of evolving matter, why shouldn't the laws of logic evolve? For Marx, Engels, and his successors, the evolution of matter is endless. The communist mode of production is specifically this world of the pure *praxis*, in which action takes precedence over anything and initiates in everything the contradiction which is the continuous engine of material change (Engels 1979). The belief in some stable and unchanging things which characterizes what Marx and Engels name "idealism" is only a product of the evolution of the matter. As Engels (1979, pp. 7-8) writes,

[for] dialectical philosophy, nothing is final, absolute, sacred. It reveals the transitory character of everything and in everything; nothing can endure before it except the uninterrupted process of becoming and passing away, of endless ascendancy from the lower to the higher.<sup>18</sup>

Now, since the brain is matter and is submitted to the dialectic law of evolution, its logical structure should change. Moreover, if the notion of progress is correlated with the unfolding of history, why cannot the evolution of the

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<sup>18</sup>According to Rothbard (1990), Marx was more an *eschatologist* Gnostic than a materialist. Like most of the historicist Gnostics, he was esoterically and mystically informed of the ineluctable and eschatological laws of history. In such a view, esoteric mysticism seems to be the counterpart of polylogism in the "scientific" domain. I don't agree with the Rothbardian thesis, since Marx clearly explains that "Communism is the necessary shape and the forceful principle of the near future. But communism is not as such the end of human evolution" (quoted in Ousset 1970, p. 109). Therefore, Marxism is not eschatological (although its popular conception is).

laws of logic also be a progress of the same laws? Accordingly, each stage should be superior to the “preceding” stage, so that the present highest stage, currently proletarian logic, could legitimately criticize earlier stages even if it is itself found wanting by subsequent stages.

#### FROM HERMENEUTICS TO PROGRESSIVE POLYLOGISM

Although at the present time, no one seems to support polylogism as described above, it is nevertheless possible to explain how hermeneutic economics leads to progressive polylogism. In this section, I will first present the foundations of hermeneutics followed by an explanation of how the hermeneuticists’ rejection of relativism may involve this polylogism.

Hermeneutics is originally the science of interpretation of ancient biblical texts. Its scope has progressively widened under the influences of some philosophers such as Gadamer, Ricoeur, and Heidegger. Their intent is to turn hermeneutics into a *general* discipline with the main purpose of revealing a correct understanding of texts and works about art and religion on the basis of the interpretation of ancient writings. More precisely, according to Gadamer (1996), the study of past documents will lead us to the discovery of the great questions concerning the people from that particular time period through examination of the answers in these very documents (see also Warnke 1993). In economics, hermeneutics has recently been endorsed by some Austrian economists. For instance, Lachmann (1991), as a radical subjectivist, offers to extend the application of subjectivism to the very constitution of economic theory. Hence, he places economics in the field of *interpretative* study of the past and turns it into a specific historical discipline. From his personal view results his support of hermeneutic philosophy, some constitutive characteristics of which turn this interpretive discipline into the only source of knowledge.

#### *Hermeneutics and Relativism*

For Gadamerian hermeneutics, which inspired Lachmann and his disciples, theoretical knowledge of the past expressed in writings does not provide any knowledge about the real world. It only provides information about what the knowing subject expressed about the world. Thus, the observed object and the theoretician-subject are not dissociable. The fundamental idea stressed by hermeneutics is the *intersubjective* nature of any past knowledge, which means that the knowing subject’s beliefs about the world depend crucially on the historical and cultural context in which the subject evolves. Consequently, the economist’s task becomes that of interpreting the past in the most appropriate way by taking into account the fact that this intersubjective context historically influenced the knowing subject’s theory (Madison 1991).<sup>19</sup> In order

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<sup>19</sup>*Understanding* (*verstehen*) and interpretation are the key concepts in the hermeneutic approach (see Dilthey 1992). Introspective and empathic understanding is

to remain consistent, attention must be paid to the fact that the economist himself evolves in a cultural and historical context that greatly shapes his efforts of understanding and interpretation of the past.

In economics, the strongest defense of hermeneutics can be found in Rector (1991), which is based on Gadamer's works.<sup>20</sup> Rector argues that beliefs cannot have any intrinsic correspondence into the real world. Following Gadamer, Rector (1991, p. 214) even rejects the very idea of Aristotelian correspondence-truth as fundamentally unsatisfying:

For Gadamer, it would be impossible to apply such criteria [a premise based on Aristotelian correspondence-truth] because there is no vantage point from which the totality of a cognitive structure can be evaluated. The reason why this internal position cannot be overcome is that cognitive systems are not restricted to the beliefs of autonomous individuals. Rather, cognitive systems are part of the culture that individuals participate in.

According to Gadamer, the beliefs constituting the basis of *cognitive* and *theoretical* systems are initially transmitted through the use of language, which characterizes the cultural and historical period in which the theoretician lives. As Gadamer explains, it is only through language that the world appears to us. Then, "with respect to the illusions of self-consciousness, just as with respect to the naïveté of a positivist concept of 'fact,' the inter-world of language proves to be the genuine dimension of the given" (Gadamer 1991, p. 205). The so-called epistemic beliefs embedded in language make a certain understanding possible and serve as a basis for the formation of plausible beliefs. Language, consequently, enables an original experience of the world. On the other hand, it also shapes a given theory as its peculiar product,

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also fundamental within the Austrian traditional approach, but it is first based on the construction and definition of concepts (*begreifen*). In hermeneutics, understanding is not grounded on reliable true concepts but only amounts to the search for meanings on the basis of many subjective apprehensions of reality. In opposition to the Austrian approach, hermeneutics denies the criteria of *objective explanation*. For an interesting and detailed discussion about *verstehen*, see Bacharach (1989). On the conception of "*verstehen*," see Weber (1995, pp. 27-52), Lachmann (1971) and Mises (1998, chap. 2, esp. pp. 51-58; 1985, pp. 183-323). If the temptation is great to oppose Weber's and Mises's works, Alfred Schutz's writings are an interesting tentative gathering into a similar epistemological unity. See especially Schutz (1967) and Kurrild-Klitgaard (2001). It should also be noted that the Hayekian conception of knowledge acquisition and *verstehen* (see Hayek 1952; 1979, esp. chaps. 3 and 4) can take his works toward the type of hermeneutics described above (see Miller 1979).

<sup>20</sup>To be sure, there are other writings in defense of hermeneutics. However, Rector's contribution seems to be the most powerful. The purpose here is not to study hermeneutic philosophy in general, nor to criticize Heidegger, Ricoeur, and Gadamer's works. Gadamer's writings are used to make the point more convincing. The criticism here points only to the interpretation and epistemological position of economists calling for the application of hermeneutic epistemology into theoretical economics.

changing with the evolution of linguistic structures.<sup>21</sup> According to Rector, this is the reason why Gadamer deduces the interdependency of the subject and the object.

At this stage, this amounts to assuming that any knowledge and theory are implicitly trapped in particular circumstances of time and place.<sup>22</sup> It is very easy to deduce relativism from those assertions. If the analysis itself depends on the intersubjective cultural context, how can the scholar make a correct interpretation of the past? The constraint of historically situated language leaves the “knowledge” of another time incomprehensible. In other words, if the enlightenment of the past enables one to reconsider present theories laden with epistemic beliefs of the historical period during which the research was done, it actually enlightens nothing since its interpretation is itself assumed to depend on the scientist’s underlying cultural beliefs. At best, interpretation is a rereading specific to the period during which the research was done. Therefore, it allows neither to question the past and present beliefs nor to take them into account in order to achieve a better understanding. Hence, there would be as many “truths” in relation with a given phenomenon as there were interpretive enlightenments.

*The Failure of the Hermeneutic Counterattack:  
From Relativism to Polylogism?*

Gadamer describes the historical process of interpretation and understanding of the past, which, for Rector (1991, pp. 219–22), makes it possible to counter the charge of relativism. For Gadamer, the *efficaciousness of history* has to be taken into account. This term means that works from the past influence present times. Through this influence, something of the past is accessible to the scientists in the present. The understanding of the past through the present occurs when historians derive their understanding of texts from a tradition to which they belong. If historians are aware of this efficaciousness of history, they also become aware of the constraints of their own hermeneutical situation.<sup>23</sup> Then, the improvement of the understanding of the past occurs through the universal mediation of language: “we discover how a thing is when we talk about it” (Gadamer 1991, p. 55). The use of language

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<sup>21</sup>Assuming that the structure of language has an influence on the theorizing process—which is likely to be—it would be interesting to investigate the possible existence of universal structures in human language. From this point of view, the linguistic foundation of Gadamerian hermeneutics would deserve a careful scrutinizing. See also Smith (1990, pp. 223–27).

<sup>22</sup>For a criticism, see Rasmussen (1984). Rasmussen denies that a claim made at some time and some place necessarily implies that one is cut off from reality. Indeed, the fact that the mode of existence of our knowledge is not the same as the mode of existence of reality does not prevent our knowledge from corresponding to reality (i.e., *Veritas est adequatio rei et intellectus*).

<sup>23</sup>The hermeneutical situation entails the fact that understanding of the past changes with the historical period in which the historian lives.

allows a *continuous improvement of understanding and knowledge* by undertaking an *unfinished* and *dialectical* dialog between the texts of the past and the interpretation by the scientists of the present. This dialectical process questions past writings and the answers they brought, that is, it looks at the questions that were meaningful to the authors from the past. (In this way, this dialectic principle of hermeneutics seems to be close to those of the Popperian critical epistemology—i.e., *infinite* process of conjectures and refutations. Every theory—including the metaphysical ones and the prejudices—contributes to problem-solving, as a basic material for criticism or as enabling critical competition with other theories).<sup>24,25</sup> While questioning the past, we collect interpretations that differ from the present day which unveil some of our tacit beliefs that we have to assess with the consistency of our own systems of thought.<sup>26</sup> In particular, answers to questions that we seek in the documents of the past can give some answers but raise new questions, many of which will vary from some of our prejudices and epistemic beliefs. When these differences are revealed, we thus unveil certain truths about ourselves and the way we look at the world. For Gadamer (1991, p. 55), through this slow dialectical process,

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<sup>24</sup>In the same vein, Lachmann (1994, p. 138) thinks that “[h]ermeneutics is in conformity with the maxims of critical rationalism.”

<sup>25</sup>For a presentation of the Popperian thesis, see Popper (1989). There is a problem with Popperian critical rationalism. Contrary to what critical rationalism suggests, an evolutionary epistemology often defended by hermeneutic economists, Boudon (1990, chap. 4) demonstrates that the scientific process of conjectures and refutations will *never* enable the questioning of certain principles regarded as objectively true. As explained by Boudon, Popper’s epistemology can only be applied to *open* sets of questions. Yet, there are issues that constitute *closed* sets of questions. For instance, either  $q$  is real or  $q'$  is real (exclusive or), without taking into account  $q''$ ,  $q'''$ , etc. The praxeologist is faced with this type of issue: either man is an acting being or he is not? This question evokes one answer and only one that is necessarily true. In such a case, the *historical* process of conjectures and refutations also implemented in hermeneutics is irrelevant since it assumes more than two possible exclusive answers to the question. For a clear synthesis on the limits of Popperian epistemology, see Bramoullé (1995). About some difficulties with the falsificationist principle, see Boudon (1990, chap. 4).

<sup>26</sup>According to Lavoie, tacit knowledge is particularly important, since it can make an economist reject a theory. However, to justify this rejection, the economist must afterward develop his arguments explicitly. Lavoie answers that if the entrepreneur finds the “truth” thanks to his tacit knowledge, the economist can proceed in the same way. But the economist is not the entrepreneur, and Lavoie is confused between the object under study and the studying subject (Gordon 1986, pp. 9–13). In fact, Lavoie rejects what the contemporary epistemologists call the KK thesis (the idea that you don’t know something unless you also know that you know). As such, this rejection is acceptable. However, the problem is precisely that within the scientific debate, each one must do his best to make his argument explicit. Therefore, a scientist who calls on the KK thesis to assess that he has not clearly justified his positions, would prevent himself from accepting the criteria necessary in a productive and real scientific debate. One cannot use the denial of the KK thesis to avoid why one accepts one account of reality over another.

language continually accomplishes the synthesis of the horizon of the past and the present. We understand each other to the extent we talk to each other, we don't use the same language and, however in the end, we bring forward to each other the things by the use of words, the things "said" by the words.<sup>27</sup>

Eventually, if cultural content-related epistemic beliefs do exist, the ongoing hermeneutic study of past texts permits us to find out many epistemic beliefs of the present and the past. It also provides a new and better understanding of phenomena. Then, Rector concludes that there are interpretations that are "more correct" than others. Consequently, the charge of relativism is excessive.

However, we argue that this counterattack is far from convincing. Indeed, how is it possible to deal with different historical and linguistic traditions? Are they commensurable? Even if we assume so, any act of understanding involves a dimension of sameness and a dimension of difference (Schutz 1967). As Bacharach explains (1989, pp. 129–30), the success of understanding depends on this sameness. It is because I am to a certain extent like you, that the effect of your situation on me, by itself, gives me information about the effect your situation has on you. But, if the situational, cultural, linguistic, and historical distance is too great, the efficiency of understanding can be questioned. Even if we are reasoning with reference to a single cultural, historical, and linguistic tradition, we have to assume that it was not interrupted by any radical revolution or breaking-off in order for the hermeneutical work to remain acceptable. If this condition is not met, the process-like conception of truth endorsed by hermeneutics cannot counter the charge of relativism.

Now, given the assumption of considerable cultural and linguistic distance between the interpreted documents of the past and their current interpreters, hermeneuticists can actually be charged with progressive evolutionary polylogism. First, let us recall hermeneutics' fundamental propositions:

1. Words and concepts are not controlled by the scholar since their meanings are inseparable from tacit beliefs contained in his language and culture. It means that language-mediated knowledge is essentially historical and contextual (i.e., the specific meaning of words and concepts depends on many pieces of knowledge, the meaning of which remains essentially tacit and time-dependent).

2. Thanks to the ongoing dialectical dialog between past and present, *scholars can always progress toward further truth*. This is why hermeneuticists refuse the charge of relativism. My demonstration of how hermeneutics leads to progressive polylogism can usefully rely on the following syllogism:

- (1) *All men are utility-maximizing*. (2) *Socrates is a man*. (3) *Thus, Socrates is utility-maximizing*. The concepts contained in the subject "man" and the

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<sup>27</sup>Indeed, Gadamer (1996) forges the concept of horizon. The proper hermeneutical situation of a scientist leads him to have a specific horizon, that is, to have concerns and questions that are obvious, whereas others will be unattainable for him.

predicate “utility-maximizing” cannot be completely defined. In hermeneutics, as just suggested above, their definitions are incomplete because they cannot express all the underlying tacit and cultural beliefs. Moreover, given the considerable cultural and historical distance between the interpreted documents and the interpreters, the dialectical dialog between past and present no longer works. Let’s assume that the syllogism is formulated at  $P_1$ .<sup>28</sup> At a future time  $P_n$  (much later than  $P_1$ ) scientists begin to interpret this syllogism. Since a considerable historical and cultural distance exists between  $P_1$  and  $P_n$ , “man” and “utility-maximizing” can only be given implicit definitions prisoner of their historical period. Therefore, in order to say something on this syllogism, the scientists at  $P_n$  can refer to the only explicit definitions of “man” and “utility-maximizing.”<sup>29</sup> In any case, as Gadamer is forced to acknowledge, in order for language to establish a common horizon through an intertemporal dialogue, an agreement is required “not only on the meaning of words” but also “with regard to ‘things.’” Now, if we refuse the charge of historical relativism *and*, as Rector assumes, that an unfinished improvement of knowledge toward further truth can occur, this improvement can only operate through the syllogism’s logical consistency. Yet, everyone reading the syllogism formulated at  $P_1$  should agree with it, at least from the point of view of its formal validity. However, in hermeneutics, if only the explicit definition of the concepts can be taken into account and if knowledge improves from one period to another, it means that one interpretation in  $P_n$  will be “more logical” than that in  $P_1$ . The only way to legitimize this conclusion is to assume that the *logical structure of scientist’s mind in period  $P_n$  is always more powerful than that in  $P_1$* . It would enable some corrections of formal logic, thus representing a progress toward more logical truth.

In this syllogism, the logical structure of the scientists’ mind at  $P_1$  can make them believe that the syllogism is valid. However, this is impossible to assert if we admit the main assumptions that nothing (thus including a syllogism) is

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<sup>28</sup>The cutting out of time in periods is used because it is methodologically useful in understanding the demonstration.

<sup>29</sup>Hermeneutic economists will probably acknowledge that explicit definitions of concepts are possible and do not deserve incessant discussions from one period to another when they are based on simple representations of the reality and a concrete world that anyone can understand. (If they do, they contradict the *relativist* position of many hermeneuticists according to which there seems no way for a meaning to have any foundation in the realities being studied).

