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Articles

Hyperinflation and Hyperreality: Thomas Mann in Light of Austrian Economics

Paul A. Cantor*

> One may say that, apart from wars and revolutions, there is nothing in our modern civilizations which compares in importance to [inflation]. The upheavals caused by inflations are so profound that people prefer to hush them up and conceal them.
>
> —Elias Canetti, *Crowds and Power*

I

With the worldwide collapse of socialism as an economic system, Marxism today stands thoroughly discredited as an intellectual position. Made prophetically early in this century, Ludwig von Mises's claim that economic calculation is impossible in the absence of free markets has been vindicated by the manifest failure of Soviet communism. Decisively refuted by the facts of economic life, Marxism has been forced to retreat to the one place in the academy where empirical reality seems to carry no weight in an argument: the humanities departments. As has often been noted, the great paradox of academic life at the moment is that just when Marxism has lost all credibility in the practical world, it has come to dominate the study of the humanities in American universities. Deconstruction and other forms of poststructuralism prepared the way for this outcome. By calling into question any notion of truth and objectivity, these movements in literary theory left humanities departments vulnerable to the lingering bewitchment of Marxism in a way to which other disciplines more in touch with reality have been comparatively immune.

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In the grand sweep of world history, it may seem a fair exchange to see millions of people liberated from the Marxism that was forced upon them, while a handful of literature professors voluntarily subject themselves to an outmoded and refuted dogma that somehow flatters their egos and soothes their social consciences. And despite the grandiose claims of literary critics to be changing the world, no one—not even a Chairman of the Federal Reserve—has ever been foolish enough to turn to a professor of English for economic advice. Thus one might be tempted to accept the apparently benign use of American humanities departments as retirement homes for washed-up Marxists. But we should not underestimate the danger of abandoning the study of literature to Marxist theorists; how our students view the humanities may well affect their broader view of the world. And in particular we need to guard against the possibility that Marxism may be repackaged under such slogans as "socialism with a human face." Having lost all respectability as an economic theory, Marxism is likely to continue to resurface periodically as a vaguely humanistic program. In a recent article, Richard Rorty forthrightly and courageously admits the economic failure of Marxism, and yet he cannot help looking back nostalgically to the days when socialism seemed to be a viable economic alternative:

> But I have to admit that something very important has been lost now that we can no longer see ourselves as fighting against "the capitalist system." For better or worse, "socialism" was a word that lifted the hearts of the best people who lived in our century. A lot of very brave men and women died for that word. They died for an idea that turned out not to work, but they nevertheless embodied virtues to which most of us can hardly aspire.[1]

Setting aside the fact that a lot of equally brave men and women died fighting *against* socialism, we can see in Rorty's statement the danger of allowing socialism to retain its claims to the moral high ground. One way of salvaging the cause of socialism is to insist that, however much a failure it may have been as an economic alternative to capitalism, it still provides a kind of ethical alternative in some vaguely humanistic sense.

At the heart of the form of deconstructed or aestheticized Marxism that currently dominates humanities departments stands the belief that literature with its higher ethical sense somehow still points us in the direction of socialism. But there is no reason why the

[1]Richard Rorty, "For a More Banal Politics," *Harper's Magazine*, May 1992, p. 18.

left should have a monopoly on the study of literature. Even though many authors have in fact been socialist in their leanings, the prevailing notion that literature can only be used for leftwing purposes is just a myth. In a brief paper, I cannot hope to demolish systematically such a long-standing and ingrained prejudice. But I do want to use one concrete example to suggest that literary analysis need not be the exclusive preserve of the academic left, but is in fact compatible with Austrian economics. I will discuss a short story Thomas Mann wrote in 1925, "Unordnung und frühes Leid," or, as it is known in English, "Disorder and Early Sorrow."[2]

Set in Weimar Germany during the time of the hyperinflation, this story takes on new meaning once it is analyzed in terms of Mises's theory of inflation and the crack-up boom. With Mann's uncanny ability to mirror economic and social reality in his fiction, he succeeds even without any knowledge of Austrian economics in bringing out the psychological ramifications of an inflationary environment with a subtlety of insight Mises would have admired. Moreover, as we analyze "Disorder and Early Sorrow" in light of Mises's theory of inflation, we will see that the story has larger implications for our view of twentieth-century cultural history. A reading of Mann in terms of Austrian theory helps to uncover a connection between the economic facts of the twentieth century and the very poststructuralist ideas that have given Marxism a second life in today's humanities departments. In short, I hope to show that, despite all indications to the contrary from my colleagues, it is possible to talk about literature and still make economic sense.

II

At first sight, "Disorder and Early Sorrow" may appear too insubstantial a story to bear up under the weight of any kind of sustained analysis.[3] Mann tells the tale of an apparently average day in the

[2]I quote "Disorder and Early Sorrow" in the translation of H. T. Lowe-Porter, from Thomas Mann, *Death in Venice and Seven Other Stories* (New York: Vintage, 1989). When referring to the German original, I quote from Thomas Mann, *Gesammelte Werke* 13 vols. (Frankfurt: S. Fischer, 1974), vol. 8. Lowe-Porter's translation is filled with minor errors, omissions, and additions, which I have not bothered to correct, except where they have a bearing on interpreting Mann's intentions.

[3]Although "Disorder and Early Sorrow," is frequently referred to as a novella, and has many of the characteristics of the form, it seems to me brief enough to be properly called a short story. As for its seeming lack of substance, Henry Hatfield, for example, rather patronizingly says that the story "is one of Mann's less ambitious pieces, yet within its limits one of his most successful." See Henry Hatfield, *Thomas Mann* (Norfolk, Conn.: New Directions, 1951), p. 87. Although "Disorder and Early Sorrow" has been popular with readers, and is frequently anthologized, it has attracted little attention from critics. Few essays have been devoted to it specifically, and most general

life of Dr. Abel Cornelius, a professor of history. His teenage children, Ingrid and Bert, are holding a party for their friends, a typical cross section of youthful acquaintances, including students and entertainers. Everyone enjoys the party, especially the professor's younger children, Ellie and Snapper, who relish the opportunity to spend time with the grownups. Finding his routine disturbed by the presence of all the young people, the professor is nevertheless in some ways attracted to them and their modern way of life. He wanders in and out of the party, tries to get some work done in his study, and eventually goes out for his daily walk. He returns to find his house in an uproar. His five-year old daughter is throwing a tantrum, as a result of feeling spurned by an engineering student named Max Hergesell, for whom she rather precociously developed a crush while he playfully danced with her. Upset that Hergesell cannot be her brother, little Ellie is not consoled until Max gallantly comes to her room to wish her good night, thus bringing the tale to a close with a poignant hope of innocence restored.

Though seemingly slim in substance, "Disorder and Early Sorrow" presents the kind of world familiar to us from the great texts of literary modernism, such as Eliot's *The Waste Land* or Mann's own "Death in Venice." The story charts the dissolution of authority, as we watch a social order breaking down and see the confusions that result. In particular, Mann portrays a world in which parents are losing their authority over their children. Obviously viewing their parents as old fogies, the children think of their generation as smarter than the preceding one. Mann portrays a world that has gone mad in the worship of youth. As a sign of the resulting confusion, we are introduced to the "big folk" (*die Grossen*) in the first paragraph (p. 179), only to discover in the second that the term applies to the teenagers, not, as one would expect, to their parents. The little children already call their father by his first name. As a story of people growing up too fast, "Disorder and Early Sorrow" appropriately concludes with the incident of Ellie's infatuation with Max. The image of a five-year old girl having her first love affair becomes Mann's way of crystallizing

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studies of Mann mention it only in passing. If they discuss it at all, critics usually choose to concentrate on the autobiographical aspects of the story. Evidently Mann based the story largely on a party actually given in his own household in Munich. See the account of his son: Michael Mann, "Truth and Poetry in Thomas Mann's Work" in *Thomas Mann*, Harold Bloom, ed. (New York: Chelsea House, 1986), pp. 292–93. Some critics discuss the Freudian implications of the relationship between the father and the daughter in the story. Herbert Lehnert develops a brief but interesting interpretation of the story as involving an inversion of the structure of *The Magic Mountain*; see *Thomas Mann: Fiktion, Mythos, Religion*, 2nd ed. (Stuttgart: W. Kohlhammer, 1968), p. 97.

our sense of the absurd pace of development in this world.

In "Disorder and Early Sorrow" all categories are breaking down. While the children behave like adults, the adults start behaving like children; in order to play with Ellie and Snapper, Cornelius "will crook his knees until he is the same height with themselves and go walking with them, hand in hand" (p. 191). This image of a "diminished Abel" (p. 191) points to the broader collapse of hierarchy in Cornelius's world, especially any sense of social distinctions. He has a hard time telling his son from his servant; they dress alike and are prone to the same youthful fads and fashions (pp. 179–80, 203). The world of "Disorder and Early Sorrow" has become so confusing that it is difficult for the characters simply to tell what is real anymore. This aspect is brought out by the presence of actors throughout the story. Mann emphasizes elements of imitation and parody; Ingrid has "a marked and irresistible talent for burlesque" (p. 179), which she and her brother love to put to use:

> They adore impersonating fictitious characters; they love to sit in a bus and carry on long lifelike conversations in a dialect which they otherwise never speak. (p. 183)

When an actor named Ivan Herzl shows up at the party in heavy makeup, he provokes Cornelius into thinking about how people no longer are what they seem: "You would think a man would be one thing or the other—not melancholic and use face paint at the same time" (p. 196). Mann creates a pervasive sense of inauthenticity in the story; the modern world is a counterfeit world.