To be sure, for the realist epistemology endorsed here, the issue of truth of the concept is raised only when the intellect bears a judgment upon the conceptualized thing (this is the case when we explicitly define a concept). Of course, this judgment can be erroneous even if it is not likely for certain objects. However, the notion of truth is not involved as long as the concept remains an intellectual similitude with the object that the intellect generates under the action of the object’s sensible species. Therefore, the intellect faced with “Socrates” will forge the concept of man *de jure* and usually *de facto*. For a clear and realist explanation of what a concept is, see Gilson (1997, p. 172 and pp. 288–91).

absolutely true and all imperfect truth necessarily emerges through an unfinished dialectical quest. Therefore, under the above-mentioned conditions, when the hermeneuticist denies the charge of relativism, he is led to defend an absurd progressive evolutionary polylogism.

#### CONCLUDING REMARKS

As Mises (1998, p. 24) writes,

It may be admitted that it is impossible to provide conclusive evidence for the propositions that my logic is the logic of all other people and by all means absolutely the only human logic and that the categories of my action are the categories of all other people's action and by all means absolutely the categories of all human action.

Yet, Mises immediately denies the relevance of this argument by reasonably explaining that

the pragmatist must remember that these propositions work both in practice and in science, and the positivist must not overlook the fact that in addressing his fellow men he presupposes—tacitly and implicitly—the intersubjective validity of logic and thereby the reality of the realm of the alter Ego's thought and action, of his eminent human character.

Hermeneutic economists have also adopted a similar argument in order to legitimize its positioning. As Lavoie (1986, p. 204) explains, in order to communicate with the others, whomever and wherever they are, we must presuppose an intersubjective world:

The level of practical, common-sensical reasoning in the day-to-day affairs of men, the level of already existing meaning which some writers in the hermeneutics tradition call “the intersubjective life world,” is taken for granted by all active scientists when they try to persuade one another. In the sense it is *a priori* but it is not immune to criticism.

This type of *a priori* is also acknowledged by the philosopher Donald Davidson whose work is sometimes considered as belonging to the hermeneutic tradition. According to Davidson (1985, see esp. pp. 141-54 and 183-98), everyone must obey a *principle of charity* in the act of communication. This principle means that every man has, as much as possible, to match up the sentences he considers true in his own language with those uttered by his interlocutor. But each one has also to do his best to attach meaning to the most absurd elocutions of the other. Therefore, one has to suppose the sentences that the interpreted considers as true are indeed true (i.e., corresponding to an existing reality), in addition to the fact that we, the interpreter, take them as true. If Davidson is right, it means that the interpretation necessitates an external world, *a part of which can be objectively acknowledged*. The consequence is the impossibility of a form of relativism according to which the world is

only relative to personal or shared conceptual schemes. An objective shared world is presupposed by any interpretation and a part of it could become *definitely* immune to criticism.<sup>30</sup>

Of course, contextual knowledge exists. This is why any interpreter should *methodologically* do his best to understand the behaviors of others. But, if context-free knowledge exists, it questions the hermeneutic fundamental assumption of the essentially contextual and historical nature of any pieces of knowledge, and the legitimacy of an epistemology relying on an unfinished process of conjectures and refutations (as the texts by Lavoie and Lachmann testify). It should be noted that renouncing these fundamental assumptions prevents from one being charged with progressive polylogism.

The root of the problem about theoretical economics does not lie in the existence of a tradition or a sufficient cultural proximity. In other words, theoretical economics does not have to deal with problems of an historical and a contextual nature. If a bond exists between the historical and cultural contexts, Barry Smith (1996, p. 184) states that many propositions can be true and account for something about the world without depending on any cultural context. To this regard, as Gordon notes (1986, p. 11), “[i]f truth depends on a hidden context from which it cannot be detached, on what context does this very statement depend? Or, if its truth can be grasped regardless of its context, why cannot other propositions be likewise detached from their context?” Finally, hermeneutics only recalls something trivial, yet important, namely that any theorization is subject to cultural influence. Objective and context-free knowledge exists. Of course, this does not mean that we have to dispose of the issue of whether *applied* economics should rely on empirical and historical elements that go beyond the application of mere praxeological principles.

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<sup>30</sup>Lavoie (1986, p. 204) does not understand this necessary consequence, since he immediately writes at the end of the above-mentioned quotation: “In the sense it is a *a priori* but it is not immune to criticism.” Lavoie does not see that many *a priori* are not open to criticism, not because they are intersubjectively shared, but because they are objective.

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# WHAT AUSTRIAN SCHOLARS SHOULD KNOW ABOUT LOGIC (AND WHY)

STEVEN YATES

## 1.

Why is logic, usually thought of as a branch of philosophy, important to Austrian scholars, most of whom are economists and not philosophers? The aim of this paper is to sketch a number of reasons and draw some conclusions. It is worth observing, first, that David Gordon's *An Introduction to Economic Reasoning*, possibly the only economics text written from an Austrian-School point of view, begins with a brief discussion of deductive logic as the primary tool of economics. What is it about deductive logic that makes it such a good tool? Gordon writes:

Given a true statement, we can, by using deduction, obtain other true statements from it. These new statements not only are true—their truth is guaranteed! If the statements we started with are true, then our conclusions are also true. . . . An argument in which the conclusion is correctly deduced from the premises is called a valid argument. If we can (somehow) arrive at true premises, then we are guaranteed true conclusions. (Gordon 2000, pp. 1-2)

This raises two issues: (1) What relationships between premises and conclusions guarantee that if the former are true the latter must be true? (2) How can premises be known to be true? If we can answer (1) we can do “formal” or “minor” logic. If we can answer both (1) and (2), we can add “material” or “major” logic.<sup>1</sup>

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<sup>1</sup>These are Jacques Maritain's terms; cf. below.

First, though, what is logic? Different modern and contemporary texts provide a range of answers. Morris Cohen and Ernest Nagel (1934, p. 5) wrote in their classic *An Introduction to Logic and Scientific Method*: “Logic may be said to be concerned with the question of adequacy or probative value of different kinds of evidence.” From one of the most widely used contemporary texts, that of Copi and Cohen (1994, p. 2): “Logic is the study of the methods and principles used to distinguish good (correct) from bad (incorrect) reasoning.” These remarks enable us to pin down central aspects of the subject—it is, at the very least, the study of the rules governing correct reasoning, violations of which are called *fallacies*. Logic is more, however: more than just a branch of philosophy, it stands at the core of a set of disciplines that include mathematics, geometry, and praxeology. All these share a single major trait: their fundamental propositions are grasped intellectually and therefore known to be true *a priori*. Logic is broad enough to “stand over” these by virtue of its capacity to study what it means to say that propositions are grasped intellectually and known *a priori*. The French Thomistic philosopher and theologian Jacques Maritain defined logic as follows:

Logic studies the reason itself as an instrument of knowledge, or a means of acquiring and possessing the true. It may be defined as: *the art which directs the very act of reason, that which enables us to advance with order, ease and correctness in the act of reason itself.* (Maritain 1946, p. 1)

Maritain goes on to discuss how logic not only

proceeds in conformity with reason . . . but bears upon the act of reason itself. . . . The *reason* is not another faculty than the *intellect* (the *understanding*): but from the point of view of the functioning of this faculty, it is called more especially the *intellect* when it sees, grasps or “apprehends,” and more especially the *reason* when it proceeds through discourse from the apprehension of one thing known to another. (Ibid.)

Logic is thus a foundational endeavor (contemporary attacks on “foundationalism” notwithstanding).<sup>2</sup> The objects of logic include propositions of complete generality (identity, contradiction). Logicians can reflect on their methods and indicate how these methods apply to other disciplines and domains. It thus provides not just groundwork for the science of economics as understood by Austrian School thinkers but offers common ground with other disciplines, including philosophy and two of its key branches: metaphysics and epistemology.

Reasoning frequently manifests itself as *arguments*—sets of propositions in which some (called premises) are used as evidence to support another proposition (called the conclusion). Logic employs specific rules of inference

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<sup>2</sup>As exemplified in, e.g., Rorty (1979).

to assess the adequacy of the results, as Cohen and Nagel observe. Deductive arguments, discussed by Gordon (2000, chap. 1), aim for logical closure. A deductively valid argument is structured so that true premises guarantee a true conclusion: (1) above. Premises in inductive arguments only support their conclusions to some degree of probability. According to Ludwig von Mises, praxeology is a deductive science; its propositions are inferred deductively from the action principle, grasped intellectually and known to be true *a priori*: (2) above.

It follows, at the very start, that Austrian scholars should know something of deductive logic: what it is, how a deductive argument is structured, and how to apply deduction. These are the *first* and most obvious things Austrian scholars should know about logic. I would argue that the study of logic in light of the many achievements of the Austrian School of economics provides much deeper insights. (1) implies the canons to which Gordon referred that identify the rules governing deductive validity—assuring that true premises guarantee a true conclusion. These rules are typically designated with names like *modus ponens*, *modus tollens*, hypothetical syllogism, categorical syllogism, instantiation, and so on. Austrian scholars should know something of these as part of their general background knowledge.

(2), however, implies something more fundamental and therefore more central to the Austrian School. How can we be assured that our first premises are both true and known to be true, as opposed to mere belief? In other words, what are we saying when we say that we have grasped the truth of the action principle intellectually, or by reflective understanding? Without addressing this, the Austrian School cannot claim to have moved beyond opinion. It doesn't help to say that the truths of logic, mathematics, or praxeology are self-evident (as Mises unfortunately sometimes does). *Self-evidence* is a dangerously psychologistic notion (*psychologism* being the doctrine that the principles of logic are reducible to the principles of psychology). What is self-evident to *A* may not be at all self-evident to *B* and may seem downright absurd to *C*. Likewise with *certain*. *Certainty* is also a psychological rather than a logical operator; it indicates not knowledge but very strong belief. I may be as certain as I can be that it will rain tomorrow; it does not follow that it will indeed rain tomorrow. One can be certain and wrong. We need to be sure to remain within logic's domain of reference, range of investigation, and vocabulary. Therefore we should speak not of certainty but *necessity*—a relationship between propositions that follow from antecedent propositions with the closure of strict deduction. We need to ask: are there propositions that one apprehends intellectually (in the sense of Maritain above) as universal truths as a component of correct reflective understanding? Such propositions would be self-validating in the sense that we would find ourselves having to employ them even in an attempt to cast doubt on them or deny them. These would be those propositions of complete generality mentioned above, belonging at the *foundations* of logic.

## 2.

I would assert, therefore, that the *second* thing Austrian scholars should know about logic has to do with the foundations of logic—especially as the results offer prospects both for the long-deferred revolutionizing of the scientific study of the acting person. Such a change of perspective holds out hope of reversing the self-destructive course of both philosophy and economics (among other disciplines), as practiced in universities, have been on for perhaps the past 150 years.

Let us see how issues related to the foundations of logic arise in Mises's work.

Mises does not provide us with an explicit definition of logic or unpack its basic nature, much less consider its foundations. But much of what he has to say in the crucial first 100 or so pages of *Human Action* clearly implies such. Other writings such as *Epistemological Problems of Economics* and *The Ultimate Foundation of Economic Science* also call forth a philosophy of logic that can be elucidated as an essential component of a broader *Austrian School paradigm* of philosophical and scientific scholarship that includes Austrian School economics as a special case (Mises 1976 and 1962). What would distinguish this paradigm is its apriorism—its insistence, that is, that there are propositions the truth of which is grasped intellectually and not empirically, and that among these are the foundational truths of praxeology such as the action principle. The historiographic task of drawing the historical antecedents of the Austrian school is well underway (Smith 1994; Gordon 1996; Rothbard 1997; pp. 173–94). The task of charting its philosophical antecedents and consequences has only begun (Smith 1990, pp. 263–88). So let us consider first those aspects of Mises's work that point toward an aprioristic philosophy of logic.

*Human Action* takes the acting person in whatever surroundings he finds himself as its starting point; logic and its foundations enter the picture immediately, implied in or deducible from this starting point. Mises writes in one of his most relevant passages:

[T]he problem of the a priori . . . refers to the essential and necessary character of the logical structure of the human mind.

The fundamental logical relations are not subject to proof or disproof. Every attempt to prove them must presuppose their validity. It is impossible to explain them to a being who would not possess them on his own account. Efforts to define them according to the rules of definition must fail. They are primary propositions antecedent to any nominal or real definition. They are ultimate unanalyzable categories. The human mind is utterly incapable of imagining logical categories at variance with them. No matter how they may appear to superhuman beings, they are for man inescapable and absolutely necessary. They are the indispensable prerequisite of perception, apperception, and experience. . . .

The human mind is not a tabula rasa on which the external events write their own history. It is equipped with a set of tools for grasping reality. . . . The fact that man does not have the creative power to imagine categories at variance with the fundamental logical relations and with the principles of causality and teleology enjoins upon us what may be called *methodological apriorism*. (Mises 1966, pp. 34-35)

Mises has penned here not a system of logic but pointed (incompletely) toward the foundations of logic—in a way that also implies an epistemology and the outlines of a metaphysics or theory of reality that can continue developing. These results, I would argue, tie the Austrian school to the larger Aristotelian-Thomistic tradition. In a sense, Mises has implicitly built up his system of economics within an intellectual paradigm capable of including both.

At the foundations of this paradigm are the principles of identity and contradiction—Aristotle’s “laws of thought” which if construed realistically must be seen not just as laws of correct thought but of reality. These laws are grasped intellectually. They are also absolutely general. They apply not to this or that state of affairs but to all actual and imaginable states of affairs. Aristotle (1941, pp. 735-43) originally argued that to understand the principle of contradiction is to apprehend that its denial is unintelligible. Mises (1966, p. 35) continues: “The idea that *A* could at the same time be *non-A* or that to prefer *A* to *B* could at the same time be to prefer *B* to *A* is simply inconceivable and absurd to a human mind. Does this imply—for Mises as well as for Aristotle (and Aquinas)—that the principles are universally valid for reality as well as for human thought? Here a possible ambiguity creeps in. On the one hand, many scholars (e.g., Hoppe) have referred to a Kantian dimension in Mises’s thought. Undoubtedly Mises studied Kant. Mises’s use of the term *category*, as opposed to my *proposition*, suggests Kant. We have the implication above that the propositions at the foundation of logic (and all their implications as well as the action principle itself) might be apprehended differently by a “superhuman being”—such as God—and are thus unique to human beings. As Mises puts this:

It is idle to ask whether things-in-themselves are different from what they appear to us, and whether there are worlds which we cannot divine and ideas which we cannot comprehend. These are problems beyond the scope of human cognition. Human knowledge is conditioned by the structure of the human mind. If it chooses human action as the subject matter of its inquiries, it cannot mean anything else than the categories of action which are proper to the human mind and are its projection into the external world of becoming and change. All the theorems of praxeology refer only to these categories of action and are valid only in the orbit of their operation. They do not pretend to convey any information about never dreamed of and unimaginable worlds and relations. (Mises 1998, p. 36)

Elsewhere, however, Mises appears to grasp for something more ambitious. A few years back he had written:

The first point to be established . . . is that none of the sources of historical information accessible to us contains anything that could shake the assumption of the immutability of reason. Never has even an attempt been made to state concretely in what respects the logical structure of reason could have changed in the course of the ages. The champions of historicism would be greatly embarrassed if one were to require of them that they illustrate their thesis by pointing out an example. . . . [I]n what way [is] the logic of primitive peoples . . . structurally different from our logic[?]. (Mises 1976, pp. 102-03)

Even more revealing:

The categories of human thought and action are neither arbitrary products of the human mind nor conventions. They are not outside of the universe and of the course of cosmic events. They are biological facts and have a definite function in life and reality. They are instruments in man's struggle for existence and in his endeavors to adjust himself as much as possible to the real state of the universe and to remove uneasiness as much as it is in his power to do so. They are therefore appropriate to the structure of the external world and reflect properties of the world and of reality. They work, and are in this sense true and valid.

It is consequently incorrect to assert that aprioristic insight and pure reasoning do not convey any information about reality and the structure of the universe. The fundamental logical relations and the categories of thought and action are the ultimate source of all human knowledge. They are adequate to the structure of reality, they reveal this structure to the human mind and, in this sense, they are for man basic ontological facts. (Ibid., pp. 85-86)<sup>3</sup>

These insights apply to praxeology. Praxeology, the general science of human action, refers to categories of action. The results suggest a bridge from praxeology to an epistemology and metaphysics via the logic that conceptually contains both. In the context of explaining why the general science of human action must differ from the physical or natural sciences, Mises erects the scaffolding of this bridge:

The real thing which is the subject matter of praxeology, human action, stems from the same source as human reasoning. Action and reason are congeneric and homogeneous; they may even be called two different aspects of the same thing. That reason has the power to make clear through pure ratiocination the essential features of action is a consequence of the fact that action is an offshoot of reason. The theorems attained by correct praxeological reasoning are not only perfectly certain and incontestable, like the correct mathematical theorems. They refer, moreover, with the full rigidity of their apodictic certainty and incontestability to the reality of action as it appears in life and history. *Praxeology*

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<sup>3</sup>Mises cites Cohen (1931, pp. 202-05; 1944, pp. 41-44, 54-56, 179-87).

*conveys exact and precise knowledge of real things.* (Mises 1966, p. 39; emphasis added)

With this last especially, suggestions of a Kantian transcendental idealism seem to dissolve. Unfortunately, Mises continues:

We do not know what a superhuman intellect may think and comprehend. For man every cognition is conditioned by the logical structure of his mind and implied in this structure. It is precisely the satisfactory results of the empirical sciences and their practical application that evidence this truth. Within the orbit in which human action is able to attain ends aimed at there is no room left for agnosticism. (Ibid., p. 86)

The emphasis is on *acting man*. The result—as well as the observation above that these categories “work” as central to their justification—suggest a kind of post-Kantian pragmatism, perhaps on the order of that defended by Clarence Irving Lewis (with Lewis’s collectivism subtracted, of course) (1956; and in Konvitz and Kennedy 1960, pp. 305–15). Is there any room for agnosticism regarding the applicability of the propositions of logic either to beings other than men or to the world generally, considered independently of our thought about it and experience of it?

Action is the conscious employment of at least one means to achieve at least one prior-imagined end. The means employed, as well as the end achieved, considered as states of affairs in the world as well as means and ends, are independent of the conscious actor, with the former selected from the options present in the actor’s surroundings. The same is true of the principles ensuring the means selected are appropriate to achieving the ends desired. *Action*, that is, is necessarily *action in the world*—in a set of surroundings containing objects and processes behaving in specific ways conforming to specific patterns and registering on our sensory apparatus in specific ways. Once we realize this, all suggestions of transcendental idealism and pragmatism ought to disappear.<sup>4</sup> What can only be described as an extreme realism—and (in contrast to what is probably the dominant school of thought in academic philosophy today) an extreme foundationalism—arises to take its place.<sup>5</sup> It is the apriorist element that points

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<sup>4</sup>See Gibson (1966) for an ecological approach (Gibson’s term for something that is actually very Aristotelian overall in its account of perception) that, applied to the situations of interest to Austrian scholars, also situates the aware and acting person in an environment with determinate properties.

<sup>5</sup>The most prominent critic of “foundationalism” among professional philosophers has probably been Richard Rorty; cf. again his *Philosophy and the Mirror of Nature*, he was pursuing tendencies already active in both the “analytic” and “continental” schools in contemporary philosophy and which have converged as postmodernism, which denies the existence of transcultural and transhistorical truths to be known in favor of the historical and cultural dependency of all knowledge. By foundationalism Rorty didn’t have in mind a single doctrine but several: Platonism, Cartesianism, Kantian transcendental idealism, logical empiricism, among others—all of which hold that there is an epistemic “bedrock” of first

at this foundationalism by asserting that some knowledge of general or universal truths can be had *a priori* by what Maritain called apprehension. Or as Hoppe, having worked his way through the Kantian argument, expressed this insight:

We must recognize that such necessary truths are not simply categories of our mind, but that our mind is one of acting persons. Our mental categories have to be understood as ultimately grounded in categories of action. And as soon as this is recognized, all idealistic suggestions immediately disappear. Instead, an epistemology claiming the existence of true synthetic a priori propositions [that of Kant's system] becomes a realistic epistemology. Since it is understood as ultimately grounded in categories of action, the gulf between the mental and the real, outside, physical world is bridged. As categories of action, they must be mental things as much as they are characteristics of reality. For it is through actions that the mind and reality make contact. (Hoppe 1995, p. 20)

### 3.

This last points directly toward a *third* truth that Austrian scholars should know about logic—that its propositions apply to the world in ways we apprehend as causes and effects; i.e., the general category *causality* applies to the world. In other words, Kant's wrong turn was in having answered Humean skepticism with *impositionism*: the fundamental categories (logical foundations, deductive relations, causality and so on) are not apprehended in reality in their various concrete instances but are imposed by the human mind on a *Ding-an-Sich* (Smith 1990b). Impositionism would imply a “praxeology” the fundamental categories of which are deducible from or reducible to only our “laws of thought” and could be different for a nonhuman intelligence. Mises offers insights out of accord with this interpretation. Consider his observations on the relationship between human action and causality:

Man is in a position to act because he has the ability to discover causal relations which determine change and becoming in the universe. Acting requires and presupposes the category of causality. Only a man who sees the world in the light of causality is fitted to act. In this sense we may say that causality is a category of action. The category *means and ends* presupposes the category *cause and effect*. In a world without causality and regularity of phenomena there would be no field for human reasoning and human action. Such a world would be a chaos in which man would be at a loss to find any orientation and guidance. Man is not even capable of imagining the conditions of such a chaotic universe.

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principles, logical or otherwise, or a permanent matrix of categories or a permanent set of eternal objects or other apprehendable entities of which it is the special task of philosophy to discover and elucidate. Suffice it to say—if the Austrian School is the correct one, then postmodernism is wrong through and through—and if postmodernism is true (whatever sense that would make) than all of us are delusional.

Where man does not see any causal relation, he cannot act. This statement is not reversible. Even when he knows the causal relation involved, man cannot act if he is not in a position to influence the cause. (Mises 1966, p. 22)

This does far more to answer Hume's skepticism. It unpacks the action principle in another way, such a way as to infer the category of causality *a priori*: known independently of experience in the sense that successful action in the world presupposes it. This is why, of any event, we almost automatically look for its cause or causes—assuming without seriously questioning that such a relation exists to be found. To say of some event, “This was caused by nothing at all; it just sprang into existence by complete happenstance,” makes no sense and in practice will not even be entertained. So although we must discover particular causes (or networks of causes) by empirical means, the category of causality itself is never in question.

Carl Menger, of course, emphasized causality to the point of making it the subject of the very first paragraph of his *Principles of Economics*, writing:

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 into 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. (Menger 1994, p. 51)

Menger proceeds to situate human needs and the conditions for their satisfaction into this world governed by a causality known *a priori*. The *a priori* nature of the category, of course, does not inform us about the specific conditions of the events that make up our everyday experience. These can only be discovered empirically. Our perception that a given event has a given cause (or, more specifically, a set of necessary and sufficient conditions) has been a philosophical problem since the time of Hume, one the elucidation of which goes beyond the scope of what can be attempted here. Suffice it to say, sometimes this perception is astoundingly simple. For example, it does not take many experiences of touching active burners for a small child to realize that *active burners* on stoves *burn*. The child quickly learns not to touch them long before he is old enough to understand anything as abstract as *cause and effect*.

On the other hand, it is often not realized by purveyors of statistics as a source of deep insights that a statistical correlation does not lead logically to a causal claim. (The correlation may be strong, with numerous instances, and free of counterinstances; thus in the absence of good grounds for doubt it might be unreasonable to withhold the judgment that a causal relationship exists between the events correlated.) This is because such inferences have an inductive, not a deductive, structure. This result suggests that an aprioristic argument regarding causality as a product of intellectual insight might be

much stronger than it appears at first glance. In this case, Hume may have been right in his judgment that we never experience causality in the sense of a power through which one event produces another. His starting point, however, was his impressionism: his conviction that all our knowledge begins with units of experience he called impressions, and that any idea we might have, such as causality, must be traceable to an antecedent impression. If there is no such impression to be associated with causality, then in the Humean view we have no clear idea of it. Such was empiricism in the hands of Hume, and it made our knowledge of causes and effects ultimately mysterious.

#### 4.

The villain, in this case, is empiricism as a theory of knowledge. This tells us the *fourth* thing Austrian scholars should know about logic: that the particular philosophy of logic embodied in methodological apriorism and this account of causality invites both a devastating critique of empiricism as a comprehensive epistemology and promises a viable, equally comprehensive alternative. Indeed, alternative schools of economics—even freedom-oriented ones such as the Chicago School—embed empiricism into their methodologies. This doubtless explains why advocates of the latter, such as Milton Friedman (1991, p. 18), have complained about Mises’s “intolerance.” Such allegations can now be answered.

Empiricism has long been proving itself unsatisfactory to conscientious scholars with very little help from the Austrian School, however. The positivism of Auguste Comte 150 years ago proposed a militant empiricism as standing at the core of all scientific methodology. Since then, however, methodology guided by empiricist assumptions has been disintegrating a little at a time. In Comte’s writings, philosophy as traditionally conceived is to be supplanted entirely by natural science conceived as a unity whose ideal form was physics. The story of the slow dissolution of modern thought under this body of assumptions is too long to be told here.<sup>6</sup> To be brief, and without maintaining that this is the only possible approach:<sup>7</sup> in the philosophy of logic, and of mathematics as well, positivism as a method and empiricism as an epistemology led to *conventionalism* in the philosophy of logic. This is the doctrine, alluded to by Mises above, that the laws of logic (and mathematics) are combinations of signs devised by us, for our purposes, and have no relation to reality. They are analytic propositions, truths by definition, designation or stipulation. This view was given its clearest expression by logical positivist philosopher A.J. Ayer who wrote famously that

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<sup>6</sup>I tell it in my book *In Defense of Logic: Against Polylogism and Conventionalism*, undergoing revisions.

<sup>7</sup>For a somewhat different and possibly more standard approach see Hayek (1952).

[t]he principles of logic and mathematics are true universally simply because we never allow them to be anything else. And the reason for this is that we cannot abandon them without contradicting ourselves, without sinning against the rules which govern the use of language, and so making our utterances self-stultifying. (Ayer 1962, p. 77)

If principles of logic and mathematics are true “because we never allow them to be anything else” (implying that we make the choice) then why is it impossible to abandon them. Why is it impossible to find alternatives to them that do not “sin” against the rules of language? To such a question, logical positivism and its immediate successor, logical empiricism, never had an answer. Also frustrating logical positivist and logical empiricist philosophy of logic was the enormous applicability of instances of both logical and mathematical reason to a variety of real world problems. This is rendered utterly mysterious by conventionalism. Real-world problems have ranged from ancient man’s inferences from changing seasons to specific conditions for planting crops to modern civilization’s application of increasingly sophisticated forms of mathematics and other purely formal relations to the construction of buildings, bridges, electrical devices, rocket ships, eventually computers, among an ever-widening array of other engineering and technological marvels. I have elsewhere offered an account of tortured attempts to reconcile such commonplaces with conventionalism (Yates unpublished, chap. 5).

Empiricism in the hands of the logical empiricists triggered countless technical problems (e.g., Goodman’s [1979, pp. 59–73] aberrant predicates “grue” and “bleen”<sup>8</sup> as well as paradoxes such as that of the raven pp. 70–72).<sup>9</sup> It grew increasingly remote from the sciences positivist and logical empiricist philosophers had set out to elucidate.<sup>10</sup> The historicist rebellion, one might call it (I have in mind here writers such as Norwood Russell Hanson [1958], Thomas S. Kuhn [1970] and Paul Feyerabend [1975]) dislodged *logical* empiricism but did not overthrow empiricism itself. They provided extensive arguments against the idea that experience alone (observation sentences rooted in “sense data,” etc.) provides a kind of bedrock against which theoretical statements can be tested—but they did not reinvestigate the possibility of

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<sup>8</sup>This essay was originally delivered as a lecture at the University of London in 1953.

<sup>9</sup>The idea here is that “All ravens are black” is formally equivalent (by the purely formal move known as transposition) to “all non-black things are non-ravens.” According to positivism the only way to confirm the truth of “All ravens are black” is experience; but because of the formal equivalence, whatever confirms “All ravens are black” also confirms “all non-black things are non-ravens,” resulting in the absurd result that the observation confirms virtually any universal statement whatsoever. Such paradoxes, the working out of which actually consumed a great deal of energy on the part of academic philosophers, actually illustrate the utter hopelessness of any account of science premised on the denial that science involves any *a priori* propositions about the world.

<sup>10</sup>See Whitehead (1929, p. 18): “The evidence that a methodology is worn out comes when progress within it no longer deals with the main issues. There is a final epoch of endless wrangling over minor questions.”

propositions capable of apprehension *a priori*. Not even the British philosopher of science, Nicholas Maxwell, whose work comes the closest to breaking out of the empiricist box, really broke with the broader empiricist stance. Maxwell (1974, pp. 123–53, 247–95) noticed that science makes substantial *a priori* presuppositions about the world, but he infers from this not apriorism but what he calls aim-oriented empiricism, according to which we cannot really *know* that our *a priori* presuppositions are true.<sup>11</sup> He does not see us as capable of grasping foundational truths intellectually, as did Aristotle, Aquinas, and Maritain.

Hence—to make a long story far too short—the discipline of philosophy devolved into a mixture of evolutionary naturalism (Quine,<sup>12</sup> Kuhn [1970]), epistemological behaviorism and eliminative materialism (Rorty [1979], the Churchlands [Churchland, Paul 1979 and Churchland, Patricia 1984]), and out-and-out relativism or “epistemological anarchism” (Feyerabend [1975 and 1987]). Austrian scholars, as I’ve said above, should know the logical foundations out of which Austrian School economics emerges via deductive reasoning; they should also know how the empiricist alternative has simply disintegrated over the past 60–80 years. This knowledge would provide a formidable rhetorical weapon against *all* empiricist schools of economics. Mises, in fact, anticipated the criticism of the “historicist philosophers of science” (Hanson, Kuhn, Feyerabend, et al.):

Nothing is more clearly an inversion of the truth than the thesis of empiricism that theoretical propositions are arrived at through induction on the basis of a presuppositionless observation of “facts.” It is only with the aid of a theory that we can determine what the facts are. . . . To apply language, with its words and concepts, to anything is at the same time to approach it with a theory. Even the empiricist, who allegedly works without presuppositions, makes use of theoretical tools. They are distinguished from those produced by a scientific theory only in being less perfect and therefore also less useful. (Mises 1976, p. 28)<sup>13</sup>

These schools—of logical empiricism, historicism, behaviorism, and so on—are now entirely played out. They have nowhere left to go. Most of contemporary philosophy is entirely self-contained. It may occasionally speak to larger issues, but in a fashion severed from all epistemological foundations, in accordance with Rorty’s attack on such. The contemporary humanities generally

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<sup>11</sup>Maxwell’s work merits more attention than it has received. His latest book bears the provocative title *The Comprehensibility of the Universe: A New Conception of Science* (1998).

<sup>12</sup>See Quine (1969) especially the essay “Epistemology Naturalized,” pp. 69–90.

<sup>13</sup>Although there is not space to develop the point here, Mises might be said to have, in this passage, anticipated by 30 years important aspects of Kuhn’s views—minus, of course, the defective epistemology that plagued *The Structure of Scientific Revolutions* and got Kuhn branded (falsely) as a relativist.

grant only historical and cultural contingency; they urge that we strive not for objectivity but for solidarity, understood epistemically as a quest for consensus, not for metaphysical truth as correspondence with reality (Rorty 1989; Smith 1988). Such notions by their nature cannot move beyond opinion—opinions unlikely to interest policy-makers!—because they work from the premise that opinion is all there is! Some opinions are better for us to believe (e.g., “love is better than hate”); some not. Why this is so is a question the post-modernists stalking the contemporary academic wilderness would have us set aside as meaningless or futile. Contemporary psychology has proven of more interest to those intent on planning a certain kind of society with a command economy. In the absence of foundations that could ground a moral view of human life, contemporary psychology lends itself to the interests of those who would manipulate others, working particularly through the institutions of public (state-sponsored) education (Eakman 1998). This illustrates the cultural and educational dangers of abandoning truth and intellection.

## 5.

Above, we remarked on Aristotle’s extensive argument that efforts to deny the principle of contradiction result in unintelligibility. Likewise, several authors including Hoppe (1995, p. 61) and Selgin (1990, p. 15) have observed that the denial that man acts would itself be an action, concluding that the action principle is self-validating. This points toward the *fifth* thing Austrian scholars should know about logic: it would have been far simpler to demolish the original Comtean illusions by way of pointing out the performative contradictions they involve. A *performative contradiction* is a proposition the content of which is falsified by the act (or performance) of uttering it. The denial that *man acts* is an example—for denials of anything are themselves linguistic *actions*. It makes no sense to understand them in any other way.

Performative contradiction, however, is just one species of a broader strategy of logical reasoning that can be applied to all forms of empiricism. Here is how it works. The central claim of empiricism, that all knowledge arises through or is reducible in some way to sense experience, cannot itself arise through or be reduced in some way to sense experience. It isn’t that kind of claim. Thus the central claim of empiricism, if accepted as true, is in the embarrassing position of being a counterexample to itself. To approach this from a slightly different direction: the validation of sense experience—the idea, that is, that the senses do provide us with reliable knowledge at least some of the time, as opposed to dreams and horoscopes—cannot itself be found in sense experience, because that would beg the question. Empiricism cannot, that is, “bootstrap” its way to self-validation. The *fifth* thing Austrian scholars should know about logic and its applications, in this case: general theses involving human experience, human knowledge, human reasoning as well as human action, are invariably self-applying. The denials of some of these theses are *self-referentially inconsistent*, to use the term employed by Frederic B.