With all stable points of reference gone, the only law of "Disorder and Early Sorrow" appears to be perpetual change. Against this instability, Mann sets his central character. As a professor of history, Cornelius is always searching for something solid to grab hold of in the midst of all this mutability, and he wistfully contrasts the fixity of the past with the everchanging world of the present:

> He knows that history professors do not love history because it is something that comes to pass, but only because it is something that *has* come to pass; that they hate a revolution like the present one because they feel it is lawless, incoherent, irrelevant—in a word, unhistoric; that their hearts belong to the coherent, disciplined, historic past. . . . [He seeks] the temper of eternity. (p. 186)

Thus like *The Waste Land*, "Disorder and Early Sorrow" counterpoints the coherence of past eras with the incoherence of modern times.

III

Thus far Mann's story sounds like many other modernist works, chronicling the breakdown of order in twentieth-century life. But when one looks in the story for Mann's sense of what is responsible for this breakdown, the uniqueness of "Disorder and Early Sorrow" begins to emerge. Modernists have put forward many explanations for the incoherence of twentieth-century life. In *The Waste Land*, for example, Eliot correlates the disorder of the modern city with a failure of religious faith and a loss of the traditional myths that used to give coherence to life. But in "Disorder and Early Sorrow," Mann explores another possibility, correlating his portrait of modern life with a specific historical event—the German inflation of the 1920s, an economic development so extraordinary that a new term had to be coined to describe it—*hyperinflation*. The absurdity of modern life has been traced to many sources, but here Mann looks to the absurdity of modern economic policies. He suggests that if we seek an explanation of the dissolution of authority in the world he is portraying, we should look to the monetary madness of the Weimar Republic.[4] As he shows, inflation eats away at more than people's pocketbooks; it fundamentally changes the way they view the world, ultimately weakening even their sense of reality. In short Mann suggests a connection between hyperinflation and what is often called hyperreality.[5]

[4]Though some critics acknowledge in passing the fact that "Disorder and Early Sorrow" is set in the time of the German inflation, it is surprising how little critics make of the importance of economic factors in the story. Hans Eichner, *Thomas Mann: Eine Einführung in Sein Werk* (München: Lehnen, 1953), p. 64, relates Ellie's tantrum to "die allgemeine Verwirrung der Inflationsjahre" ("the general confusion of the inflation years"), but says nothing further. The fullest discussion in English of the story I have been able to locate mentions inflation just once, and then as only one of many examples of disorder in the story. See Sidney Bolkovsky, "Thomas Mann's 'Disorder and Early Sorrow': The Writer as Social Critic," *Contemporary Literature* 22 (1981): 221. In a brief essay on the story, Mann himself stressed its personal and psychological elements, but he also expressed his satisfaction that it had appeared in French translation under the title "Au temps de l'inflation," which he says is in accord with the author's intention and meaning ("nach des Verfassers Absicht und Meinung"). He was happy that in foreign countries the story was being understood as "a document of middle-class German life after the war" ("als Dokument deutsch-bürgerlichen Nachkriegsleben"). See "Unordnung und frühes Leid," *Gesammelte Werke*, 11: 621. When Mann described the story in a letter, he called it: " 'Unordnung und frühes Leid,' eine Inflationsgeschichte" ("a history of inflation" or "an inflation story"). Letter to Hans Heinrich Borcherdt, March 3, 1926, as quoted in Esther H. Lesér, *Thomas Mann's Short Fiction: An Intellectual Biography* (Rutherford, N.J.: Fairleigh Dickinson University Press, 1989), p. 304, n. 50.

[5]The terms *hyperreality* and *hyperrealism* originated in art criticism. They refer to a style of painting so photographically realistic that it in fact makes the work look

If modernity is characterized by a loss of the sense of the real, this fact is connected to what has happened to money in the twentieth century. Everything threatens to become unreal once money ceases to be real. I said that a strong sense of counterfeit reality prevails in "Disorder and Early Sorrow." That fact is ultimately to be traced to the biggest counterfeiter of them all—the government and its printing presses. Hyperinflation occurs when a government starts printing all the money it wants, that is to say, when the government becomes a counterfeiter. Inflation is that moment when as a result of government action the distinction between real money and fake money begins to dissolve. That is why inflation has such a corrosive effect on society. Money is one of the primary measures of value in any society, perhaps *the* primary one, the principal repository of value. As such, money is a central source of stability, continuity, and coherence in any community. Hence to tamper with the basic money supply is to tamper with a community's sense of value. By making money worthless, inflation threatens to undermine and dissolve all sense of value in a society.

Thus Mann suggests a connection between inflation and nihilism. Perhaps in no society has nihilism ever been as prevalent an attitude as it was in Weimar Germany; it was reflected in all the arts, and ultimately in politics. It would of course be wrong to view this nihilism as solely the product of an inflationary environment. Obviously Weimar Germany faced many other problems, some the legacy of World War I and the Treaty of Versailles, some the legacy of nineteenth-century German thinkers such as Nietzsche. But as Mann's story reminds us, we should not underestimate the role of inflation in creating the pervasive sense of nihilism in Weimar Germany. A glance at the back of an American dollar bill shows two phrases: "United States of America" and "In God We Trust." Somehow our money is connected with our political and even our religious beliefs. Shake a people's faith in their money, and you will shake their other faiths as well. This problem has become particularly acute in the twentieth century, because ours is the age of paper money, money

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unreal. The terms have been given a broader meaning in contemporary discourse by such writers as Jean Baudrillard, who sees the whole world we live in as hyperrealistic in its pervasive artificiality: "The unreal is no longer that of dream or of fantasy, . . . it is that of a *hallucinatory resemblance of the real with itself*"; *"It is reality itself today that is hyperrealist"* (italics in the original). See Jean Baudrillard, *Simulations*, Paul Foss, Paul Patton, and Philip Beitchman, trans. (New York: Semiotext[e], 1983), pp. 142, 147. For a more popular account of the contemporary idea of hyperrealism, see Umberto Eco, *Travels in Hyperreality*, William Weaver, trans. (New York: Harcourt Brace, 1986), pp. 3–58.

that has to be taken on faith alone. That is why we have to put "In God We Trust" on the back of our dollars; nobody really trusts the Chairman of the Federal Reserve. In "Disorder and Early Sorrow," Mann invites us to consider what happens to our lives when we are forced to take our money purely on faith and that faith is betrayed by the government.

Unlike many economists and historians to this day, Mann is not mystified by the cause of inflation[6]; he makes it clear in the details of the story that what has gone haywire in Weimar Germany somehow involves the money supply. We cannot help noticing that something is wrong when we hear of Cornelius drinking a "watery eight-thousand-mark beer" (p. 184). And Mann is aware that government fiscal policies are the source of the trouble. It cannot be an accident that the historical subject Cornelius is studying is precisely the beginnings of modern central banking and deficit financing, and hence the origins of inflation as a tool of modern public policy:

> First he reads Macaulay on the origin of the English public debt at the end of the seventeenth century; then an article in a French periodical on the rapid increase in the Spanish debt towards the end of the sixteenth.[7] (p. 192)

Financial details chronicling the absurdity of hyperinflation are scattered throughout the story. Cornelius is making a million marks

[6]For example, in his influential and widely praised study, *Weimar Culture* (New York: Harper & Row, 1968), the historian Peter Gay typically mistakes the effects of inflation for the causes: in his view the Weimar inflation was "caused by a shortage of gold, adverse balance of payments, and the flight of capital" (p. 152); only later in his account does he even refer, and then merely in passing, to the government's "printing of money" (p. 154). For a recent historical account of Weimar Germany that confirms the Austrian theory of the inflation, see Stephen A. Schuker, *American "Reparations" to Germany, 1919–33: Implications for the Third-World Debt Crisis* (Princeton, N. J.: Princeton University Press, 1988), p. 20: "a budget deficit that could not be financed except through the issue of floating debt discounted by the Reichsbank represented the real engine of inflation."

[7]The relevant passage in Macaulay can be found in Chapter 19 of his *History of England*. See *The Works of Lord Macaulay* (London: Longmans Green, 1898), vol. 5, pp. 335–49. That Mann had recently been reading this section when he wrote "Disorder and Early Sorrow" is suggested by a verbal echo; at one point Macaulay speaks of "the lamp of Aladdin" (p. 346), while in the German Mann refers to "Aladin mit der Wunderlampe" (p. 646); the parallel seems weaker in the translation, where Lowe-Porter merely speaks of "Alladin" (p. 204). In this section of his history, Macaulay discusses the moment when the British Parliament created the national debt to deal with the budget deficits it had incurred, chiefly in financing wars. Mann undoubtedly saw the parallels to the situation in Germany after World War I. Macaulay praises deficit financing as a wonderful contrivance for national prosperity; Mann had less cause to be this sanguine about its effects.

a month, and that is merely "more or less adequate to the chances and changes of post-war life" (p. 182).