Fitch (1952, app. C), a mathematical logician who was unusually sensitive to the philosophical implications of his subject matter. Performative contradiction is then a variant on self-referential inconsistency. It applies to the core of empiricist dogma itself: that we acquire knowledge only through observation, and never through pure reasoning independent of observation. As Hoppe (1995, p. 61) also notes, the empiricist does not actually observe people *acting*, what he *observes* are bodily motions, what Skinner calls verbal behavior (speech), and so on. Indeed, behaviorism is the most logical approach to take to the scientific study of human beings if empiricism is your starting postulate—however paradoxical is the predicament of the “thinking behaviorist” as well as the acting behaviorist who is *defending* behaviorism to an audience of people who are attempting to *decide* whether the arguments in defense of behaviorism are rationally grounded (Lovejoy 1922, pp. 135–47). Human action can only be understood—and validated—by *a priori* argumentation and methodology, and this calls forth an apriorist epistemology as well. The ultimate justification for these moves is (1) Aristotle’s principle of contradiction and (2) the further principle that general theses about human beings and their activities, since formulated and defended by human beings, these theses necessarily apply to themselves, i.e., are self-referential in view of the performance involved in formulating, articulating, and defending them with arguments.<sup>14</sup>

## 6.

There is a *sixth* thing Austrian scholars should know about logic, and it is this: given our results so far, there is one and only one correct logic—despite Mises’s own occasional demurrals. Occasionally he suggest the possibility of beings possessing different sets of logical categories—subhuman or superhuman—or that reason is transitory.<sup>15</sup> It is now both possible and necessary to lay this ambiguity to rest—returning to the Mises who wrote the above paragraph about the “immutability” of reason. The propositions at the foundations of logic are immutable (although a people’s capacity to grasp them may indeed be transitory!). Can anyone seriously suppose that the principles of identity and contradiction are “true for us” but not “true for God” (for example)? Or that it is possible that for God there can both be and not be houses on Elm Street at the same time and place, or that God could will that seven and five add up to some number other than twelve? (Clark 1985, pp. 117–31). Is it possible that the brains and nervous systems of some hypothetical intelligent extraterrestrial

<sup>14</sup>For further articulation and defense of these points see Yates (unpublished, chap. 4).

<sup>15</sup>See, e.g., Mises (1966, pp. 33–34), where he suggests that “reason, intellect and logic are historical phenomena” that are “transitory” and present a “historical phase between prehuman logic on the one hand and superhuman logic on the other.” Such passages show that even the greatest thinkers are only human and have occasional lapses in judgment.

species are sufficiently different from ours as to embody different laws of logic and systems of mathematics? I submit that the person who hypothesizes such has not really apprehended these laws or understood Aristotle's fundamental argument—surely one of the most important in the whole history of Western philosophy—that any intelligible attempt to cast doubt on the principle of contradiction or set it aside presupposes it and invalidates skepticism toward it. Now one can find scientists who suggest that the brain of each species constructs its own universe—that reality itself is a “construction” of the brain and nervous system of a species (Jerison 1976, pp. 92–101). This raises all over again the issue of the status of the brain and nervous systems undertaking the studies. Are they “constructions” of themselves? (Katz and Frost 1979, pp. 35–44). It may well be that the brain of a species “constructs” a perceptual *sensorium* that will differ from species to species relative to the capacities of its members' senses to register sensory input, thus delivering a “cross section” of what is real that will in fact be exceedingly difficult for a member of another species even to imagine in terms of its appearance (Nagel 1974, pp. 435–50; Lettvin et al. 1959, pp. 1940–51). But necessarily (for species capable of functioning at the conceptual level, anyway) laws of logic, mathematics, and praxeology are invariant. There is again at most one logic—even for superhumans, extraterrestrials, and God Himself!

All forms of what Mises called *polylogism* are therefore false and impossible. Mises's own remarks are directed against two forms of polylogism, classical Marxist polylogism and racist polylogism (Mises 1966, pp. 72–91). The former held that bourgeois and proletariat experienced the world in different ways because they employ different “logics.” The latter held that different racial groups have different “logics.” Both positions are still around. One may occasionally still hear Marxists resort to concepts like “class consciousness.” The latter is instantly recognizable in the “afrocentricity” and various forms of multiculturalism also stalking today's academic wilderness; it often comes accompanied by what may be called radical feminist polylogism and still others (Yates unpublished chap. 1).

What refutes every form of polylogism is the realization that there can be at most one set of logical categories whose exact nature is implied in the Aristotelian principles of identity and contradiction, alongside their corollaries. To these there can be no intelligible, coherent alternatives, only different levels of mastery.<sup>16</sup> This realization creates the conditions for an Austrian scholarship that can set itself apart as radically (in the original and highest sense of that term) different from the modes of thought that have become dominant in the scholarship of much of the rest of higher education today. There are libertarians who have attempted to maintain what they no doubt consider a safe distance from the Austrian School of economics—under the misconception that Misesian thought inculcates a *homo economicus* view of the human

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<sup>16</sup>See again Yates (unpublished, chap. 4). For a recent favorable analysis of Aristotle's defense of the principle of contradiction see Rasmussen (1973, pp. 149–62).

condition.<sup>17</sup> Mises, however, makes no such assumption (Mises 1966, p. 62). He does assert, contrary to Objectivists who follow Ayn Rand, that human action is motivated by factors other than reason in her sense (p. 46). But this is just to say that human action is one of many kinds of phenomena taking place in the world, even if it must be understood “from the inside,” *a priori*, instead of “from the outside,” empirically, because of the special relationship human beings hold to their own actions.

## 7.

With this we come to the final issue. Asked in the title is not just what Austrian scholars should know about logic but why Austrian scholars should know about logic? In large measure, the *what* should have answered the *why*. But a few additional remarks are in order. Austrian scholarship, like any other paradigm that often addresses technical issues, is ever in danger of becoming just one more approach not just specialized but specialist. That is, it would regard addressing technical problems as an end in itself (Maxwell 1980, pp. 19-81). An Austrian scholarship that advances in full light of its logical and epistemological as well as its methodological premises has the potential to address areas other than economics. Undoubtedly some of its results in philosophy, or in psychology (where it offers a potentially very precise and systematic alternative to schools such as behaviorism), will feed back into economics, perhaps shedding light on issues in economics in ways none of us can predict in advance but would not want to find ourselves ruling out.

In the meantime, the approach suggested here suggests that Austrian scholars be fully cognizant of the logical structure of such moves as the defense of the action principle and consequent defense of the *a priori* understanding of human action. They should be cognizant of the larger epistemological and metaphysical implications of the results. This is so such moves can be wielded effectively in neighboring subject domains. This will enable us to see Austrian scholarship generally as a larger paradigm (in Kuhn's sense but minus Kuhn's evolutionary naturalism, itself haunted by self-application problems) for scholarship (Rothbard 1997, pp. 195-210). Enhancing the possibilities here is the fact that the Austrian School's slow but steady gains in recognition among a new generation of scholars as having the only viable account of such real-world problems such as why “booms” (e.g., the late 1990s) are invariably followed by “busts” (the early 2000s). Kept free of the mindset of specialism, this paradigm addresses the issues of our time forthrightly and not evasively. It ultimately provides the intellectual foundation for whatever hypothetical free society, based on the free actions and interactions

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<sup>17</sup>See e.g., Machan (1990, pp. 18-19). Although not discussing Mises or the Austrian school per se the arguments in Machan *The Moral Case for the Free Market Economy* (1988; 2000) are relevant to this issue. The free will/determinism dispute is a philosophical mare's nest that goes well beyond the scope of what can be attempted here.

of human beings living in a real world, might be built up on top of the one the omnipotent state and the forces of positivism, polylogism, and other forms of irrationalism are slowly but surely destroying.

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# THE GOLD STANDARD IN CONTEMPORARY ECONOMIC PRINCIPLES TEXTBOOKS: A SURVEY

JAMES KIMBALL

Throughout much of modern history, gold served as the commodity that most widely facilitated free exchange.<sup>1</sup> While its virtues as a medium-of-exchange were clear to people of previous eras, gold has fallen out of favor, both in its use as money and in the esteem in which it was once held among academics. It used to be the case that gold, the gold standard, and the various other iterations it took over its many years of employment saturated the study of money and economics, but now it is often difficult even to find substantive references to it in modern textbooks. Just what is the prevailing understanding today on the subject of the gold standard? The world is now a generation removed from any semblance of a gold standard and well over a century from its heyday. With little or no practical experience with it, almost all dialogue about it exists now in the fringes of the academic community. The minimal emphasis that mainstream economists place on a gold standard is reflected in the scant attention placed on it in modern principles of economics and monetary textbooks.

Presented here is a survey of 65 modern post-WWII undergraduate economics textbooks on how they address the subject of the gold standard, looking at the level of information provided, the quality and organization of their argumentation on the topic, and any underlying bias that might be reflected in their treatment of the gold standard.<sup>2</sup> Then turning to the Austrian economic

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<sup>1</sup>Silver and other precious metals and commodities have also often served as common media-of-exchange, however, not nearly to the extent that gold did.

<sup>2</sup>The 65 texts were selected from the Auburn University Library. Auburn University had a Ph.D. program in economics until 1999. They still have a Ph.D. program in applied economics in their Agricultural Economics department. This survey is based on the assumption that this is a representative sample of what would be found in other contemporary U.S. research universities. All the texts were undergraduate level general economics or money and banking textbooks. In most cases, the most recent edition available of

literature, a brief critique of the relevant issues is conducted and considerations concerning sound money and a gold standard.

#### MODERN ECONOMICS TEXTBOOKS ON THE SUBJECT OF GOLD

Austrian economists have always been quite reserved in their praise of textbooks, arguing that they often fail to present the study of economics as one integrated and cogent system, rather, presenting different topics and concepts in isolation of each other. In one review of a popular textbook, Murray Rothbard criticized it as a “swollen and elephantine grab-bag” of current economic thought (Rothbard 1973). It should then be of little surprise to most readers familiar with the Austrian School that the problems plaguing textbooks as a whole should manifest themselves when it comes to how these books present the topic under discussion. The concepts of gold as money and the gold standard are not uniformly handled in every textbook. It is rare to find a clearly marked and systematically argued presentation of the issues surrounding it in modern textbooks. A greater majority of them, particularly those from the 1980s to the present day, do not even present this topic under a dedicated sub-heading, but tend only to pepper a few paragraphs with tidbits and opinionated statements on gold amidst broader discussions of what they would deem to be more “relevant” topics. A few of the most modern textbooks scarcely address gold in their main body texts, reserving discussion of it to inset textboxes or the margins with all the other relics of economics science that are now considered to be of only trivial importance.

Finding references to the gold standard can often be difficult. Nearly a quarter of all the textbooks reviewed did not even list any terms related to this precious metal in their indexes. No textbook had a unique chapter assigned to gold. The most frequent references to it were found in chapters dealing with the creation of money, banking, the Federal Reserve System, international trade, and international monetary systems. Within these chapters, the variety of information provided was diverse, with few standardized methods of presenting the topics from one textbook to the next. While there were a few conventions that appeared with high regularity, like the use of the story of enterprising goldsmiths to explain the development of fractional reserve banking, even the presentation of these stories varied considerably. While a majority of texts presented the goldsmith story as a true historical account of the development of banking, others denounced it as “apocryphal”<sup>3</sup> and mere myth.

The amount of information provided is also considerably small. The average textbook from 1950 to 1980 reserved between ten and fifteen combined

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the textbook was used. In the few cases where there was a large time gap between early and later editions, the earliest and latest editions available were examined in tandem. In almost all of these cases, no relevant or significant changes were made to how they approached the subject of our examination.

<sup>3</sup>See, for example, Colander (1995, p. 313).

pages for subjects related to gold, while the average textbook from 1980 to present, only about three or four combined pages.<sup>4</sup> It is also interesting to note that the average length of textbooks from the earlier period was around 600 pages while the textbooks from the more recent period averaged over 800 pages. The easiest way to explain the discrepancy in time spent on the gold standard between the two periods of texts is that the earlier books usually emphasized a clear presentation of the mechanics behind the gold standard when it came to international trade and the Bretton-Woods system. The newer textbooks usually reserved that space for what they saw as the more relevant issues of international trade and somehow managed to explain how the standard functioned for over a century in a paragraph or two.

Aside from a few pleasant and welcome instances, nearly all the texts, without regard to period, failed to adequately differentiate between the diverse incarnations of the gold standard. These texts often conflate the core components of all the different systems into one, allowing a few authors to construct a convenient “straw man” gold standard that would rarely withstand the tailored arguments thrown against it and be easily dismissed as a “barbarous relic”<sup>5</sup> whose fate was assured by the inescapable progress of civilization. Not a single author of any of the texts reviewed presented any ideas for shifts in the current monetary system toward a gold-based system positively. Roughly one-third of the authors offered systematic arguments for and against such a standard and expressed relatively positive statements about its effectiveness while in use. The other two-thirds of the authors presented the topic in a non-systematic method and made pronouncements against it ranging from historical and theoretical arguments to simple snide and dismissive statements.

The next several sections here will investigate these findings further as they relate to how the texts address gold and the gold standard in relation to the creation of money, the mechanics of the gold standard, inflation and price stabilization, theoretical and historical argumentation, and money and banking issues. Since few authors attempted to approach this topic using clear systematic argumentation, there may be some inevitable overlap within these categories. It is also, in many instances, interesting to note the trends and significant differences between texts of differing time periods, and this paper addresses those when they were deemed sufficiently consistent or relevant.

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<sup>4</sup>One important consideration, which this paper does not address, is how textbooks present alternative monetary systems. Since these systems ideologically compete directly against the gold standard, this would be a very relevant area for further study. Many authors, who largely ignore the gold standard and fail to clearly present the arguments for it, are strong advocates for other systems and the only real way to decipher their ideological bent, would be to see what issues they raise when comparing the various more recent and mainstream suggestions for monetary reform.

<sup>5</sup>A famous quotation by John Maynard Keynes. Quoted here from the introductory sentiments in Ise (1950, p. 327).

### *Gold as Historical Money*

Most textbooks first introduce the concept of gold in a section on the creation and development of money. This section tends to be about one-quarter the way into most texts and is usually either a separate chapter or an introductory section in the chapter on money and banking.<sup>6</sup> The basic fundamentals of exchange and market transactions have typically already been discussed. The typical section on the creation of money is between five and ten pages in length, of which the discussion of gold can run anywhere from a solitary mention of it in a long list of other common goods that have been used as a medium-of-exchange to a multi-page discussion. The most typical setup, especially in the more recent textbooks, rarely spends more than a paragraph talking about gold in this section. However, it is important to look at how it is presented.

Earlier period texts rarely editorialized in their discussion of the origins of money while most modern authors frequently used critical language whenever referencing anything having to do with gold. One text describes the varieties of commodity monies in this manner, "Primitive economies have used everything from precious metals and polished rocks to strings of seashells, wives, and slaves" (Reynolds 1966, p. 20). Many authors continually referred to gold as "primitive" or being indelibly linked to "less organized societies."<sup>7</sup>

Most modern texts spent far more time on obscure instances of commodities developing into money than the development of gold. The most common commodities were the Stone of the Island of Yap<sup>8</sup> and cigarettes in concentration camps during the World Wars. Particularly in modern texts, these examples frequently constituted the bulk of their discussion, with gold receiving only scant mention.<sup>9</sup> One text focused almost exclusively on the use of cows as money, pointing out the etymology of terms such as *pecuniary* and comparing a cow-based monetary system to our gold-based system, resulting in one of the odder discussions encountered,

just as some people of an earlier period probably continued to think that gold and silver served as money only because they were "backed" by cows, so some people continued for years to believe that demand deposits and bank notes were not "real" money, but only valuable because they were "backed" by gold. (Suits 1973, p. 249)

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<sup>6</sup>Though in a few books, the properties of money are not discussed until the very end. See, for example, Stiglitz (1993, pp. 870-86).

<sup>7</sup>See, for example, Baumol (1994, p. 718).

<sup>8</sup>Famed large stones of lime that were rarely moved when they changed ownership on this primitive island community.

<sup>9</sup>See, for example, O'Sullivan (1998, p. 553) and Ekelund (2000, p. 653).

Another author used a similar, but hypothetical, example of a corn-based economy to walk the reader through this lengthy section, using corn to demonstrate inflation and Gresham's law, without clearly enlightening the audience that these concepts originally and most closely apply to a discussion of metallic currency (McEachern 2003, p. 654).