Under these insane conditions, people become obsessed with the economic facts of life and must devote all their energy just to trying to stay above water. Frau Cornelius feels disoriented in the most basic tasks of daily life:

> The floor is always swaying under her feet, and everything seems upside down. She speaks of what is uppermost in her mind: the eggs, they simply must be bought today. Six thousand marks a piece they are, and just so many are to be had on this one day of the week at one single shop fifteen minutes' journey away. (p. 183)

We see here how one government intervention in the economy immediately leads to others. Having produced scarcities in the market with their inflationary policies, the authorities introduce new regulations to try to deal with the irrationality they themselves created. But faced with the rationing of goods, the people in Mann's story learn to get around the government's tampering with the market:

> For no single household is allowed more than five eggs a week; therefore the young people will enter the shop singly, one after another, under assumed names, and thus wring twenty eggs from the shopkeeper for the Cornelius family. (p. 183)

Here Mann presents the characteristic inauthenticity of the world he is portraying as a direct response to government intervention in the market, which forces people to become fakes.

Mann is aware of how absurd the German inflation became, and moreover he shows how that absurdity in turn worked to make all of life absurd in the Weimar Republic. He shows one of the moments in inflation Mises concentrated on, the flight into real goods:[8]

> Before the young people arrive [Frau Cornelius] has to take her shopping basket and dash into town on her bicycle, to turn into provisions a sum of money she has in hand, which she dares not keep lest it lose all value. (p. 192)

With the value of money diminishing virtually hour by hour, people desperately search for some way to hold on to value, and that means they rush to exchange their largely fictitious money for something real, a real good. Thus inflation serves to heighten the already frantic

[8]In German, "die Flucht in die Sachwerte"; see Ludwig von Mises, *Human Action* (New Haven, Conn.: Yale University Press, 1949), p. 424.

pace of modern life, a pace that further disorients people and undermines whatever sense of stability they may still have.

Mann also shows how inflation disrupts the social order, producing as it does a huge underground transfer of wealth. Those people who had worked hard and put their money in the bank saw their savings become worthless almost overnight. Mann documents the fall of the middle class in the case of the Hinterhofers:

> two sisters once of the lower middle class who, in these evil days, are reduced to living "*au pair*" as the phrase goes and officiating as cook and housemaid for their board and keep. (p. 191)

Mann shows how hard it is for these women to live with their sense of economic degradation, portraying the shame and bitterness of Cecilia Hinterhofer:

> Her bearing is as self-assertive as usual, this being her way of sustaining her dignity as a former member of the middle class. For Fräulein Cecilia feels acutely her descent into the ranks of domestic service. . . . She hands the dishes with averted face and elevated nose—a fallen queen. (p. 202)

A society composed of embittered people like the Hinterhofers is soon going to face major political problems, as the rise of fascism in Germany was to show.

At the same time as many people lost everything during the German inflation, some made their fortunes by taking advantage of the new economic conditions. Mann includes among the cast of characters the kind of speculators who profited from inflation:

> They lead . . . that precarious and scrambling existence which is purely the product of the time. There is a tall, pale, spindling youth, the son of a dentist, who lives by speculation.[9] . . . He keeps a car, treats his friends to champagne suppers, and showers presents upon them on every occasion. (p. 204)

Those who know how to exploit an inflationary situation can gain as much as others lose. As a result, inflation creates a topsy-turvy world. The fact that people are losing and making fortunes overnight is responsible for all the social confusions in "Disorder and Early Sorrow," such as Cornelius's inability to tell his son from his servant. In a world in which all distinct categories begin to dissolve, a pervasive

[9]The German here is more specific—the character is a *Börsenspekulant*, a "stock market speculator" (p. 646).

sense of relativism develops. Cornelius's convictions begin to weaken and he feels unable to take a stand against the opinions of the younger generation. In a frightening anticipation of today's tyranny of political correctness, the history professor retreats into an academic skepticism when faced with the fanaticism of youth, trying to make his lack of conviction masquerade as a form of broadmindedness:

> For in one's dealings with the young it behoves one to display the scientific spirit . . . in order not to wound them or indirectly offend their political sensibilities; particularly in these days, when there is so much tinder in the air, opinions are so frightfully split up and chaotic, and you may so easily incur attacks from one party or the other, or even give rise to scandal, by taking sides. (p. 207)

Worried about taking any sort of stand, Cornelius begins to question his most fundamental certainties: "And is there then no such thing as justice?" (p. 207). Mann thus shows how inflation ultimately has a political effect, eating away at the basic beliefs that give a grounding to social order. By undermining all sense of stability and value in Weimar Germany, inflation ultimately led to the rise of Hitler and Nazism.[10]

IV

Mann is as acute in portraying the psychological effects of inflation as he is in portraying the economic, social and political effects. As he shows, inflation fundamentally changes the way people think, forcing them to live for the moment. There is no use planning for the future, since inflation, especially hyperinflation, makes future conditions uncertain and unpredictable. As Mises demonstrated, the most insidious effect of inflation is that it makes economic calculation nearly impossible. It thereby destroys the Protestant ethic, which ever since Max Weber has been viewed as linked to capitalism. What is the use of saving one's money if that money will soon become worthless as a result of inflation? As Mann shows, in an inflationary environment, the rational strategy is to spend your money as fast as you make it. Thus inflation works to shorten everyone's time horizons, destroying

[10]It may seem extreme to blame the rise of Hitler on the German inflation, but for an insightful discussion of the connection between inflation and Nazism, see Elias Canetti, *Crowds and Power*, Carol Stewart, trans. (New York: Seabury, 1978), esp. pp. 187–88. Canetti even links the devaluation of human life represented by the Holocaust directly to the German inflation. For Mises's own frank account of Weimar politics, and the role of inflation in the rise of Nazism, see his *Omnipotent Government: The Rise of the Total State and Total War* (New Haven, Conn.: Yale University Press, 1944), pp. 193–228.

precisely those attitudes and habits that normally make the middle class hard workers and prudent investors, those forces that lead them to restrict their present consumption for the sake of increasing future production.

This effect of inflation explains why youth has come to dominate the world of "Disorder and Early Sorrow," and why the older generation has lost its authority. The young are more adaptable to changing conditions, while the old are set in their ways. Hence the young cope better with inflation:

> the upper middle class . . . look odd enough . . . with their worn and turned clothing and altered way of life. The children, of course, know nothing else; to them it is normal and regular. . . . The problem of clothing troubles them not at all. They and their like have evolved a costume to fit the time, by poverty out of a taste for innovation: in summer it consists of scarcely more than a belted linen smock and sandals. The middle-class parents find things rather more difficult. (p. 182)

Mann notes that inflation even changes the way people dress, but, more importantly, he sees that it alters the dynamic between the generations in society, giving the young a huge advantage over the old. Not having experienced economic stability, the youth of Germany are more able to go with the inflationary flow.

In the person of Cornelius's servant, young Xaver, Mann portrays the perfect child of the inflationary era, the embodiment of its virtues and its vices:

> He is the child and product of the disrupted times, a perfect specimen of his generation. . . . The Professor's name for him is the "minute-man,"[11] because he is always to be counted on in any sudden crisis, . . . and will display therein amazing readiness and resource. But he utterly lacks a sense of duty and can as little be trained to the performance of the daily round and common task as some kinds of dog can be taught to jump over a stick. (pp. 202–3)

Xaver has the adaptability to changing conditions demanded by the era of inflation, but the price he pays for that is the total loss of the discipline once prized in German society. His lack of feeling for the past of course disturbs his master, the history professor, but as a child of inflation Xaver is constantly plunging into the future:

[11]Here the English translation is in some ways more appropriate than the original German. Mann has Cornelius speak of Xaver as *Festordner* (p. 645), "master of ceremonies," not "minute-man."

> Dr. Cornelius has often told him to leave the calendar alone, for he tends to tear off two leaves at a time and thus to add to the general confusion. But young Xaver appears to find joy in this activity. (p. 203)

In a world in which the young are leaping into the future two days at a time, the old become increasingly irrelevant. Economists have long recognized that inflation is particularly cruel to the elderly in society, especially retired people who live on fixed incomes, which cannot keep pace with inflation. Mann fills in our sense of the psychological disruptions that accompany the economic ravages of inflation. More than any other factor, inflation discredits the authority of the older generation and turns power over to youth. It is not simply a matter of the old losing their economic advantage over the young. In an inflationary environment, all the normal virtues of the old suddenly start to work against them, while all the normal vices of the young suddenly seem to look like wisdom. Conservatism and a sense of tradition make it impossible to respond to rapidly changing economic conditions, while the profligacy of youth becomes paradoxically a kind of prudence in an inflationary environment. Mann's genius is to show how all the characteristics of the world in "Disorder and Early Sorrow" flow from the new economic facts of life. One still needs to turn to economists like Mises to understand the causes and the full economic ramifications of inflation. But what Mann does for us is to show the human reality of the phenomenon, how it alters not just economic conditions but the very fabric of everyday life, right down to the psyches of young children.[12] Ellie's premature infatuation with Max is the emotional equivalent of inflation.