The most common explanation provided for gold losing its popularity as a money was the inconveniences of transporting and measuring units of it. This naturally led to issuance of paper certificates, with most authors usually ignoring the role governments played in this process, including the introduction of legal tender laws and providing legal protection to banks.<sup>10</sup> These sections rarely used any form of adequate historical dating. According to these texts, gold was used, like all the other commodity monies, in the past and fiat currencies in the present. Paul Samuelson (1980, p. 263) cautioned the "modern student" not to be misled, "as were earlier generations of students by some mystical belief" that gold inferred any value to money and then went to the trouble of cataloging all the groups of people who still harbor an eccentric and somewhat malevolent interest in holding gold, including,

Footloose refugees, underworld interests, tax evaders, opponents of welfare state, . . . those foolishly confident that ultimately gold will be restored to a central place in the official monetary systems of the world, and shrewd and unshrewd speculators, who bet that enough dupes believe the above case. (Samuelson 1980, p. 673)

#### THE MECHANICS OF THE GOLD STANDARD

The space each author devotes to discussing the basic history and the mechanics of how the gold standard functioned under each incarnation varies significantly depending on whether the texts were written during the Bretton-Woods system or after. Logically, the earlier texts present a more thorough analysis of how the balance-of-payment mechanism functioned as well as relevant facts about the world monetary system and the gold exchange standard. The more recent texts do, on the whole, a very poor job presenting the mechanics of the gold standard in any thorough or systematic method; most texts claim it is now only of historical significance.<sup>11</sup> Many do not even precisely define the variant forms and time periods when the gold standard functioned. Some texts suggest it existed from the end of the Napoleonic Wars to the beginning of World War I<sup>12</sup> while others posit it began around the American revolutionary period and lasted till either the great depression or the 1970s. Still others offer no real historical landmarks to guide the reader.<sup>13</sup>

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<sup>10</sup>See, for example, Stiglitz (1993, pp. 870-86).

<sup>11</sup>See, for example, Lipsey (1966, p. 466).

<sup>12</sup>Ibid.

<sup>13</sup>See, for example, Byrns (1989, p. 223).

Judging the whole corpus of economic textbooks, it is virtually impossible to consistently find a thorough explanation of the differences between the classical gold standard, the gold exchange standard, bimetallism, the limited gold bullion standard, and the other relevant modifications actually seen in practice. It follows that all but a few texts completely ignore the many nuances that Austrians place a heavy emphasis on, such as principles of sound money, reserve ratios within the banking system, and the different political motivations and levels of government intervention during these periods.

Many of the more modern authors chose to introduce the explanation of the gold-flow mechanism by repeating simplified arguments of a few classical economists of the eighteenth and nineteenth centuries and then offering their own explanations for how these simplistic and idealistic assumptions rarely played out in the real world. They ignore the fundamental distinctions between a completely market originating gold standard and one that has been partially co-opted or obstructed by government intervention.

#### *Textbooks on Inflation and Price Stabilization*

The topic of the gold standard naturally leads to extended discussions on inflation and price stabilization. Here, a considerable amount of confusion results from authors arguing between *what* actually is best for society and *which* monetary systems are most likely to promote the welfare of society. Many of the authors say that proponents of a gold standard, often labeled “staunch conservatives,”<sup>14</sup> are most concerned with stabilizing the price level. None of the texts reviewed made the distinction between the natural variation of prices in a market originating gold standard, with which most Austrians would not have a problem, and the desire of economic planners to use a gold standard to manipulate and maintain some artificial and arbitrary price level, which Austrians tend to oppose. Most authors who addressed this topic conflated all supporters of gold as supporters of price stability and then proceeded to show how the gold standard failed to maintain price stability, and consequently, should be regarded as a failed endeavor.<sup>15</sup> Nevertheless, a number of modern authors mentioned that many proponents of the gold standard see the central issue to be one of reducing or preventing government intervention.<sup>16</sup>

There is also considerable employment of vague and poorly reasoned argumentation as many authors fail to distinguish between historical events, economic realities, and the myriad of unrelated concomitant conditions in existence. In one of the more egregious examples, Bach (1963, p. 240) argues that the gold standard is flawed *because* it did not promote price stability, stating,

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<sup>14</sup>See, for example, Samuelson (1980, p. 263).

<sup>15</sup>See, for example, Arnold (1989, p. 406) and Byrns (1989, p. 155).

<sup>16</sup>Though Samuelson puts it this way: “Staunch conservatives . . . are convinced that governments cannot be trusted to refrain from abusing this power . . . and prefer the vicissitudes of mine discoveries rather than in fallible or allegedly corrupt governments” (1980, p. 263).

But United States history illustrates clearly that the gold standard is no guarantee against sharp price-level changes. The graphs in chapter 6 show the great inflation that took place during and following World War I, the precipitous drop following that inflation, and the sharp drop from 1929 to 1933, *all while we were firmly on the gold standard.*

Here Bach blames the gold standard for failing to have an effect it was arguably never intended to produce, a stable price level; and further, he fails to take into account the government interventions prior to 1929 in the money supply that nullified all of the stabilizing effects that a gold standard could infer.<sup>17</sup>

When it comes to inflation, most of the discussion relates around two questions, what are the effects of inflation under a gold standard and can the gold standard actually prevent inflation? The first question often opens the door to social planning. Every textbook assumed that some level of government intervention could bring about an increase in social welfare, though their views on the optimal policy varied.<sup>18</sup> One author harshly criticized inflation because the redistribution it brings about “isn’t on the basis of income levels, number of dependents, or other socially acceptable economic criteria. Instead, it is haphazard and inequitable in a manner unrelated to society’s objectives” (Spencer 1993, p. 146). Another author explained that “a closer look at who benefits and who loses from unanticipated inflation suggests that there are probably more gainers than there are losers” (Stiglitz 1993, p. 968).

It is generally accepted by nearly all the authors surveyed that the world experienced far less inflation while under the gold standard, in their words, often causing a “nostalgia” (Fischer 1983, p. 658) for this bygone era, yet few authors seem to think this is an important or consistent enough attribute to warrant serious reconsideration of the merits of the gold standard.<sup>19</sup> Many

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<sup>17</sup>It is also misleading to blame the classical gold standard when it was abolished by the warring countries in Europe. This caused an influx of gold to America and permitted more monetary inflation than otherwise. Furthermore, the gold exchange standard was abandoned in 1931 by Britain. For a thorough analysis of the monetary issues related to the Great Depression, the most authoritative resource is Rothbard’s *America’s Great Depression* (1972). While most texts failed to clearly demarcate what the actual supply of money contained at certain times, one text offered this rare definition which goes a long way, compared with other texts, to clarifying what is taking place. “Any reference in this chapter to the gold standard relates to a monetary system based on gold, but containing sizable elements of fiduciary money. If the monetary circulation consisted of nothing but gold coins, no monetary authority would be able to exercise a deliberate impact on the size of M” (Korteweg 1959, p. 77).

<sup>18</sup>Quite a few texts don’t offer rigorous defense of social welfare, rather, they briefly present all the different models and seem to assume an argument *ad numerum* that the prevalence of models suggests that a social criterion of some kind must exist.

<sup>19</sup>While many authors agreed that it produced less inflation, this was not universally accepted as a significant positive argument for the gold standard. As Stanley Fischer (1983, p. 659) comments, “The chief advantage [of the gold standard] is the low average rate of inflation that would likely to result . . . but we should not be too influenced by the experiences of the nineteenth century . . . the gold standard was not an infallible bulwark against inflation.”

authors mention that the era of the gold standard put the economy into a “strait-jacket” (van Sickle 1954, p. 292) that forced it into considerably higher unemployment and far more price variability than experienced since World War II (Fischer 1983, p. 874). Still, many authors argued that the supposed *golden calf* of the gold standard, price stability, was elusive and furthermore, that the gold standard was no guarantee against inflation. The most commonly cited cause of inflation and price level changes during the classical gold standard was changes in the quantity of mining and new discoveries of gold. Government intervention, typically presented as a necessary step in times of war and crisis was the second most frequently cited cause.<sup>20</sup> Only a few authors added the crucial caveat that during these times, governments habitually suspended the essential operations of the gold standard. However, overall, most authors give the gold standard its due for helping to restrict inflation.

#### *Authors’ Arguments and Perspectives on the Gold Standard*

Few authors have approached the topic of gold using uniform categories or systematic argumentation. In approximately half of the textbooks, the best method for distilling their perspective on the topic of gold is to glean it from pithy comments and incomplete arguments, almost always derogatory, scattered throughout their books.<sup>21</sup> Chapters on the origins of money, international monetary systems, and money and banking were the likeliest candidates for these brief expositions. In another quarter of the texts, the writers presented a semblance of systematic argumentation, both pro and con, though it was rarely comprehensive and usually sided with the mainstream interpretation.<sup>22</sup> In the final quarter of the material reviewed, the writers presented a simple working version of the classical gold standard and then proceeded to spend as much or more time offering all the arguments against it.<sup>23</sup> Several of these expositions would likely leave an uninitiated student wondering how such a flawed system could ever have been coincidental with such a long period of peace and prosperity.

Another common feature is the considerable use of the passive voice where the actors should have been identified or where the identification of those actors would impugn them. A common example is the statement, “The dollar was devalued” (Lipsey 1984, p. 951), however, it is highly unlikely that this devaluing was due to the Fates colluding against mankind, but rather the necessary effect, whether anticipated or not, of actions, in the specific case mentioned by the author, of the government. Similarly, in another section, Lipsey stated, “In the period after World War I, the gold standard failed and

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<sup>20</sup>A more detailed examination of these arguments can be found in the section labeled “The Vicissitudes of Mining” and “The Effects of the Great Depression and the World Wars.”

<sup>21</sup>See, for example, McEachern (2003) and O’Sullivan (1998).

<sup>22</sup>See, for example, Arnold (1989) and also van Sickle (1954).

<sup>23</sup>See, for example, Case (1999).

was abandoned” (1984, p. 479) ignoring the relevant question of who was pushing for its abandonment and what their motivations for considering it “failed” might have been.

The next few pages will focus on how the textbooks address or construct arguments proving or disproving the viability of the gold standard, including mining and the supply of gold, hoarding, the domestic vs. international tensions a gold standard creates, the effects of the World War I and the Great Depression, and the role of banking.

### *The Vicissitudes of Mining*

For a disturbingly high number of authors, mining seems to be the linchpin by which the whole gold standard rises and falls. Many authors offered practically no other assault on the viability of the gold standard except that it was subject to these vicissitudes.<sup>24</sup> A slight tinge of contempt can be detected in the tone of many when they talk about gold-exporting countries and the owners of mines, as if the gold standard wrongly endowed these sinister countries and businessmen with unchecked monopoly power over the rest of the world.<sup>25</sup> The argument that the gold standard is inequitable because it benefits the gold-producing nations at the expense of all others for no reason beyond the random endowment of natural resources is used rather frequently. One commentator goes so far as to cite this argument as the primary motivation for President Reagan deciding against returning to the gold standard early in his administration (Case 1999, p. 860).

As a matter of historical fact, the large discoveries of gold in South Africa and the Klondike are often mentioned as clear reasons why the gold standard could not insulate an economy from rapid changes in the money supply. However, aside from simplistic comments of this nature repeated *ad nauseam*, extremely few texts offered any kind of statistical data to show the severities of the fluctuations during these periods and almost all ignored the fact that the actual periods when the gold standard was temporarily abandoned rarely coincided with spikes in the physical supply of gold but rather with sizable changes in the supply of fiduciary media.<sup>26</sup> The language used to explain the effects mining can have is telling. One writer opined that a fundamental problem with the gold standard is that it placed the world’s commerce “at the mercy of the gold discoveries” (Baumol 1994, p. 915). Another stated, “Discovery of new gold sources or improvements in the technology used to extract gold from existing mines would likely bring about *rapid* inflation” (Ekelund 2000, p. 815). Others frequently used adjectives to describe the potential changes in the money supply including “*chaotic*” and “*tumultuous*.”

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<sup>24</sup>See, for example, Ekelund (2000).

<sup>25</sup>The recent antitrust clash with Microsoft comes to mind (Dilorenzo 2001).

<sup>26</sup>As Rothbard (1991, p. 57) argued: “National fractional reserve systems are the real source of most of the difficulties blamed on the gold standard.”

### *Effects of Gold Hoarding*

Hoarding was occasionally cited as a serious problem for the stability and functionality of the gold standard. This argument comes down to little more than a complaint that people act differently than the observer or the government thinks they should. “Hoarders” were frequently depersonalized into a sinister alliance of misers that actively try to thwart society’s welfare. Having earlier stated that gold’s main use throughout history has been hoarding, Samuelson (1984, p. 261) offered the exclusive argument that when FDR outlawed the private ownership of gold, that “this was done so that holders or hoarders of gold could not make a 67 percent profit from the devaluation of the dollar” (p. 263). But as Ludwig von Mises observed in many of his works on money, hoarding merely represents another demand for money and does not affect the demand structure in any unnatural or particularly destructive way.<sup>27</sup> The real problem here for these authors is that these “hoarders” are not acting in a politically expedient manner for those currently in power.<sup>28</sup>

### *The Interests of Domestic Versus International Affairs*

One of the more serious arguments focused on is the concept that the gold standard removes control over the domestic monetary situation from a country’s government and often places its domestic policy and international interests at odds. These texts argue that the expansive aggregate monetary policies needed for domestic prosperity—inflation—is precisely opposed by the desire of net exporters to decrease the domestic stock of money to lower prices and give them a competitive edge on the world market.<sup>29</sup> Wonnacott (1990, p. 219) argued,

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<sup>27</sup>Mises (1998, p. 399) states:

What is called hoarding is a height of cash holding which—according to the personal opinion of an observer—exceeds what is deemed normal and adequate. However, hoarding is cash holding. Hoarded money is still money and it serves in the hoards the same purposes which it serves in cash holdings called normal. He who hoards money believes that some special conditions make it expedient to accumulate a cash holding which exceeds the amount he himself would keep under different conditions, or other people keep, or an economist censuring his action considers appropriate. That he acts in this way influences the configuration of the demand for money in the same way in which every “normal” demand influences it.

<sup>28</sup>Guido Hülsmann (2003, p. 53) clarifies,

“Hoarding” is a pejorative expression for an increase in the demand for real cash balances. Let us first remind ourselves that quantities of money are “hoarded” because each single money unit is held in the “hoard”—that is, in the cash balance—of some individual. Therefore it is impossible to hold money more intensely than it otherwise would have been held.

<sup>29</sup>See, for example, Wonnacott (1990, p. 343).

The biggest problem with the gold standard, then, is that it does not provide a steady and measured restraint. Rather, it exerts restraint in the form of a threat of disaster . . . as long as the authorities are lucky, with gold flowing in steadily from mines or from foreign countries, and as long as they follow farsighted policies that prevent any crisis of confidence, it is possible that the system may work reasonably well.

The crucible of this argument is the term “farsighted policies.” The complaint here is that the gold standard forces governments to irrationally restrain themselves by not pumping *faux* money into their domestic economies in an attempt to reap short-term political gains. Consequently, this argument is not really one so much against the gold standard as it is in favor of government intervention, which is hindered by the “strait-jacket” that an effective gold standard demands.

Government intervention is subject to the same economic laws that all other actions must report to. That a gold standard is flawed because it holds a government responsible for the necessary effects of its actions is not an economic argument but a political one. Any time a change in market conditions takes place, adjustments will be made. Economic laws cannot be avoided and attempts to do so are misguided. The argument that the gold standard forces nations to “accept domestic adjustments in such distasteful forms as deflation, unemployment, and falling incomes, on the one hand, or inflation, on the other” (McConnell 1972, p. 757) is a Catch 22. Regardless of the monetary system, changes in the supply of money will result in either inflation or deflation; there is no other option. One cannot escape fundamental economic realities. What it appears this author is really interested in is finding a monetary system whose relative elasticity allows a nation to avoid culpability for its actions for the longest possible interlude.

#### *The Effects of the First World War and the Great Depression*

A few authors clearly state that the real reason the gold standard was abandoned during the depression of the 1930s was that it limited the government’s ability to inflate the money supply<sup>30</sup>—though even this limitation is not universally seen as positive. Many, however, do not present the situation quite so clearly. Most notably, numerous texts claim that this period was really the first time people began seriously considering that the gold standard may not, in fact, provide the optimal quantity of money for the new emerging brand of growing, full-employment economies. As authors van Sickle and Rogge noted in 1954,

The revolt against the gold standard is an outgrowth of the Great Depression of the 1930s and of the experience of World War I when national economies, divorced from gold and stimulated by enormous government spending, were able to provide continuous employment for all able and

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<sup>30</sup>See, for example, Gitlow (1962, p. 654).

willing workers. These two experiences also led to a revolt against the traditional view that market forces tend to keep a competitive private enterprise economy operating at the full employment level. (van Sickle 1954, p. 364)

While most authors, who claim that the Great Depression was the “straw that broke the back of the gold standard” (Arnold 1989, p. 806), recognize and point out that this was caused by the monetary expansion during the World War I, few place the key emphasis on the link between these two phenomena. Paul Wonnacott, responding to serious considerations in 1979-80 of returning to the gold standard, (without addressing possible government action that may have caused in the first place the adverse effects so often blamed on the gold standard) states that the present attempt to return to it “would be a mistake. The gold standard contributed to the depression of the 1930s; it can make the economy unstable” (Wonnacott 1990, p. 220). Similarly, Bach (1963, p. 240) states that the changes in the money supply during this period occurred while we were “*firmly* on the gold standard.” The clearly intended inference for the reader to make is that the gold standard *was* the contingent cause of the changes in the money supply. Fortunately, most authors aren’t as blatant as Bach, but still fail to appropriately disaggregate the conditions present during that period. They end up either intentionally or unintentionally blaming the gold standard for many of the problems of that era.