[12]Mann was of course not the only writer of his day who portrayed the effects of inflation, though it is surprising how little attention literary critics have paid to this phenomenon. I have been able to locate only one brief article that deals with the depiction of the 1920s inflation in literature; appropriately it treats Austrian authors. See Friedrich Achberger, "Die Inflation und die zeitgenössische Literatur," in *Aufbruch und Untergang: Österreichische Kultur zwischen 1918 und 1938*, Franz Kadrnoska, ed. (Vienna: Europa, 1981), pp. 29–42. Achberger lists 33 Austrian literary works with the inflation as their theme, including works by such well-known authors as Heimito von Doderer, Robert Musil, and Stefan Zweig. From Achberger's descriptions, these works evidently have much in common with "Disorder and Early Sorrow." Achberger mentions that Mann's brother, Heinrich, also wrote a novella dealing with the inflation period called *Kobes* (1925); Hugo Stinnes, the German industrialist who profited heavily from the inflation, provides the model for this work. Rolf Linn remarks: "This makes 'Kobes' unique, for the vast literature about the turbulent post-war years in Germany—all but forgotten with the exception of Thomas Mann's 'Disorder and Early Sorrow'—deals largely with the victims of the rapid devaluation of the mark." See Rolf Linn, *Heinrich Mann* (New York: Twayne, 1967), p. 83.

V

In addition to all its economic, social, political, and even psychological consequences, inflation in Mann's view works to undermine the basic sense of reality.[13] In the world of inflation, reality begins to attenuate. As we have seen, even an eight-thousand-mark beer is watered down. For a variety of reasons, prices cannot always be raised to keep pace with inflation; hence producers are forced to cheapen their products, to adulterate them. Mann portrays a pervasive cheapening of the world in "Disorder and Early Sorrow." Cornelius thinks of himself as a gentleman, but in his straitened circumstances, he cannot help cutting corners, even when offering cigarettes to his guests:

> He . . . takes a box from his supply in the cupboard: not the best ones, nor yet the brand he himself prefers, but a certain long, thin kind he is not averse to getting rid of—after all, they are nothing but youngsters. (p. 198)

Typically in this inflationary environment, things end up in a state of disrepair, as normal economic channels become disrupted:

> The basin has been out of repair for two years. It is supposed to tip, but has broken away from its socket on one side and cannot be mended because there is nobody to mend it; neither replaced because no shop can supply another. (p. 193)

Once one realizes what is going on in "Disorder and Early Sorrow," one can see how the opening of the story is emblematic of the world Mann is portraying:

[13]An interesting literary parallel can be found in the third part of Hermann Broch's trilogy *The Sleepwalkers*, Willa and Edwin Muir, trans. (New York: Grosset & Dunlap, 1964). His character Huguenau finds his world unhinged by the process of inflation: "Currency hitherto accepted becomes incalculable, standards fluctuate, and, in spite of all the explanations that can be adduced to account for the irrational, what is finite fails to keep pace with the infinite and no reasonable means avail to reduce the irrational uncertainty of the infinite to sense and reason again" (p. 640). Economics had represented the world of rationality to Huguenau, but inflation turns that rationality into irrationality: "even that most characteristic mode of the bourgeois existence, that partial system which is hardier than all others because it promises an unshakable unity in the world, the unity that man needs to reassure his uncertainty—two marks are always more than one mark and a sum of eight thousand francs is made up of many francs and yet is a whole, a rational organon in terms of which the world can be reckoned up—even that hardy and enduring growth, in which the bourgeois desires so strongly to believe even while all currencies are tottering, is beginning to wither away; the irrational cannot be kept out at any point, and no vision of the world can any longer be reduced to a sum in rational addition" (p. 641).

> The principal dish at dinner had been croquettes made of turnip greens. So there follows a trifle, concocted out of those dessert powders we use nowadays, that taste like almond soap.[14] (p. 179)

Clearly inflation is adversely affecting the diet of Mann's characters, but something more significant becomes evident here. Cornelius and his family live in a world in which they do not have desserts anymore, they have dessert substitutes. Forced to economize by inflation, these people can no longer afford the real thing:

> These consult together meantime about the hospitality to be offered to the impending guests. The Professor displays a middle-class ambitiousness: he wants to serve a sweet—or something that looks like a sweet. (p. 182)

We are all familiar with this kind of food substitute, an artificial product that is always presented as superior to the real thing, but that is in fact merely cheaper (and perhaps less fattening). Such substitutes are characteristic of life in the twentieth century, and Germany, with its advanced chemical industry, led the way in developing them, so much so that we have taken the German word for substitute, *Ersatz*, into our language.

Thus in his ultimate indictment of the monetary policies of the Weimar Republic, Mann shows how inflation contributes to the ersatz reality of the twentieth century. We have come to live in a world of plywood rather than mahogany. Things are not real anymore; we are surrounded by clever (and cheap) substitutes, mere simulacra of the real things. Mann fills up the story with artificial substitutes, from the false teeth of the children's nurse (p. 189) to the fake leather in Hergesell's shoes:

> They are the tightest I've ever had, the numbers don't tell you a thing, and all the leather today is just cast iron. It's not leather at all. (p. 195)

The artificially heightened pace of the inflationary economy produces more and more irrationalities, including increasing deception in the marketing of commodities. Much of what is traditionally and

[14]The German original (p. 618) is much stronger in conveying a sense of impoverishment; it should be translated: "As main course there were only vegetables, cabbage-cutlets; after that followed a *Flammeri*, composed out of one of those pudding powders one buys now, that taste like almond and soap." A *Flammeri* is a blanc-mange or trifle, but the word also conveys the sense of flummery or deception. Mann uses *Flammeri* in precisely that sense a few pages later (p. 621).

mistakenly regarded as the duplicity of capitalism is in fact the result of government intervention in the market in the form of tampering with the money supply. As Mann shows, it is primarily the government-induced process of inflation that eats away at the substance of reality in the modern world.

To be sure, one cannot blame everything on inflation. Already in the nineteenth century, Alexis de Tocqueville had noted the tendency of democracies to produce a cheapening of products:

> The handscraftsmen of democratic ages not only endeavor to bring their useful productions within the reach of the whole community, but strive to give to all their commodities attractive qualities that they do not in reality possess. In the confusion of all ranks everyone hopes to appear what he is not. . . . To satisfy these new cravings of human vanity the arts have recourse to every species of imposture.[15]

Thus even before the paper money inflations of the twentieth century, one could detect a movement of the modern economy toward the simulacrum in place of the real thing. De Tocqueville reminds us that economic developments often have political causes, and many of the tendencies Mann portrays in "Disorder and Early Sorrow" can be attributed to the abrupt democratization of Germany after World War I. But Mann shows how inflation works to hasten and heighten these tendencies, forcing people to economize by accepting substitutes in a desperate attempt to maintain the shadow of their former standard of living.

With his novelist's feel for the texture of everyday life, Mann senses the connection between the world of inflation and the world of the modern media. The government creates an illusion of wealth by tampering with the fiduciary media; the communication media similarly contribute to the creation of an all-pervasive world of illusion. Writing in the 1920s, Mann is already aware of how modern technology and the increasingly mediated character of modern life create new possibilities of deception. Every medium of communication is

[15]Alexis de Tocqueville, *Democracy in America*, Henry Reeve, Francis Bowen, and Phillips Bradley, eds. (New York: Vintage, 1959), vol. 2, p. 53. De Tocqueville illustrates this principle with a personal anecdote: "When I arrived for the first time in New York . . . I was surprised to perceive along the shore . . . a number of little palaces of white marble, several of which were of classic architecture. When I went the next day to inspect more closely one which had particularly attracted my notice, I found that its walls were of whitewashed brick, and its columns of painted wood. All the edifices that I had admired the night before were of the same kind" (p. 54). For further thoughts on the connection between democracy and the simulacrum, see Baudrillard, pp. 78–79. Contemporary French thinkers might be surprised to learn how many of their ideas were anticipated by their aristocratic countryman in the nineteenth century.

potentially a medium of miscommunication. In the masquerades of Bert and Ingrid, the telephone has become an important medium:

> The telephone plays a prominent part . . . : they ring up any and everybody—members of government, opera singers, dignitaries of the Church—in the character of shop assistants, or perhaps as Lord or Lady Doolittle. They are only with difficulty persuaded that they have the wrong number. (p. 184)

The telephone is an example of how the modern communication media create an illusion, the illusion of immediacy. Bert and Ingrid enjoy the sensation of seeming to be in touch with the great public figures of their day, but in a sense, they are as much deceived as the people they try to fool. They think that they are dealing directly with these famous people, but in fact the telephone stands inbetween them; otherwise their deception would not work. Thus any relationship they establish over the phone is inevitably phony; as the German idiom for "wrong number" more forcefully suggests, they are "falsch verbunden" (p. 624), falsely connected.