Few texts offered any systematic discussion of the monetary actions that were undertaken by the belligerents in World War I, even fewer pointed to the creation of the Federal Reserve in 1913 as a key event in allowing the United States to adopt inflationary policies. Many authors simply stated the position that the War caused the participating countries to abandon the gold standard in order to “safeguard their metallic reserves.”<sup>31</sup> They rarely explained why such reserves would need to be safeguarded, namely that these countries were heavily inflating their money supplies to fund wartime efforts. No textbook extensively analyzed the monetary changes throughout the period from World War I to the Great Depression and the worldwide abandonment of the gold standard.

### *The Role of Banking and Fractional Reserve Practices*

Gold has played an important role in influencing the development of money and consequently, banking. Most writers acknowledge the unique historical role gold once played. While the topic of banking is usually initially introduced as dealing directly with gold, these discussions tend to quickly shift to the modern and more useful machinations of the monetary establishment, namely fiat paper currencies. Approximately two-thirds of the texts reviewed introduce the concept of banking with the goldsmith story.<sup>32</sup> There

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<sup>31</sup>See, for example, Fairchild (1954, p. 257).

<sup>32</sup>See, for example, Spencer (1993) and also Fischer (1983).

is some variability on whether the authors posit this as the authoritative historical development of banking or simply a useful allegory.

Most texts began explaining, albeit briefly, that gold, being cumbersome for actual exchange in most transactions, was increasingly left in warehouses while the receipts for redemption of the gold became frequently used in its stead. Some portrayed these goldsmiths as “enterprising”<sup>33</sup> while others portray them as absent-minded shopkeepers who one day happened to “observe”<sup>34</sup> that the physical stock of gold did not vary much from day to day and month to month. In either case, they came to realize that they could print up a small amount of extra receipts for the gold in their warehouses and either spend it themselves or lend it out with interest without substantially effecting their solvency. This realization birthed fractional reserve banking.<sup>35</sup>

At this point, having just explained that *true* banking began when someone first issued claims on gold that actually belonged to someone else, a few authors felt it necessary to warn any uninitiated readers against considering the practice of fractional reserve banking as dishonest.<sup>36</sup> However, just when one might expect an exposition on its morality or a clarification of what really takes place, the best we get is an *argumentum ad populum* of sorts, appealing to fractional reserve banking’s widespread use as sufficient authority to allay any concerns of ethics. From this point on, nearly all texts assume fractional reserve banking as standard practice<sup>37</sup> and only a few even acknowledged that there are people who are opposed to such an institutional arrangement on ethical or practical grounds.<sup>38</sup> None of the material under review ever mentioned or referenced any concept of property rights in this regard.

Invariably, during the discussion of the creation and evolution of modern banking, the topic of bank runs comes up. While there is some variety on how this topic is covered, the vast majority of the texts present the problem as being now one of only historical interest because the present central banking

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<sup>33</sup>See, for example, Baumol (1994, p. 722).

<sup>34</sup>See, for example, Byrns (1989, p. 227) and also Colander (1995, p. 313).

<sup>35</sup>Most texts saw deposit creation as being at the heart of the role of banking. See, for example, Gill (1978, p. 248).

<sup>36</sup>See, for example, Case (1999, p. 616).

<sup>37</sup>The following quotation typifies how many authors explain, if they explain at all, the present contentment with such an arrangement.

Our current monetary system has evolved over hundreds of years during which commodity money was first replaced by full-bodied paper money . . . finally we arrived at our present system. . . . Like a hesitant swimmer who first dips her toes, then her legs, then her whole body into a cold swimming pool, we have “tested the water” at each step of the way—and found it to our liking. It is unlikely that we will ever take a step back in the other direction. (Baumol 1999, p. 719)

<sup>38</sup>See, for example, Bach (1963, p. 223).

system has ended any concern over irredeemably. However, historically, quite a few texts present the fear of irredeemability as being even then somewhat irrational. The claim is that the only thing that the people *really* should fear is fear of bank runs itself. Instead they should see bank runs as unfortunate in that they often arbitrarily interrupted periods of great prosperity and expansion. Many authors resorted to chiding bankers of old for not being shrewd enough while acknowledging that the real solution would later be found in institutional change.

*Government Intervention into Banking and the Management of Money*

Why did governments get involved in market produced banking?<sup>39</sup> Explanations range from the danger of having “profit-oriented bankers [who] might otherwise provide the economy with a gyrating money supply that dances to the tune of the business cycle” (Baumol 1994, p. 735), to the vast benefit a centrally managed money supply can provide in promoting a growing, full-employment economy.

While every text incorporates a thorough explanation of how the Federal Reserve functions, many authors sympathize with a sort of rational ignorance on the part of the readers and the general public concerning the complicated affair of money creation. Paul Samuelson comments, “The public neither knows nor cares—and need not know or care—whether its currency is in the form of silver certificates, Federal Reserve notes, or copper or silver coin. So long as each form of money can be converted into any other at fixed terms, the best is as good as the worst” (Samuelson 1980, p. 261).

With the presence of the Federal Reserve system firmly established, this literature turns its attention to various issues of managing the money supply. The level of reserves, particularly under the Bretton-Woods system, is a frequently occurring topic. Some authors express bewilderment at the government’s stubborn policy of maintaining high reserves, particularly during the earlier half of the twentieth century. One compared this scenario to the fable of King Midas who would later discover that he could not eat his gold.<sup>40</sup> Other authors expressed frustration at the disutility and high costs of mining gold

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<sup>39</sup>All the textbooks did an appallingly poor job of tracing the historical development of this institution. They left out the effects of legal tender laws and other government interventions necessary to institutionalize a fundamentally bankrupt practice. Furthermore, they rarely even mentioned, let alone explored the concept of free banking and how it is relevant for today.

<sup>40</sup>George Leland Bach (1963, p. 241) stated:

During the 1930s we got nearly \$20 billion of gold from abroad, giving foreigners in exchange goods, services, and investments in American industries and government bonds. Then we carefully buried the gold in Fort Knox and paid soldiers to guard it. The fable of King Midas, who finally found he could not eat his gold, looked uncomfortably close to many observers.

only for it to be reburied in Fort Knox.<sup>41</sup> For them, this irrational fascination with gold “was the center of a ‘religion’ of money” (Bach 1963, p. 660).

The other reoccurring problem that mismanagement of the money supply can bring about is inflation. While all texts acknowledged the higher levels of inflation compared to previous eras, few offered a side-by-side comparison of inflation under the gold standard versus the Federal Reserve system, tending to deal with inflation under each system separately. A majority of the materials, especially the more modern ones, expressed contentment with how the Fed has managed the money supply.<sup>42</sup> In either case, few authors acknowledged the existence or viability of any alternative systems, focusing only on strategies for better central management.

#### THE AUSTRIAN CRITIQUE OF THE GOLD STANDARD

The Austrian School of economics has long held as its core values the view that a free and open market economy, private property, and sound money would maximize economic freedom and prosperity. It attempts to construct and point to the merits of a noncoercive organization of society and show the deleterious and necessary effects of arbitrary intervention into that society. These themes were dominant in nearly all the social sciences before the rise of the centralized and total state of the twentieth century. Indeed, these are pillars of classical liberalism. As Ludwig von Mises explains, “Defense of the individual’s liberty against the encroachment of tyrannical governments is the essential theme of the history of Western civilization” (1980, p. 454). The preference for the gold standard among Austrians is not born out of nostalgia for previous eras or a belief that gold is the perfect money or a cost-free monetary alternative, but quite simply, that historically, gold freely arose as the preferred choice of market participants. Its voluntary selection time and again throughout history supports that it is the most suitable medium-of-exchange available in the world (Garrison in Rockwell 1992, p. 62).

There are a few basic propositions which Austrians hold about money. First, that in a market economy free from forceful intervention, the tendency will be for one or at most a few suitable commodities to begin to serve as a common medium-of-exchange. Second, that these commodities will tend to have certain characteristics that make them particularly suitable for this purpose (Garrison in Rockwell 1992, p. 62). Historically, gold has proven to be most suitable for this purpose, with silver having similar qualities, but to a lesser extent. As Murray Rothbard explains,

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<sup>41</sup>See, for example, Byrns (1989, p. 223).

<sup>42</sup>Ekelund (2000, p. 815) put it this way: “In the United States, the Fed has amply demonstrated its willingness to gradually reduce the inflation rate during the 1980s and 1990s. This would appear to take some of the steam out of the argument for a return to the gold standard.”

it is no accident that this has been the invariable success story of precious metals, which can be partly explained by their superior stable nonmonetary demand, their high value per unit weight, durability, divisibility, cognizability, and the other virtues described at length in the first chapter of all money and banking textbooks published before the U.S. government abandoned the gold standard in 1933. (Rothbard in Rockwell 1992, pp. 7-8)

When Austrians defend the gold standard, they are really only defending the right for people to voluntarily direct their own affairs. They are merely upholding the fundamental tenants that underlie all peaceful social cooperation (Mises 1998, p. 168). Supporting the gold standard is supporting the veracity that voluntary exchange is beneficial to all parties involved and that coercion cannot produce a more socially beneficial arrangement. It is completely wrong to believe that the gold standard was rejected by the market or somehow failed. It did not fail. It was violently abolished by governments because it did not serve their inflationary schemes (Mises 1980, p. 461).

Indeed, the principles of sound money have always stood firmly in the way of government machinations that can only be brought about by deceptive means. As Austrian economist Richard Ebeling explains,

looking over the broad sweep of history, it [is] absolutely clear . . . that the history of money [is] nothing less than one long tragic account of incessant state debasement of the monetary unit and an accompanying disruption of economic progress and social development. From the coin clipping of ancient kings and princes through the tidal wave of paper money inflations to the manipulative subterfuge of modern central banking, political influence or control over money and banking had brought in its train nothing but economic havoc and social conflict. (Ebeling in Rockwell 1992, pp. 43-44)

This is the single greatest merit of the gold standard, that it immunizes the market from disastrous state intervention. The benefits of this alone far outweigh the trivial technical or resource cost arguments against the gold standard (Rockwell 1992, p. xii). The frequently cited real costs that a gold standard implies, like the mining and transportation of gold, are not accurately measured by the proponents of these arguments.<sup>43</sup> Simply measuring

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<sup>43</sup>Many mainstream academics attempt to calculate a real figure to determine the costs a gold standard would impose on the economy. Typical estimates range from 16 percent to 50 percent of the annual growth rate of national income. Roger Garrison (in Rockwell 1992, pp. 62) warns against such incorrect calculation.

Proponents of the gold standard would be ill-advised to respond with a cost figure of their own. If the true costs of a gold standard could be calculated at all, it would have to take into account the monetary instability associated with alternative standards and the consequent loss of output. . . . An appreciation of these benefits, but not a precise quantitative estimate, can best be gained by comparisons of historical episodes which are illustrative of economic performance under a gold standard and economic performance under a paper standard.

the costs of mining gold versus the costs of printing and managing the money supply is not relevant. Each system must be reviewed as a whole, including all costs and benefits. As Roger Garrison (in Rockwell 1992, p. 76) states, “Ultimately, the cost of any action, commodity, or institution is the alternative action, commodity, or institution forgone. The opportunity cost is the only cost that counts.” The complete true costs of centralized monetary systems should include both the apparent costs of printing and managing the money supply and the far more relevant and costly effects of the instability associated with these systems. When viewed as a whole, the benefits of a gold standard over other systems are apparent (Garrison in Rockwell 1992, p. 63).

Governments have long understood that their interests and those of the people under them do not frequently coincide. That is why they have had to resort to subterfuge to bring about their schemes. Inflation is really a hidden tax that only benefits the government and whatever social class it chooses to favor with any given policy.<sup>44</sup> Inflation cannot create jobs or wealth, it can merely redistribute them, and by virtue of the necessity of force, which contradicts voluntary exchange, it must create a less socially beneficial outcome. Policies, which could not be undertaken absent inflation, lull the people into thinking that governments possess some “magical powers to turn stones into bread” (Ebeling in Rockwell 1992, p. 44).

Political leaders favor inflationary policies because they hide the real costs of their programs until after they have seized greater control or have left power. These political leaders, as Mises pointed out, can only pursue these extremely popular policies by misleading the people and undermining

the democratic way of persuading the majority. They arrogate to themselves the power and the moral right to circumvent the will of the people. They are eager to win its cooperation by deceiving the public about the costs involved in the measure suggested. . . . Inflation is the fiscal complement of statism and arbitrary government. (Mises 1980, p. 468)

It is for this reason that most Austrians support a 100 percent gold standard as the only system fully compatible with the free market and the defense of property rights.<sup>45</sup> Any standard that allows banks or governments to

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<sup>44</sup>Mainstream economics is inured with the benefits that inflationary schemes can supposedly provide. Arguments abound that inflation spurs economic growth, reduces unemployment, cures monetary disequilibrium, and can provide a stable money. All of these arguments have been systematically refuted in the Austrian literature. For further reading on these subjects, see the following resources. Monetary disequilibrium: Cochran (2001) and Horwitz (1996). Stable money: Dorn (1987) and Herbener (2004).

<sup>45</sup>Given the way the Austrian School has historically approached the topics surrounding money and its functions within an economic system, it should be of little surprise that a number of its more prominent Authors have produced works that adequately address the many relevant issues surrounding the gold standard and sound monetary policy. Perhaps no author has been more prolific than Murry Rothbard. Following closely in the footsteps of Ludwig von Mises and the work he did in *The Theory of Money and Credit*

expand credit beyond the observed preferences of market participants creates fraud and instability. As Rothbard notes, “leaving the government and its central bank power to fine tune the money supply, but abjuring them to use that power wisely in accordance with various rules, is simply leaving the fox in charge on the proverbial henhouse” (Rothbard in Rockwell 1992, p. 2).

### CONCLUSION

This paper has attempted to survey, primarily, how modern economic textbooks have addressed the various topics surrounding the gold standard, and secondarily, to analyze how the Austrian School has addressed these same topics. This survey shows that the situation in modern textbooks is really quite unbalanced. Their failure to provide adequate information about the gold standard is only exceeded by their failure to recognize the relevant facets of a gold standard and provide systematic argumentation for and against them. Regrettably, the situation with the textbooks is somewhat understandable given the ideological bent of modern economics.<sup>46</sup>

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(1912) and the sections on indirect exchange in *Human Action* (1949), Rothbard focuses heavily on the fundamental issues related to sound money that are crucial for a market economy. Rothbard’s *What has Government Done to Our Money?* (1964) is perhaps the best introduction to this topic available. In a little over a hundred pages, he systematically addresses the history of money, its functions and properties in a free society, and the effects of government’s meddling with the money supply. While the depth of information covered in this monetary essay is light at times, Rothbard makes up for this by the scope and integration of all these topics into a cogent and clear view of money. He starts by looking at the concepts of barter and exchange and building the concepts of the monetary unit, private coinage, and fluctuations in the money supply upon this “Crusoeian” economic foundation. Then, introducing government into the equation, he examines legal tender laws, debasement, inflation, and fiat money, concluding with a history on the monetary breakdown of the West.

In Rothbard’s equally substantial essay *The Case Against the Fed* (1994), he extends his analysis of monetary issues to the important subjects of banking and centralized planning of the money supply, showing in classic form the deleterious effects of monopolized power. While his *Making Economic Sense* (1995) is a collection of essays not specifically dedicated to topics relating to money, whenever topics related to money surface, Rothbard guides the reader through the sound monetary interpretation of the events and phenomena. But Rothbard’s seminal work, *Man, Economy, and State* (1962), is where he goes into the greatest detail establishing the principles of economic reasoning concerning money. There are a number of other articles and resources on related topics on the Ludwig von Mises Institute website: [www.mises.org](http://www.mises.org).

<sup>46</sup>Today, most economists live off the state, whether through its subsidization of the public university system or its own hiring of economists in an attempt to support or legitimize its policies. It should be of little surprise then that the twentieth century saw the profession transformed from its laissez-faire roots to the statist doctrines that rule the day now. Many of its chief practitioners are merely creatures of the state rejecting thorough, systematic, and honest academic work in favor of the subterfuge of statist and collectivist ideologies. See Salerno (2004).

The most persistent problem preventing these texts from systematically and honestly presenting their arguments is that long before they arrive at the subject of money and the gold standard, a goliath expansionist and interventionist government has already been assumed as necessary or beneficial for society. As Mises stated so succinctly in *Theory of Money and Credit*, “It is impossible to grasp the meaning of the idea of sound money if one does not realize that it was devised as an instrument for the protection of civil liberties against despotic inroads on the part of governments. Ideologically it belongs in the same class with constitutions and bills of rights” (Mises 1980, p. 454).