In a telephone conversation, one does not see the person one is talking to, but has the illusion of being in his presence. Similarly, in a paper money economy, one does not see gold anymore, but the currency gives the illusion of the presence of wealth. The increasingly mediated character of the modern economy, especially the development of sophisticated financial instruments, allows the government to deceive its people about the nature of its monetary policy. When a government tries to clip coins or debase a metal currency, the results are readily apparent to most people. By contrast, the financial intermediation involved in modern central banking systems helps to shroud monetary conditions in mystery. At least initially the techniques of deficit financing and monetarization of debt conceal from the public what is happening to the money supply. Just as the jokes of Bert and Ingrid work only because the people they call cannot *see* them, the Weimar government's inflation worked only because it was hidden behind the smokescreen of modern central banking; with paper money one cannot at first see how the currency is being debased. As Mises has shown, the whole of inflationary policy depends on the confusion in any system of indirect exchange between money and capital, the illusion that pieces of paper are somehow really wealth.

Mann sees the pervasive inauthenticity of the modern world even in the music of the young people, who listen not to real live performances, but to mechanical reproductions on the gramophone. In the

"new world" created by the gramophone (p. 198), music from all over the globe begins to blend together, and one loses sight of national origins (pp. 198, 199), or the distinction between authentic folk songs and popular hits (pp. 200–1). Seeming to make music from the whole world simultaneously available, the gramophone creates a false aura of cosmopolitan sophistication and thus adds to the sense of cultural relativism:

> They move to the exotic strains of the gramophone . . . : shimmies, foxtrots, one-steps, double foxes, African shimmies, Java dances, and Creole polkas. (p. 204)

Everywhere one looks in "Disorder and Early Sorrow," one sees illusions substituting for reality. The flight from the world of reality is best illustrated by Xaver's fanciful escape into the world of the cinema:

> With his whole soul he loves the cinema. . . . Vague hopes stir in him that some day he may make his fortune in that world . . .—hopes based on his shock of hair and his physical agility and daring. He likes to climb the ash tree in the front garden. . . . Once there he lights a cigarette and smokes it as he sways to and fro, keeping a lookout for a cinema director who might chance to come along and engage him. (p. 203)

Here Mann anticipates what was to become the Hollywood myth of being discovered in Schwab's drugstore. Such dreams are bred by an inflationary economy, which thereby corrupts the ambitions of youth. The young man fantasizes about making his fortune in the movies because he can only imagine becoming wealthy by making one big killing. In an inflationary environment, one must dream of becoming an overnight success because the slow steady way of amassing a fortune by working hard simply will not work. As Mann senses, the moving picture is the perfect art form for the age of inflation: a kinetic art for a kinetic era. He shows how the movies are already saturating everyday life; in his choice of cigarettes, Xaver smokes "a brand named after a popular cinema star" (p. 180). In the illusory world fostered by inflation, an image on a screen now works to shape a man's desires.

VI

The references to telephones, gramophones, and motion pictures in "Disorder and Early Sorrow" build up a sense of how mediated modern life has become, how much we are surrounded by artificial

reproductions and representations of life. Ultimately the issue of representation becomes central in Mann's story. Studying it carefully, we can see how a reconception of representation has occurred in our century, a major shift in our way of thinking that can be correlated with the shift to paper money and inflationary policies. In the older sense of money, a banknote referred to something outside itself. Under the gold standard, a dollar bill represented a fixed amount of gold, on deposit somewhere and obtainable on demand. That is what it meant to have a currency backed by gold—a paper banknote was redeemable in terms of a real commodity, namely gold, something that had independent value. But in the modern era of fiat money, a banknote just represents another banknote. One dollar bill can merely be exchanged for another dollar bill, but such a transaction has no point anymore, once no real commodity backs the currency. In the modern paper money system, money does not represent anything outside itself; money only represents itself.[16]

What is fascinating is that this change in the concept of representation in fiat money sounds like the prototype for the new concept of representation in modern art. Modern artists pride themselves on their discovery of the principle of non-representational art. Ask a modern painter what his scrawls on the canvas represent and he will patronizingly reply: "My painting doesn't represent anything external to it; it represents itself." Growing out of the nineteenth-century idea of art for art's sake, this attitude in modern art denies that the artist need refer to the external world; his works can exist within the self-contained world of art itself. The world of modern paper money is a similarly closed system. A currency with no commodity like gold backing it thus provides the model for the self-referentiality on which modern art prides itself.[17]

In a case like this it is difficult to speak of cause-and-effect. It would be simplistic to make a statement like: "Because we went off the gold standard, modern art became non-representational." One

[16]To be sure, as long as people have faith in a paper currency, it can be exchanged for real commodities, and in that sense can still be said to represent value. But as the quick collapse of paper currencies like that of Weimar Germany shows, their "reality" is highly attenuated compared to that of gold-backed currencies.

[17]Consider in this context Samuel Beckett's famous formulation of the non-representational character of modern art: "there is nothing to express, nothing with which to express, nothing from which to express, no power to express, no desire to express, together with the obligation to express." See Samuel Beckett, "Three Dialogues," *Disjecta* (New York: Grove, 1984), p. 139. With one substitution, this passage becomes an excellent characterization of the world of paper money as legal tender: "there is nothing to exchange, nothing with which to exchange, nothing from which to exchange, no power to exchange, no desire to exchange, together with the obligation to exchange."

suspects that both developments have their roots in something deeper in modern life and modern culture, perhaps the democratization de Tocqueville traces. Still, it is worth considering that a change as fundamental as the switch from a commodity-based currency to fiat money might have widespread implications for a society, and might even affect basic cultural attitudes. If self-referentiality is really a defining characteristic of modern art, then perhaps the inflationary environment created by twentieth-century governments at least helped to foster the sense of irreality that pervades our culture. As money ceases to refer to anything real anymore, the traditional idea of referentiality is undermined. The architects of inflationary policy are to blame for many of the disasters, economic and political, of this century. "Disorder and Early Sorrow" suggests that we may also hold them responsible for the empty self-referentiality of much modern art.

Once art becomes severed from reality, artists turn to such notions as the surreal and the hyperreal as substitutes. The whole movement known as postmodernism grows out of the non-representational turn in modern art. We would have to go well beyond the boundaries of Mann's story to explore fully the relation between inflation and postmodernism.[18] One of the central notions of postmodernist theory is the idea of the simulacrum, which we have already seen developed in "Disorder and Early Sorrow.[19] According to one

[18]In *The Post-Modern Aura: The Act of Fiction in an Age of Inflation* (Evanston, Ill.: Northwestern University Press, 1985), Charles Newman attempts to relate postmodernism to the prevalence of inflation in the twentieth century. This book is the most serious attempt I know of to discuss the cultural implications of inflation; see especially pp. 6–7, 187–90, or his summary statement (p. 184): "In cultural matters, inflation abstracts anxiety, suspends judgment, multiplies interpretation, diffuses rebellion, debases standards, dissipates energy, mutes confrontation, undermines institutions, subordinates techniques, polarizes theory, dilates style, dilutes content, hyperpluralizes the political and social order while homogenizing culture. Above all, inflation masks stasis." Unfortunately the book is seriously weakened by Newman's inability to develop a sustained argument; he comes up with some brilliant insights, but fails to develop them systematically. He is also woefully ignorant of economic truth, especially about the nature of inflation, which he claims "is primarily caused not by . . . monetary policy or government spending . . . but by inflationary assumptions anticipated by the entire culture" (p. 167), another case of mistaking the effects of inflation for the cause. One would be hard pressed to find a stupider statement than Newman's judgment on free markets: "every seller constitutes a monopoly to the degree that he has the power to increase prices without affecting sales, and such pricing institutions are not on the whole undesirable, as pure price competition would be totally disruptive of the economy" (p. 165). When literary critics are as ignorant of economic truth as this, it is hardly surprising that their economic analyses of culture are confused. Still, Newman is the only critic I know of who has understood how pervasive and insidious a force inflation has been in twentieth-century culture.

[19]For a general study of the role of the simulacrum in Mann, see Berhard J. Dotzler, *Der Hochstapler: Thomas Mann und die Simulakren der Literatur* (München: Wilhelm Fink, 1991).

definition, a simulacrum is a copy for which there is paradoxically no original.[20] But that is exactly the concept of fiat money. Under the gold standard, the dollar bill used to be the representation, for which a fixed amount of gold provided the original. In this situation, one could easily distinguish the representation from the original—the original was bright and shiny, while the representation was green and crumpled. But that kind of distinction is no longer possible in the world of pure paper money. One dollar bill merely represents another dollar bill—we are in a world of all copies and no originals.[21]

But this is exactly the kind of world Mann portrays in "Disorder and Early Sorrow," a world in which reality is constantly threatening to dissolve into mere representations of reality. Cornelius is distressed by his son's admiration for and imitation of the actor, Ivan Herzl:

> Bert has entirely succumbed to Herzl's influence, blackens the lower rim of his eyelids . . . and with youthful carelessness of the ancestral anguish relates that not only will he take Herzl for his model if he becomes a dancer, but in case he turns out to be a waiter at the Cairo he means to walk precisely thus. (p. 181)

In choosing an actor as his model, Bert ends up imitating an imitator, and thus threatens to become a mere simulacrum of a human being. What strikes Cornelius about Herzl is his total lack of authenticity; as an actor, he always seems to be putting on a show, and hence not to have any reality of his own:

> It all, no doubt, comes from his heart, but he is so addicted to theatrical methods of making an impression and getting an effect that both words and behavior ring frightfully false. (p. 197)

[20]The idea of the simulacrum is very important in contemporary French thought, particularly in Baudrillard. In *Simulations*, he defines the simulacrum as "the generation by models of a real without origin or reality: a hyperreal" (p. 2), "a liquidation of all referentials . . . substituting signs of the real for the real itself" (p. 4).

[21]That is of course why it is easier to inflate a pure paper currency as opposed to a gold-backed currency. To see how close this situation is to the world of simulacra conceived by Baudrillard, consider his characterization: "The relation between them is no longer that of an original to its counterfeit. . . . objects become undefined simulacra one of the other" (p. 97). That Baudrillard himself senses a connection between his notion of the simulacrum and paper money is shown by the fact that he often speaks of the *circulation* of simulacra; his description of Los Angeles, for example, is an apt characterization of the modern money supply: "a network of endless, unreal circulation" (p. 26; see also pp. 11, 32). Baudrillard makes the connection explicit when he compares the process of simulation to "the floating of currency" (p. 133). It is a curious historical coincidence that the poststructuralists' obsession in the 1970s with what they called "free-floating signifiers" roughly coincided with the end of the gold-exchange standard, which resulted in the free floating of national currencies, wholly uncoupled from any tie to gold.

Already in the 1920s, Mann prophetically saw the inauthenticity coming to pervade modern society and modern culture, linking this development to the modern communication media, but understanding its link to fiduciary media as well. Indeed his model for the loss of authenticity in the modern world is the loss of the reality of money that inflation causes.[22]

I can offer one particularly apt example to try to corroborate the connection I have been drawing between the epistemology of twentieth-century art and debates over paper money. At the core of postmodernism is the tendency to make the act of representation problematic. Postmodern images call attention to themselves, to the fact that they are merely images. In traditional art, the medium is, as it were, transparent; the artist wants us to look through his act of representation to the thing being represented, and hence does everything possible not to call our attention to his medium. But the postmodern artist throws a wrench into the process of representation, foregrounding his medium and thus making us concentrate on the act of representation itself, on the fact that we are watching something being represented. A famous example of this technique among the Surrealists, forerunners in many respects of postmodernism, is René Magritte's *The Treachery of Images* (Fig. 1). One of the many ways of reading the inscription on this clever painting is: "This is not a pipe; this is merely a representation of a pipe." Magritte short-circuits any tendency we might have to confuse

[22]My poststructuralist colleagues must by now be having a good laugh at my epistemological naïveté in talking about the reality of money; since all money involves an act of representation, they would argue, it is ridiculous to speak of one form of money as being more real than another, and hence I am simply mired in an archaic fetishizing of gold. But making the distinction between a pure paper currency and a gold-backed currency need not involve any essentialist claims about the metaphysical reality of one form of money as opposed to another. In this as in other areas, Austrian economics proves itself to be more subjective in its view of reality than alternate theories (especially Marxism, with its objectivist labor theory of value). For Austrian economics "real" money is simply money the market accepts on its own as real; as Mises shows, any good accepted as money must at least originally have had an exchange value independent of its use as money, that is, it must be a commodity like gold that is subjectively valued for reasons other than its use as a medium of exchange. The opposite of this kind of money is money that the government must force people to accept (legal tender laws). Thus, far from being essentialist, this distinction is purely pragmatic, simply reflecting how people in fact behave. Indeed, long after all governments have abandoned the gold standard, and even labored mightily to demonetize gold, people around the world continue to insist upon treating gold as a form of money, whereas many legal tender currencies are treated as worthless paper by people outside the authority of the governments issuing them. If my colleagues want to persist in claiming that there is no way to view one form of money as more real than another, I have some rubles I would like to trade them at face value for Krugerrands.

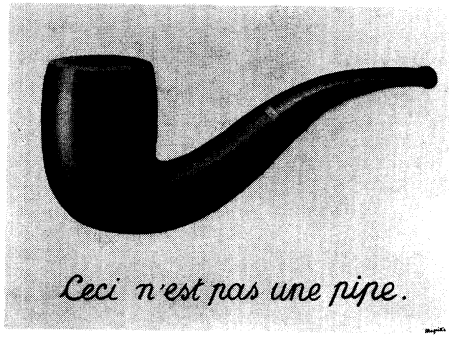

Figure 1
"This Is Not A Pipe"

Source: Original title *La Trahison des Images (Ceci n'est pas une Pipe)*. René Magritte. Oil on canvas 60. x 81.3 cm. Los Angeles County Museum of Art.

the representation of a thing with the thing itself by explicitly calling attention to his act of representing the thing.[23] The painting leaves us with a lingering sense of the inadequacy and even the duplicity of all acts of representation.

Magritte's painting, done in 1928–29, seems a perfect example of avant-garde art, the kind of work that could only be produced in the twentieth century. And yet it bears a striking resemblance to a famous cartoon by Thomas Nast, drawn as an illustration to David Wells's book, *Robinson Crusoe's Money*, first published in 1876 (Fig. 2). Wells's book was an attack on the paper money inflation brought about by the Civil War. He uses a Crusoe fable to expose the folly of the common people's belief in the reality of paper money:

> But the latter term was conceded to be but a mere fiction of speech and a bad use of language, for every intelligent person at once saw that a promise to deliver a commodity . . . could not possibly be the

[23]For a discussion of this painting, and others like it by Magritte, see Suzi Gablik, *Magritte* (New York: Thames and Hudson, 1985), pp. 124–31. The importance of this painting to poststructuralism is shown by the fact that Michel Foucault wrote a long essay about it, published in English as *This Is Not a Pipe*, James Harkness, trans. and ed. (Berkeley: University of California Press, 1983). Foucault suggests several interesting ways of reading the statement "This is not a pipe." He also connects Magritte's painting to the idea of the simulacrum: "Resemblance predicates itself upon a model it must return to and reveal; similitude circulates the simulacrum as an indefinite and reversible relation of the similar to the similar" (p. 44), once again a peculiarly apt characterization of the illusory world of paper money.

Figure 2
Milk-Tickets for Babies, in Place of Milk

Source: David Wells, *Robinson Crusoe's Money; or, the Remarkable Financial Fortunes and Misfortunes of a Remote Island Community* (New York: Harper & Brothers, 1876), p. 57.

commodity or the thing itself, any more than . . . the picture of a horse [is] a horse.[24]

[24]David A. Wells, *Robinson Crusoe's Money; or, the Remarkable Financial Fortunes and Misfortunes of a Remote Island Community* (New York: Harper & Brothers, 1876), p. 57. This fascinating book presents a view of the evolution of money very similar to that developed by Austrian economics, and offers a cogent defense of the gold standard (unfortunately Wells's argument is weakened by his clinging to the labor theory of value and his ignorance of the law of marginal utility). I learned of this book from reading Walter Benn Michaels, *The Gold Standard and the Logic of Naturalism* (Berkeley: University of California Press, 1987), pp. 145–47. Michaels's book is one of the most famous examples of the so-called New Historicism, the kind of deconstructed Marxism that currently dominates literature departments, largely derived from the thinking of Foucault. Michaels develops an intriguing argument about the relation between the gold standard and the concept of representation in nineteenth-century America, in some ways similar to the line I am pursuing. But Michaels cannot take the gold standard seriously, and regards as naïve any attempt to distinguish "real" from "fake" money. On p. 147, he writes: "in insisting that 'good money' must 'of itself possess the full amount of the value which it professes on its face to possess' (p. 26), writers like Wells were insisting that the value of money as money be determined by (and indeed identical to) the value of money as the commodity it would be if it weren't money." Here Michaels reveals his ignorance of economics and his inability to follow Wells's argument. Like the Austrians, Wells argues that money must originally have been a commodity with its own value, but he is perfectly

Nast's illustration brilliantly captures the heart of this argument by surrealistically confusing things with representations of things. Like Magritte, Nast reminds us that a picture of a cow is not actually a cow, but he is not making a merely aesthetic statement. He is drawing a more serious analogy between the duplicity involved in artistic representation and the duplicity involved in the government printing money and forcibly establishing it as legal tender, an analogy embodied in the parallel: "This is a Cow By the Act of the Artist" and "This is Money by the Act of Congress."[25] Experiencing the Union Greenback inflation, Nast was led to question the reality of representation without benefit of having read Nietzsche. As in "Disorder and Early Sorrow," an inflationary environment raises the issue of the authenticity of representation in a way that provokes an artist to think about the illusions involved in his own craft.[26]