It is quite rare to find a textbook that even begins to approach and engage the core issues of importance concerning the gold standard. This is one area where the Austrian literature really stands out. They have gone to great lengths to systematically approach this topic, to fairly rebut the alternative arguments, and methodically rework their arguments to respond to the major claims against them.

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## INTEREST: IN DEFENSE OF MISES

J. PARTICK GUNNING

In a recent paper, Guido Hülsmann (2002) advances the revolutionary idea that Austrian economists ought to base their concept of originary interest on the spread between the value of an end and the value of the means used to achieve the end. He points out that this idea stands in opposition to Ludwig von Mises's argument that the concept should be based on the assumption of time preference, as presented in *Human Action* (1966). He also argues that whereas his idea enables one to link originary interest, as he defines it, to market interest, Mises's idea does not. Hülsmann uses most of his paper to articulate his new idea. The first part of his paper, however, is largely a critique of Mises's theory. The critique reaches particularly damning conclusions. He argues that Mises's claim of the universality of time preference is flawed and that his concept of originary interest is based on an assumption about physical productivity. In addition, he argues that Mises's concept of originary interest based on time preference does not allow one to deduce that entrepreneurial competition will result in a positive rate of interest in the market economy.

The goal of this comment is to demonstrate that Hülsmann's criticism of Mises is based on a series of misinterpretations and omissions. I demonstrate, by referring to the Misesian text, that time preference is a praxeological category (part 1) and that Mises's concept of originary interest is not based on an assumption about physical productivity (part 2). I next show that regardless of whether Hülsmann is correct about Mises's concepts of time preference and originary interest, the issue is not related to the central problem with which he is concerned—the derivation of market interest (also in part 1). Finally, I demonstrate that, contrary to Hülsmann, Mises did indeed show how entrepreneurial competition leads time preference and originary interest, which are present in all decisions to consume (sooner or later), to become a component of the market rate of interest (and therefore that originary interest in the market economy is positive). Part 3 discusses: (a) the deduction of positive market interest from the assumption of time preference and originary interest in individual action and (b) the disengagement of originary interest in the market economy from

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what Mises called the gross market rate of interest. Part 4 continues the theme of part 3 by showing how the assumption of praxeological time preference combined with competitive entrepreneurship explains the spread, in a market economy, between the price of a consumer good and the sum of the prices of the resources used to produce it. Part 5 presents a brief conclusion.

# 1. HÜLSMANN'S CRITIQUE OF THE TIME PREFERENCE THEORY

Mises asserted that time preference is a praxeological category. But Hülsmann claims that Mises adhered to "a consumption theory of time preference." Such a theory, as Hülsmann presents it, "holds that time preference is caused by the necessity of consumption" (Hülsmann, p. 79), claiming that his interpretation of Mises is supported by textual evidence. To counter the viewpoint contained in this interpretation, he tries to demonstrate that time preference is *not* a category of action and he argues that Mises did *not* adequately defend his treatment of the cases of people who allow themselves to die. We discuss each argument in turn. Then we point out that the whole exercise is irrelevant to his claim that time preference does not provide a sound basis for comprehending interest in the market economy.

## *Textual Evidence of a "Consumption Theory of Time Preference"*

Hülsmann's claim to the contrary, the textual evidence suggests that Mises did not hold a consumption theory. Hülsmann describes this theory as follows:

Fact is that human beings could not survive if they did not consume. Hence, there must be some time preference in human action, lest the human race would perish. This does not mean that human beings must consume through every single action, so that time preference would be the only factor determining their actions. Rather, it means that in order to survive human beings must, at some point, prefer shorter production processes to longer ones, even though the longer ones are more *physically productive*. (Hülsmann, pp. 79-80, italics added)

Unfortunately, Hülsman's interpretation of Mises's words are presented in a way that defies direct verification by a reader who is not conversant in German. First, one set of statements to which he refers is in the 1940 German edition of *Human Action*, but Mises deleted it from the English editions. Second, Hülsman does not quote any statements from the 1940 edition but merely refers the reader to two pages of text (see his ftn. 4 on p. 80). (Beyond that, he says that the statements are made in a discussion about the errors made by other writers.) Thus, one who does not have access to the German edition or who does not read German cannot be certain of Hülsmann's references.

Nevertheless, there is an English translation available of most, if not all, of the passages to which he refers.<sup>1</sup> The translation suggests that Hülsmann's

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<sup>1</sup>See Greaves (1974, pp. 156-57).

claim is not based on what Mises says about his theory. Indeed, it appears to contradict what Mises says. One assumes that Hülsmann is referring to the following passage, as translated:

Böhm-Bawerk therefore merely arrived at the conclusion that “as a rule” future goods have a lower value than the same kind and quantity of present goods. But that is not a satisfactory explanation. Are there exceptions to this rule? If there are, what significance do they have for explaining interest? Might the exceptions not become the rule under certain circumstances and interest then disappear entirely?

No, there are no such exceptions! In acting, one must always, without any exception, value a satisfaction at an earlier point in time more than the same kind and amount of satisfaction at a later time. If this were not so, then it would never be possible to decide in favor of a present satisfaction. Whoever uses or consumes anything, whoever seeks by acting to relieve to a greater or lesser extent a felt uneasiness is always expressing a preference for an earlier over a later satisfaction. Whoever eats and consumes anything is making a choice between a satisfaction in the immediate future and one in a more distant future. If he were to decide differently, if he were not to prefer the earlier to the later satisfaction, he would never be able to consume at all. He could not even eat and consume tomorrow, because when tomorrow became today, and the day after tomorrow became tomorrow, the decision to consume would still call for valuing an earlier satisfaction more than a later satisfaction. Otherwise, consumption would have to be delayed still further. (Greaves 1974, pp. 156-57)

In reading this passage, one searches in vain for some statement about the necessity of survival or the possibility that the human race will perish. One's search of the pages in *Human Action* also ends in frustration. So far as I can determine, Mises does not say that the necessity of survival is the basis for his theory of time preference. On the contrary, he bases his theory on the assumption that actors space their consumption over time. What Hülsmann appears to do is to infer the requirement of survival from the fact that someone who delays all consumption indefinitely would not consume. But that is not enough to support the contention that Mises's time preference theory is based on the need to survive.

*Universal Characteristic of Action versus  
Universal Characteristic of Choice*

Hülsmann believes that time preference is not a universal category of action. To support his claim, he presents three examples: the warrior, the martyr, and those who aim to commit suicide (Hülsmann, pp. 80-81). These people prefer death or action that risks death over consumption and they choose accordingly. The warrior values risking his life in battle higher than not risking his life. The martyr values dying for a cause higher than living if living does not further his cause. The suicide prefers death to life. Be that as it may, these people still presumably possess the category of time preference. Presumably, they could delay their actions. By choosing the lot of the warrior,

martyr, or successful suicide today, an individual indicates that he prefers to die *sooner* rather than *later*.

In citing these examples, Hülsmann makes the error of assuming that every choice must be explicitly related to time preference. Consider a more common example. Every day, I choose tea over coffee without any direct consideration of time preference. But time preference is still the fundamental consideration in my choice to consume one of these at the moment rather than later.

### *Rejection of the Boundary Between Action and Non-Action*

Hülsmann's discussion of the warrior, martyr, or successful suicide, who he says "are not inspired by the desire to survive" (ibid., p. 80), must be compared with three cases presented by Mises. Mises suggests that critics might use these cases to try to refute the time preference theory. Mises introduces three examples that he suggests critics might use to try to refute the time preference theory. The cases are (1) a miser who withers away because he saves so much that he does not have enough to eat in the present, (2) a person who is so afraid of morbidic germs that he dies from malnutrition either because he thinks that germs are a greater threat to his life than starvation or because he does not correctly compare the risks,<sup>2</sup> and (3) a person who commits suicide because he mistakenly thinks that he will be better off dead than he will if he risks the accidents that will befall him while he sleeps (Mises, p. 490). Consistent with his examples of people who are not inspired by the desire to survive, Hülsmann criticizes Mises for maintaining that such choices represent "a pathological withering away of vital energy" (Hülsmann, p. 80).

The key to understanding Mises's meaning appears to lie with the concept of "vital energy." Mises's (p. 131) statements about this concept suggest that there is no clear dividing line between the exercise of vital energy, which implies action, and the nonexercise of that energy, which implies mere physiological functioning. By "withering away," Mises seems to have in mind a being who is on the verge of crossing this uncertain dividing line. What Hülsmann seems to have done is to identify a minor problem with the definition of action used to derive the praxeological categories—a problem that Mises acknowledged. But this is not sufficient grounds for denying the categorial nature of time preference. After all, although people may differ in their judgments about whether other human beings possess a property of the category of action, one cannot consistently deny that he himself possesses it. It is the latter "insight," which is based on self reflection, that is the basis for the claim that a particular concept, such as time preference, is an action property.

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<sup>2</sup>Mises does not actually say why he chooses not to eat, but these are the logical explanations from the context.

*Irrelevance of the Issue*

A puzzle raised by Hülsmann's criticism of the time preference theory is why he thinks it is important. The main goal of his criticism of Mises is to support the claim that Mises's concept of originary interest does not provide a sound foundation for comprehending interest in the market economy. But a consumption theory of time preference can accomplish this just as well as a praxeological theory. To see this, suppose that Hülsmann is correct that Mises held a consumption theory of time preference. So long as the economy is not dominated by warriors, martyrs, and suicides; time preference would have to exist in it; and the market rate of interest would have to reflect the different evaluations of present goods with respect to future goods that people in the market economy exhibit.

Hülsmann's logic goes something like this. Consider a building inspector who hears the claim from a builder that his building will withstand a powerful earthquake because it is built of material X. The inspector inspects the building and judges that it is built instead of material Y. He concludes that the building will not withstand the earthquake but he fails to investigate the strength of the material Y.

In short, not only is the Hülsmann's criticism of Mises incorrect (the builder used material X after all), it really does not matter for his main argument whether it is correct or not. If this paper was an effort to evaluate the full logic of Hülsmann's argument, it would be appropriate to ask why he bothered to discuss Mises's time preference theory at all. However, the concern here is only with whether his critique is valid. The paper has shown that it is not.

## 2. IS MISES'S TIME PREFERENCE THEORY BASED ON THE ASSUMPTION OF PHYSICAL PRODUCTIVITY?

Hülsmann's second criticism of Mises concerns an example Mises uses to refute those who contest "the universal validity of time preference." Mises writes:

Those contesting the universal validity of time preference fail to explain why a man does not always invest a sum of 100 dollars available today, although these 100 dollars would increase to 104 dollars within a year's time. It is obvious that this man in consuming this sum today is determined by a judgment of value which values 100 present dollars higher than 104 dollars available a year later. (Mises, p. 486; Hülsmann, p. 81)

Hülsmann interprets this by asserting that "Mises thus feels a need to explain why a man should not always prefer the more physically productive choice alternative in the future to a less physically productive alternative in the present." He notes that Mises does not actually say this, but he believes that it is permissible to infer this from Mises's statements. He goes on to claim

that Mises confuses “the physical aspect of things with economic (value) aspect” (Hülsmann, p. 81).

Hülsmann is wrong. Mises’s deduction that a person prefers a present good over a future good is based on the assumption that an individual compares things “of the same kind and quantity.”<sup>3</sup> “Of the same kind” means *of identical value in terms of satisfaction*, except of course for the time at which they are available. It is a value definition not a physical productivity definition.

Hülsmann apparently misunderstands the example and its context. The example refers to money because it is an effort to show that the capitalist saver in the market economy would not *always* postpone his receipt of money even though he could receive more money in the future by doing so. Hülsmann’s misunderstanding appears to be due to his failure to appreciate the significance of the term “always.” Mises inserted this term, one surmises, in order to confirm the notion that a person would always prefer *some* consumption in the present regardless of the future payoff, in whatever terms, to delaying consumption indefinitely. He could have been more articulate. He could have written the following: “Those contesting the universal validity of time preference fail to explain why a man does not invest *all* of his dollars for one year even though he can earn a positive rate of interest.” Mises’s discussion of a miser is consistent with this interpretation. He writes that the miser “too, in spending some of his means for a scanty livelihood, prefers some amount of satisfaction in the nearer future to that in the remoter future” (Mises, p. 490). He does not *always* delay all of his consumption to the indefinite future, no matter what the payoff in terms of perceived satisfaction.<sup>4</sup>

Finally, we must note that this criticism, like the one that claims that Mises held a consumption theory of time preference, is irrelevant to the main issue. So long as time preference is present in individuals acting in the role of consumers, it will get reflected in the spread between the market price of the good and the market prices of the resources used to produce it. So let us proceed now to the issue that is of the most concern to Hülsmann.

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<sup>3</sup>See Mises (pp. 482–83, 524, and the example on p. 557). Also see his statement about comparing the values of satisfaction in his discussion of capitalist saving on p. 486.

<sup>4</sup>That said, I must express my reservation over this example, since Mises is assuming that the investor sometimes chooses not to invest his money for one year because he desires to consume. In other words, he acts as a consumer. He writes about the man consuming his sum of money today. A more appropriate way to deal with capitalist saving is to say that if every capitalist invested in projects that did not yield a return until after one year, there would be no money left to finance projects for which the period of provision is less than one year. This is more appropriate because Mises himself says that he wants to demonstrate time preference for the case of *capitalist* saving, since he has already demonstrated it for the case of *plain* saving.

### 3. DID MISES SHOW HOW TO DERIVE MARKET INTEREST FROM PRAXEOLOGICAL TIME PREFERENCE?

Hülsmann offers his new theory of originary interest to replace Mises's theory, which he claims does not explain (or, more correctly, is incapable of explaining) originary interest in a market economy. He writes:

[The] great shortcoming [of Mises's theory] is that it does not explain the difference between the price of a product and the sum of the prices of its factors of production, that is, it does not solve the fundamental problem at stake in interest theory. While Mises's time preference theory is valid as far as it goes, it does not explain the origin of money interest, and therefore it can at best be a secondary element of the theory of interest. (Hülsmann, p. 84)

In defending this claim, he argues correctly that time preference, in Mises's writings, is derived from the individual decision to space out his consumption over time. However, the explanation one wants concerns interest under market economy conditions. He sees no way to make the transition from the former to the latter.

#### *From Time Preference to Market Interest*

Did Mises show his readers how to make the transition from time preference as a praxeological category (i.e., as present in an isolated actor) to the existence of market interest? Contrary to Hülsmann, the answer is yes. I begin by pointing out that there is one set of conditions under which market interest would not emerge even though there are many actors who are allowed to freely exchange. (1) If every actor had identical wants, including time preference, (2) if every actor perceived identical opportunities through time to satisfy them, without exchange, and (3) if no actor perceived advantages from specialization; there would be no markets, prices, or market interest. There would be time preference and originary interest, but no market interest.

The presence of time preference, in a market economy context, leads to market interest partly because everyone does not value goods, or the legal rights to those goods, according to the same time frame. Even if every otherwise self-sufficient actor had identical opportunities to consume goods through time, some would give up some goods today because others would pay market interest to borrow them. To express the aspect of market interest that is due to time preference, Mises (p. 527) used the term "discount of future goods as against present goods." He writes that discounting differs as among individuals and it is uneven (p. 536).

Market interest cannot be logically derived solely from individual time preference or individual discounting. The conditions of the market economy must also be assumed and there must also be differences among individuals in either time preference or in their nonexchange opportunities to consume goods over time. Market interest emerges through exchange—borrowing and lending. Once markets are established (i.e., in established markets), market

interest “contains” an element of what Mises called the discount of future goods. The time preference which is present in every individual gets manifest in a form that could never exist in the isolated actor—the “social” discount of future goods.<sup>5</sup> This happens through market interaction; or, in different terms, it emerges through entrepreneurial competition.

### *Disengagement*

This is the logic behind the deduction that the market interest rate contains an element of time preference and originary interest. Originary interest, based on time preference, must exist in a market economy where there is borrowing and lending. This is evident from the fact that a market economy, by definition, contains human actors with different time preferences. But the problem remains of how to disengage the originary interest component from other components of what Mises (pp. 539–45) called the gross market rate of interest. This is equivalent to the problem of showing how entrepreneurial competition plays a role in causing originary interest to be part of the market interest rate. Mises clearly recognizes this problem and regards it as important (pp. 535–36). To disengage originary interest, it is necessary to understand that the gross rate contains an entrepreneurial component (pp. 539–41). The originary interest component and entrepreneurial component can only be disengaged by means of a procedure that entails using the imaginary construction of the evenly rotating economy (p. 536).<sup>6</sup>

Thus, the existence of praxeological interest does imply the presence of interest in the market economy. Mises outlined a procedure that can be used to demonstrate this and another procedure to disengage originary interest in the market economy from entrepreneurial profit and loss. One might dispute the latter procedure, but Hülsmann claimed that Mises failed to address the issue. This suggests that he did not carefully examine the Mises text. Further evidence of this is that Hülsmann’s paper contains no relevant reference to any of Mises’s extensive discussion of market interest.<sup>7</sup>

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<sup>5</sup>This discount, as it exists in the market economy, is probably best called a “social rate of discount,” although this term is easily misunderstood. Mises uses the term “discount of future goods” in chapters 19 and 20 of *Human Action*.