VII

"Disorder and Early Sorrow" may be just a short story, but, as I have tried to show, it is remarkable how complete a portrait of the modern world Mann is able to pack into this brief work, and how rich it is in economic detail. With his attention to the consequences of inflation for daily life, Mann provides a useful supplement to Mises's brilliant economic analysis of the phenomenon. Mises explains what happened in Weimar Germany; Mann gives a sense of how it felt to ordinary people, and in that way may help to convince his readers of the full horror of inflation. Though it may be a rare case, I offer this discussion

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aware that it acquires a new and additional value once it starts to function as a medium of exchange. Michaels is blind to the whole point of the bimetallism controversy he is discussing; if the demonetization of silver in 1873 disastrously lowered the price of silver, as Michaels himself indicates (pp. 144, 175), then there must be a separate component in the value of any commodity serving as money that corresponds specifically to its monetary function, as all the parties to the bimetallism debate acknowledged, including Wells. Michaels's failure to understand this simple point of economics vitiates his whole argument. Given how much contemporary literary critics speak about economic matters, it is astounding how ignorant they remain of economics.

[25]Thinking along the same lines, and trying to find an image for the misrepresentation involved in an inflated currency, Wells is led to imagine the twentieth-century world of the simulacrum, foreseeing the creation of ersatz products: "the painted cotton, silk, wool, and leather could be made to look so exactly like the real articles, that it was only when the attempt was made to exchange the representation for the real that the difference was clearly discernible" (p. 94).

[26]In a final twist on this subject, at the time of the German inflation, Dada artists used real banknotes to create works of art in their collages. Having become virtually worthless, the "real" banknotes turned into imaginary money, one might even say play money. The Hungarian artist, Moholy-Nagy, used a 100 billion mark note in one of his collages. See John Willett, *The Weimar Years: A Culture Cut Short* (New York: Abbeville, 1984), p. 42.

of "Disorder and Early Sorrow" as an example of how an economic but non-Marxist analysis of literature is possible. Only if one approaches the story armed with the correct analysis of inflation supplied by Mises can one see what its true significance is and what its larger implications are. What is particularly interesting about the story is that it portrays the same world that modernist texts usually do, but offers a different explanation of the characteristics of that world. Mann traces the feeling of modern man that the ground has been pulled out from beneath his feet, not to some metaphysical principle of human life itself, but to the effects of a specific government policy, namely inflation. Moreover, he suggests that the inauthenticity of modern life, which has often been blamed on capitalist practices such as advertising, is more properly viewed as the result of the inflationary environment created by government. The Marxist critics who today dominate humanities departments act as if all economic analysis of literature must yield (for them) comfortingly leftwing conclusions. An Austrian economic analysis of "Disorder and Early Sorrow" shows that many of the problems characteristic of modern life are not, as literary critics tend to claim, the product of private enterprise, but rather of that very government intervention in the economy Marxists always recommend.

The twentieth century could be called the Age of Inflation,[27] the Age of Paper Money, and "Disorder and Early Sorrow" suggests how this fact is related to the prevailing sense of inauthenticity in our time, the sense of a lack of reality and a loss of value. Critics often search as if puzzled to answer the question: how could authors such as Kafka come up with a view of the world as so absurd? The fact is that in its day-to-day consequences the German inflation of the 1920s was far more absurd than anything Kafka could dream up. When Gregor Samsa turns into an insect, it certainly introduces an element of craziness into his household, but at least the money his parents put away in the bank retained its value and allowed life to go on for his family, and when his sister went to do the shopping, she did not need a wheelbarrow to carry the banknotes necessary just to buy a loaf of bread.

It would of course be wrong to blame the development of the idea of the Absurd in modern literature purely on inflation. After all, we can find the Absurd in the literature of countries which never went through anything like the German hyperinflation (though it would be impossible to find any country in this century unaffected by

[27]This name has been given to the twentieth century by Jacques Rueff, *The Age of Inflation*, A. H. Meeus and F. G. Clarke, trans. (Chicago: Henry Regnery, 1964); see esp. p. 1.

inflation, not even Switzerland; in the modern world, we are always talking only about *relative* rates of inflation; inflation is the most pervasive economic fact of our time). Still, "Disorder and Early Sorrow" gives us much food for thought, and leads us to ask how much of an impact this all-pervasive economic phenomenon has had on modern literature and ways of thinking. Taking our cue from Mann, we begin to question whether inflation may in fact be an even more insidious phenomenon than we have realized, fundamentally altering our world and the way we view it.

Thus in a way very different from Marxist approaches,[28] Mann suggests a connection between the spiritual history of the twentieth century and the economic, making us wonder whether the world became merely an image when money became merely an image. As I said at the beginning, deconstructionist and poststructuralist theories paved the way for Marxist takeovers of humanities departments by calling into question any standards of truth and reality, and thus making the demonstrable failure of socialist economic policies in the real world seem irrelevant in the thinking of literature professors. But analysis of "Disorder and Early Sorrow" suggests that these very theories do not, as they claim, provide insight into the human condition as such, but are in fact just a response to specific economic conditions in the twentieth century, the Age of Inflation. Theorists who triumphantly proclaim the illusoriness of human existence are merely reflecting the world created by government monetary policy, the web of illusions endemic to the era of paper money. In a strange way, one may say that Foucault, Derrida, and the other poststructuralists are right; they have evolved a philosophy appropriate to the Age of Inflation, the age when money itself comes to represent nothing, and hence all representation becomes problematic. The mistake occurs when these philosophers universalize from their limited historical experience, and see the world brought about by Keynesian economics as co-extensive with human life in general. Reading Mann's story can help remind us that it is not human life as such that is unreal—it is the money our governments have surreptitously imposed upon us in an inflationary policy that has caused our sense of reality itself to attenuate in the twentieth century.

[28]Mann himself drew this distinction in a public address: "man braucht nicht materialistischer Marxist zu sein, um zu begreifen, dass das politische Fühlen und Denken der Massen weitgehend von ihrem wirtschaftlichen Befinden bestimmt wird" ("one does not have to be a materialistic Marxist in order to grasp that the political feeling and thinking of the masses is largely determined by their economic condition"). See "Deutsche Ansprache: Ein Appell an die Vernunft," *Gesammelte Werke*, 11: 871.

The Theory of the Firm: The Austrians as Precursors and Critics of Contemporary Theory

Nicolai Juul Foss*

More than one commentator has observed that a distinct theory of *the firm* is conspicuously missing from the main body of Austrian economics (e.g., Langlois 1991, p. 2; Minkler 1991, p. 8). As two Austrian economists observed some years ago: "there is no subjectivist or Austrian theory of the firm" (O'Driscoll and Rizzo 1985, p. 123). That is still the situation.

With the term "theory of the firm," I shall set forth a theory that has something to say about the existence, the boundaries and the internal organization of the institution known as the business firm. And with the term "firm," I shall describe an organization that is planned with the express purpose of earning profit. In Hayekian terms (Hayek 1973), the firm is a "planned order," an aspect of "taxis."

That social institutions have always occupied center stage in Austrian economics is a proposition that commands widespread agreement today (Hodgson 1988; Langlois 1986, 1991). Many economists recognize the distinctiveness of, for example, the Mengerian theory of the origin of a medium of exchange (Menger 1871, chap. 8), and probably even more economists are familiar with the Hayekian account of the information providing function of the price system (Hayek 1945). Many economists also know that Hayek's insight stemmed from his involvement in the socialist calculation debate, preeminently a debate about the *organization* of economic activities. Indeed, Hayek's "The Use of Knowledge in Society" has become a standard reference in the literature on economic organization (e.g.,

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Ricketts 1987, p. 59; Milgrom and Roberts 1992, p. 56; Douma and Schreuder 1991, p. 9; Williamson 1985, p. 8, 1991, p. 160). More generally, many writers have pointed out the affinities to Austrian economics of much of what passes as "neo-institutionalism," viz. the analysis of social institutions with the aid of economic analysis (Langlois 1986).[1]

So the Austrians have at least since the beginning of the calculation debate with Mises (1920) theorized the organization of economic activities in alternative institutional forms.[2] But the institutions that have traditionally been confronted in Austrian economics are mainly central planning—either in its comprehensive or its market socialism-manifestation—and private property rights–based market organization. This means that hierarchical direction taking place *within* a market economy has been comparatively neglected.[3] Along with many other economists, the Austrians could be seen as assimilating the message of Machlup (1967) that for the purposes of market analysis, one can make do with a very stylized (anonymous) conceptualization of the firm; and economics *per se* had no business breaking up the black box of the firm. In fact, Austrian analysis of market phenomena has even manifested a tendency to dispose of the concept of the firm, resting content with analyzing the extra-Robbinsian—as Israel Kirzner puts it—activities of the entrepreneur.[4]

As I shall show, however, it is something of a doctrinal puzzle that the Austrians have never formulated a theory of the firm. This is so because many of the analytical components that are necessary to tell a coherent story about why there should be firms in a market economy were present in Austrian theorizing long before they became standard fare in neoclassical economics. I have in mind concepts such as property rights (Mises 1936), specific and complementary assets (Hayek 1931), asymmetric information (Mises 1936; Hayek 1937), the

[1]It should be noted that the term "neo-institutional" is often applied generally to modified neoclassical economics (property rights theory) (e.g., Eggertson 1990) as well as more process-oriented and heterodox influences (e.g., Langlois 1986).