<sup>6</sup>Mises’s (p. 531) explanation of why this is necessary seems to me to be incomplete. It refers to an assumption that we must “assign in the frame of [the evenly rotating economy] a role to the operation of forces which bring about [the maintenance of capital goods].” But he does not explain why we must assign this role. The reason we must do so, in my view, is that we aim to depict a market economy in which people plan for the future by producing resources. So we need the assistance of an imaginary economy where people are automatons in which such planning is simulated by the presence of “capital maintenance.” In such a market economy, interest performs the dual function of allocating resources as among the various time periods and of providing an incentive to produce resources (“capital goods”). Mises’s incomplete explanation may partly explain Hülsmann’s (p. 102n) apparent dismissal of Mises’s discussion surrounding the gross market rate of interest.

<sup>7</sup>As pointed out above in footnote 6, he refers to Mises’s passages on the gross rate of interest but does not discuss them.

One final point before concluding this part. In his paper, Hülsmann poses a hypothetical. He writes: [L]et us simplify the whole question and assume, for the sake of argument, that Mises . . . believed there was no value spread between means and ends (Hülsmann, p. 89). No one who is familiar with Mises's writings on this issue would make this assumption, even in a hypothetical. Mises stated repeatedly that the spread between the price of the product and the prices of the resources used to produce it are equal, except for time preference or originary interest. A search of the terms "time preference" and "interest" in *Human Action* reveal statements that contradict Hülsmann's assumption on the following pages: 295, 329, 334, 383, 524, 525, 601, 625, 637, 643. More telling is that Mises states this assumption and explicitly rejects it in his discussion of the imputation procedure (pp. 334-35).<sup>8</sup>

#### 4. HOW PRAXEOLOGICAL TIME PREFERENCE AND COMPETITIVE ENTREPRENEURSHIP EXPLAIN THE SPREAD

Suppose that actors in the market economy did not possess time preference in the sense that Mises used this concept. Then they might want to consume all the goods they could possibly consume as soon as possible. Or they might want to delay all of their consumption until the indefinite future. Whatever, they would have no reason to space out their consumption over time. If consumers wanted to consume all possible goods as soon as possible, entrepreneurship would have no incentive to delay any production. It would devote all resources of whatever kind to the production of goods for the immediate future, including goods that would satisfy the wants of those who expect to receive entrepreneurial income. There would be a spread between costs and revenues but the spread would not reflect time preference. This is because there is no time preference to reflect. A consumer sense of "sooner or later" is not present.

Now suppose that consumers wanted to delay all consumption to the indefinite future. In this circumstance, entrepreneurship would have no guidance since it would not have a clue about when consumers would buy goods that it might produce.

In a world with time preference, a guide exists. We can comprehend this guide by assuming time preference and further assuming that all producers initially make the error of employing resources in the production of goods only for the most immediate future. Under these circumstances, a single producer who recognizes that there would be a demand for his product in the future could earn a high profit compared with the others. On the other hand assume that all producers embarked on production projects that would yield consumer

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<sup>8</sup>Incredibly, Hülsmann quotes a statement from this section. He quotes Mises as saying that the price of the consumer good equals the prices of the resources used to produce it only if "due allowance [is] made for time preference." Hülsmann somehow interprets this statement as evidence that Mises did not include a "value spread between ends and means." See his footnote 13 and accompanying discussion.

goods only in the distant future. Then a producer who chose to produce for the nearer future could earn a high profit. The reasons for the profit are (a) the fact that demand reflects time preference which requires that consumption be spaced out over time and (b) the availability or lack of availability of loan funds at an interest rate that makes it profitable to adjust to the social discount rate.

To what element, then, should we attribute the spread between the costs of production and the prices of the product. To entrepreneurship, to be sure. But the specific valuations of market-produced present goods in relation to future goods, (which in conceptual form is what Mises means by originary interest), guide entrepreneurship in its choice to allocate resources as between the production of consumer goods for nearer or farther distant future consumption. These valuations are a manifestation of time preference. The spread thus contains two elements, or components: originary interest and entrepreneurial profit and loss.

## 5. CONCLUSION

In the paragraph that concludes the critique of Mises, Hülsmann writes about the relationship between Mises's time preference theory and originary interest in the market economy:

Mises's time preference theory of interest does not explain why there should be, under any set of circumstances, a systematic relationship between time preference on the one hand, and the spread between selling receipts and cost expenditure on the other hand. It does not explain why the interest rate should ever be positive rather than zero or even negative. It does not even get to the point of explaining why interest does not tend to become eradicated through entrepreneurial competition. And it therefore does not give us any reason to believe that there is a factor that systematically causes interest rates to be positive. By its very nature, Misesian time preference cannot account for price spreads. It can only account for the value differential between the actual use of a good and the counterfactual (unrealized) future uses of the same good. (Hülsmann, p. 85)

It appears on the basis of the textual evidence and arguments presented in this paper that nothing in this paragraph is accurate. That Hülsmann would reach this conclusion can be attributed to two factors. First, he employed a *non sequitur* argument leading him to conclude that an alleged flaw, or limitation, in Mises's time preference theory negated all of Mises's writings about market interest. Second, he did not read Mises's writings about market interest, thereby making it impossible for him to comprehend the procedure Mises recommends for building an image of a market economy that contains time-preference-based market interest.

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ENERGY: THE MASTER RESOURCE. BY ROBERT L. BRADLEY  
AND RICHARD W. FULMER. DUBUQUE, IOWA: KENDALL/  
HUNT PUBLISHING, 2004.

Despite its obvious economic and social importance, energy (broadly understood) is an understudied field. True, among academics, one can find several engineers and geologists, along with some economists, geographers, legal scholars, and political scientists, who devote much of their research efforts to devising and/or analyzing various energy-related technologies, supply sources, markets, and institutions. By and large, however, very few individuals have tried to understand how all the various parts of the energy puzzle fit—or not—together, and much—if not most—of the public discussion of the issue is agenda-driven and ignorant of basic physical and economic principles.

One part of the problem is, of course, the sheer scope of energy-related issues. Another is the fact that, despite often significant regulatory obstacles and ill-advised policies, energy markets have functioned rather smoothly over the last two centuries and have provided consumers with an ever growing, affordable and reliable supply of fossil fuels and electrical power. Indeed, widespread popular and academic interest in “big picture” energy studies has historically been limited to short-lived crisis episodes.

As readers of this review are surely aware, however, we are currently at the end of a half-decade that has witnessed, among other things, a second Gulf war, the California energy crisis, the Enron debacle, massive grid failure and power outages in the northeast United States, Scandinavia, and Italy, and the ratification of a gigantic and highly publicized energy-rationing scheme known as the Kyoto Protocol.

Capitalizing on these and other concerns, several popular books on energy have hit the bookshelves in the last few years, usually promoting one of two theses. According to proponents of the first and dominant perspective, the world will soon run out of cheap oil, which will drag our economies down the drain. Authors belonging to the second—and smaller—group argue to the contrary that fossil fuel abundance, and its concomitant carbon dioxide emissions, will result in a human-induced climate change of epic—and catastrophic—proportions. In both fields, one is likely to learn that a new generation of subsidized renewable energy technologies has come of age and could replace, with some “political will,” the polluting output of “big oil” firms.

Almost nowhere, however, are lay readers presented with a more sober and realistic perspective according to which the institutional framework of market economies has always been conducive to greater resource creation than depletion, that increased carbon dioxide concentrations will have benefits as well as costs, and that past and current energy crisis can typically be traced back to political interventions rather than

physical shortages or market failures. Of course, one can always find some reasonable textbook (Boyle, Everett, and Ramage 2003) and work on synthesis (Smil, 2003) that will hint at this perspective, but they are not targeted at a broad audience.

It is in this context that Robert L. Bradley and Richard W. Fulmer's primer, *Energy: The Master Resource* is so valuable. Unlike almost every other popular book on the subject, it is squarely rooted in the optimistic tradition that was best exemplified by the late Julian Simon. Indeed, the title reflects Simon's observation that, if human ingenuity is the "ultimate resource" that created all others, energy is the "master resource" that enables human beings to convert one material into another.

Bradley and Fulmer deal succinctly with the basic physical concepts, history, technology, economics, and public policy of energy. They discuss both long term trends and recent controversies in a nontechnical and abundantly illustrated way that will appeal to students, policymakers, and the interested public.

As the authors point out, virtually all energy-related long term trends in advanced economies are positive. For example: Our energy supply is becoming more abundant and affordable, not less. Despite the dire predictions of generations of energy pessimists, so-called "non-renewable" energy sources have become more abundant. In 1944, crude oil proved reserves were 51 billion barrels worldwide. After 58 years of production, reserves had grown to 1,266 billion barrels. Today, the average laborer can buy a week's worth of gasoline and electricity for about 90 minutes of work, while the same amount of energy cost a full workday in 1920.

Creative engineers and technicians are forever finding new ways to extract more power out of a given set of inputs. In the United States, the amount of electricity produced by nuclear plants has increased by 25 percent during the 1990s while the number of nuclear plants fell from 112 to 104. This was made possible by raising the average capacity utilization factor of the remaining plants to 89 percent from 69 percent.

Our cities are getting cleaner, not more polluted. In the "good old days" of the horse and buggies era, animal power turned city streets into "filthy breeding grounds for disease, reeking of manure and urine and swarming with flies" and in every big city 10,000 to 15,000 horse carcasses had to be cleared from the streets every year. Between 1970 and 2002, market incentives, improved technologies and new laws and regulations helped reduce emissions of the so-called "criteria air pollutants" in the United States from anywhere between 17 percent (nitrogen oxides) and 98 percent (lead). In the future, technological improvements and capital turnover (the replacement of older vehicles, machines, and power plants with newer, more efficient equipment) promise to continue to improve the quality of our air and water even as energy consumption increases.

The authors also discuss objectively the limitations of "alternative" power sources. They remind the reader that biomass, wind, and solar electricity generation have been around for a very long time and were displaced by fossil fuels in the nineteenth century because of physical and economic limitations that have yet to be overcome.

Bradley and Fulmer are also at their best in explaining in a succinct way the political causes of the recent energy crisis, from price controls to badly designed regulations, and in providing a fairly balanced discussion of energy and climate change complete with technology-based alternatives to the Kyoto Protocol. As someone who teaches an undergraduate interdisciplinary course on "Energy and Society," I can personally attest that this latter section will prove eye-opening to students who have been

fed years of doom-and-gloom environmental discourse and who would not be receptive to a “do nothing” approach to the issue.

Austrian economists have so far contributed very little to energy studies. While few readers of this journal might feel an inclination to pursue detailed inquiries in this area, I suspect that several energy-related cases discussed in this book would provide nice illustrations of basic economic principles such as opportunity cost, decision-making in the face of uncertainty, and the unintended, but utterly predictable, consequences of short-sighted governmental interventions. This book could therefore go a long way in providing a new set of concrete economic examples and principles for use in classroom discussions. I strongly recommend it to anyone with an interest in public policy issues who would like to get a quick, but well-rounded, education on energy matters.

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WHEN STATES FAIL: CAUSES AND CONSEQUENCES.  
EDITED BY ROBERT I. ROTBERG. PRINCETON, N.J.:  
PRINCETON UNIVERSITY PRESS, 2004.

Do weak governments around the globe merit assistance? The premise of *When States Fail: Causes and Consequences* is that without strong government, society devolves into chaos. Sponsored by the Harvard University Failed States Project, this edited volume contains fourteen chapters, most of them written by political scientists. Not all authors come to the same conclusions, but they agree on most issues. Thus, I will treat the arguments collectively. The writers argue that the United States and other nations have a positive role to play in helping at-risk governments become strong.

That most contributors are mainstream political scientists rather than Austrian economists becomes evident quickly. As the old saying goes, when all you have is a hammer, everything starts looking like a nail. In the case of these political scientists, they clearly believe that scientifically designed government institutions are needed to solve all of the world's problems.

A small minority of the contributions are interesting and thoughtful; of the remainder, the best chapters are the ones that do not say much. The arguments will be convincing to those who believe in increasing state power and those who believe that groups such as the United Nations should be involved in governmental affairs around the globe. The arguments will be unconvincing to anyone with the slightest appreciation for free markets or self-governance.

Although these academics pay some lip service to the importance of markets, they argue that society crucially relies on strong states. As such, they want to find ways to make states strong. The arguments rest on certain basic assumptions that the authors unfortunately never justify. Nowhere in the book do they offer evidence that having a failed state or a weak state is bad. At a few points the authors try to provide evidence for this hypothesis, but rather than attempting to create an objective measure of the strength of states and then attempting to correlate that with measures of results, they simply choose countries with bad outcomes and then define those countries as having weak states. When high mortality, low literacy, and low life expectancy rates plague a country, the cause, according to these authors, is that the government is not strong enough. Never do they consider the possibility that these bad outcomes could be due to overly strong states.

The Soviet Union was certainly a very strong state, and it effectively killed millions of its citizens (Rummel 1994). If the authors of this book wish to defend their simple hypothesis that strong states are good, they would need to ignore the evidence

regarding those deaths or counter with an argument about how the Soviet Union was actually a weak state. Alternatively, they could start adding other variables that only certain types of strong states are good, but these essays appear to equate strength and goodness without reservation. The volume is not about promoting economic freedom; it is about promoting strong states.

The book cites eight countries as having failed or collapsed states and three dozen as having weak states. *Economic Freedom of the World* by Gwartney and Lawson (2004) includes data for twenty of these countries. If the contributors in *Failed States* had looked at that data, they could have seen that these nations' median economic freedom score is 5.6 which is among the bottom third (i.e., least free) countries in the world. These countries receive particularly bad scores for impact of minimum wage (3.9), business regulation (4.2), and government enterprises and investment as a share of gross investment (3.4). Does this look like a problem of weak governments or one of overly intrusive governments?

In addition to assuming that weak states cause bad outcomes, the authors never consider the possibility that good outcomes can occur without strong states. When a country has good results, they simply assume that the country has a strong state. Yet history does not seem to demonstrate this point. The government in seventeenth century Holland was highly fragmented (Stringham 2003, p. 329), and one would think it should be classified as weak. In addition, the government in early nineteenth century America was certainly not as strong as the U.S. government is today (Hummel 1996), and it too might be classified as weak. In both of these cases, however, the absence of government interference enabled the market to flourish. Historical work by economists such as Benson (1990) and Clay (1997) shows that markets require little more than government getting out of the way.

The authors' treatment of Somalia is particularly puzzling. The Somali government failed in 1991, and, after a brief occupation, troops from the United States and the United Nations left in 1993 and 1995, respectively. For the past decade the residents of Somalia have lived with virtually no government (Leeson and Stringham 2005). Throughout *When States Fail* the authors consider the situation in Somalia to be especially bad. Yet, it turns out that the writers judge Somalia to be bad simply because it lacks a strong state. A recent study by two economists at the World Bank (Nenova and Harford 2004) documents that Somali anarchy is not as chaotic as most government advocates would assume. Despite the absence of government entrepreneurs provide electricity, water, air travel, schools, and courts. Investment in areas such as telecommunications has notably increased: Somalis now pay telephone rates well below elsewhere in Africa, they have 1.5 times more phones per capita than in neighboring countries, and they have ten times as many people with phones than when they had government. The situation is admittedly not perfect. The authors in *When States Fail* assume that "Somalia would have fared better" (p. 162) had international governments intervened more. If only the United States and the United Nations had continued occupying Somalia, the authors want us to opine.

In the future, *When States Fail* tells us, the United States or United Nations can help states from failing by helping them strengthen police (p. 38), disarm native populations (p. 170), increase welfare programs (p. 176), and enact global gun control (p. 128). If anyone knows of a recipe more at odds with the principles of the American Revolution, let me know. Had the advice of the Harvard University Failed States Project been heeded two and one quarter centuries ago, the failing colonial government would

have been rescued, and America would still be under British rule.

Lest any readers think I am being unduly harsh on a group of well-accomplished scholars, let me give an example of the level scholarship in this volume. Harvard University's Dr. Donald Snodgrass gives this advice to countries after a crisis: "After a brief period of rapid catch-up growth, sustained GDP growth at 5 percent or better should be attained over a number of years" (p. 260). After that: "Infant, child, and maternal mortality should be reduced, life expectancy lengthened, and illiteracy abolished" (p. 262). Surely no one would oppose such goals, but this Harvard scholar acts as if all government needs to do is press a button. Does anyone seriously believe that government has the ability to choose a growth rate? Given that illiteracy has never been abolished in any nation, including the United States, does Snodgrass seriously believe that illiteracy can be abolished in countries that have so many problems?

I am reminded of the famous French socialist Charles Fourier, who promised that under socialism: "Men will live to the age of 144 . . . the sea will become lemonade and wars will be replaced by great cake-eating contests between gastronomic armies." The political scientists writing in *When States Fail* are peddling the same utopian snake oil under a different package. All we need to reach Nirvana is to create strong governments, they say. Should we believe them?

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