[2]When I talk about "Austrians" in this article, I side-step the differences that exist between the Hayekian and the Misesian approaches to Austrian economics. While I do not deny that differences exist, research on this distinction is still only in its beginning. See Salerno (1990).

[3]Among the few Austrian contributions that deal explicitly with the theory of the firm are O'Driscoll and Rizzo (1985, pp. 122–25), Littlechild (1986, p. 35), Boudreaux and Holcombe (1989), Thomsen (1989, chap. 4), and Ikeda (1990). Contributions explicitly influenced by Austrian economics are Malmgren (1961), Ricketts (1987), Witt (1987), Loasby (1989), and Langlois (1991).

[4]The words "firm," "business enterprise" or substitute terms do not figure in the indexes to Menger (1871), Mises (1949), and Lachmann (1956, 1986).

distinction between planned and spontaneous orders (Hayek 1973), non-maximizing modes of behavior (Mises 1936; Hayek 1973; Kirzner 1973), and a basic understanding of the principal-agent relationship (Hayek 1935a, 1935b, 1940; Mises 1936).[5] These are among the concepts that have occupied center stage in recent attempts to place the theory of the firm on a solid economic footing (e.g., Alchian and Demsetz 1972; Williamson 1985).

This is not to say that the Austrians—had they pieced these concepts together—would necessarily have arrived at something similar or very close to the contemporary theory of the firm. The reason is fundamentally that whereas the modern theory of the firm has had a comparatively loyal relationship to mainstream neoclassical economics, the Austrians have consistently and continuously emphasized their differences from neoclassicism, at least as it took form after World War II. In particular, as the Austrians like to emphasize, the concepts of *market process* and *entrepreneurship* are missing from neoclassical economics in general, and, I may add, from the contemporary theory of the firm in particular. What this implies is that there may be a potential for a distinct Austrian theory of the firm.

The way the ensuing pages proceed is the following. In the next section I present a brief overview of "Contemporary Theories of the Firm," concentrating on the mainstream approach in the contemporary theory of the firm. In "Austrians on Economic Organization," I present some prominent theories and argue that the Austrians anticipated many important modern developments in the theory of the firm. But as I argue in the sections on "An Austrian Critique of the Modern Theory of the Firm" and "Towards an Austrian Theory of the Firm," the Austrians are more than merely precursors; not only is Austrian economics at variance with the modern theory of the firm in some important respects ("An Austrian Critique of the Modern Theory of the Firm"), but it is also possible to construct a distinct theory of why there should be firms on an Austrian basis ("Towards an Austrian Theory of the Firm"). Although the Austrians had (and have) a number of the essential ingredients of the theory of the firm, an Austrian theory of the firm implies adding additional ingredients and piecing them together in ways that differ from the modern theory of the firm. This is the way I resolve the apparent tension in saying that the modern theory of the firm was both anticipated by Austrians and implicitly critiqued by them.

[5]A principal-agent *relation* is said to exist when a principal wants a task to be carried out by an agent on the principal's behalf. A principal-agent *problem* exists when there is some kind of conflict of interest between the two and when the principal either cannot observe the actions of the agent (moral hazard) or cannot ascertain whether the agent has made the best use of the knowledge he possesses (adverse selection).

In other words, the purposes of this article are historical, critical and constructive, respectively. But in all three tasks, I basically adopt a method of "rational reconstruction": The Austrians can be "reconstructed" as (1) anticipating modern developments, as (2) simultaneously providing a critique of them, and, finally, as (3) having their own distinct perspective on economic organization.

Contemporary Theories of the Firm[6]

The Firm in Economics

The defining characteristic of the market economy is usually taken to be the organization of production and distribution through the price system. But the primacy of exchange is characteristic not only of the market economy but also of how economists view their discipline (McNulty 1984, p. 233). In more specific terms, firms in neoclassical (perfect competition) price theory are often taken to be identical except in terms of the product markets they serve.[7] And not only are firms often presumed to be identical; the actual description of them is the most stylized or anonymous possible. They are merely entrepreneurless production functions. This procedure, of course, is not wrong in itself; for the purpose of analysis of market level allocation it is perfectly defensible (see Machlup 1967).

But as many critics have argued, neoclassical price theory provides no rationale for the very existence of the firm, not to speak of its boundaries and internal organization. This is not just a matter of the price system operating so efficiently that there is no need for, say, any vertically integrated (hierarchical) enterprises; it is more fundamentally a matter of neoclassical perfect competition theory being inherently incapable of rationalizing anything called "the firm." All relevant productive knowledge is given, prices provide all other information, factors are totally mobile, there are no costs of ascertaining quality, etc. This implies that the theory cannot explain why buyers of goods should not simply contract with owners of factor services instead of with firms.

Coase and Post-Coasian Theory

As the story usually goes, it was Ronald Coase who in 1937 realized that not only had the firm been neglected in economics, but more importantly that it was in fact possible to use economic theory

[6]This section draws on material in Foss (1993b).

[7]As argued in Foss (1991) it was the breakthrough of the theory of monopolistic competition in the mid-1930s that established this assumption of uniformity. For an Austrian comment on this episode, see Kirzner (1979, p. 133–35).

to provide a rationale for why there should be firms in a market economy.[8] Coase's (1937) answer, in a broad outline, is that efficiency requires the substitution of firms for markets if the *transaction costs* of using markets becomes large relative to the costs of managing. Market transaction costs are the costs of discovering contractual partners, drafting and executing contracts. Beyond a central threshold of market transaction costs, hierarchical direction—what Williamson (1991) calls "intentional governance"—of the movements of goods and services becomes more efficient to all involved parties than exchange of property rights through the price mechanism, and what Williamson (1991) following Hayek calls "spontaneous governance." This provides a rationale for the *existence* of the firm.

Applying the conventional marginalist method, the *boundaries* of the firm is determined by the condition that the transaction costs of organizing an additional transaction using the market should equal the transaction costs of organizing that same transaction using the firm. And Coase finally hinted at the possibility of using transaction cost reasoning for explaining the details of internal organization.

Another aspect of the standard account of the development of the contemporary theory of the firm is that the field lay dormant for about 30 years until Armen Alchian, Harold Demsetz, and Oliver Williamson revitalized the Coasian analysis in the beginning of the 1970s (Alchian and Demsetz 1972; Williamson 1975). Indeed, almost all modern theories—most of which have taken their leads from the early seminal contributions of Alchian and Demsetz and Williamson—of the firm are considered post-Coasian in the sense that they view the firm as an efficient contract between a multitude of parties; efficient in the sense that it best facilitates exchange, given existing resource scarcities (including scarcity of information and rationality). In spite of the fact of a common Coasian origin, the contemporary theory of the firm is not monolithic (see, e.g., Holmstrom and Tirole 1989); in their attempts to operationalize, make more precise, and understand the original Coasian insights, modern theories have given rather different answers.

[8]This, of course, is not totally correct since Frank Knight in 1921 had provided an economic rationale for the existence of the firm. Basically, his theory of the firm is closely akin to the way I later in this article interpret the Austrian theory of the firm, since it is basically entrepreneurial: The firm exists as the entrepreneur's means to realize his judgment. For a comparison of Coase's and Knight's theories of the firm, and a ringing endorsement of Knight's theory, see Boudreaux and Holcombe (1989) (and for a moderator, see Foss 1993a).

In a recent article, Armen Alchian and Susan Woodward (1988) introduced a distinction between a "moral hazard approach" to economic organization, inspired by the original Alchian and Demsetz-analysis (1972), and an "asset specificity approach," best represented by the theorizing of Oliver Williamson (1975, 1985, 1991). The moral hazard approach is usually referred to as "the nexus-of-contracts approach" (Jensen and Meckling 1976; Fama 1980; Cheung 1983), and I shall use that term here. On an overall level, what makes these two approaches different is their degree of adherence to neoclassical theory; whereas the nexus-of-contracts approach is a sort of generalized (property rights) neoclassical theory, the asset specificity approach—particularly in its Williamsonian manifestation—is characterized by the import of a number of non-neoclassical concepts, particularly Herbert Simon's concept of bounded rationality (Simon 1979). They have given correspondingly different answers to Coasian questions like, "What is the precise nature of transaction costs?" "How are they best to be operationalized?" "What determines the size of hierarchical costs?" etc.

The Nexus-of-Contracts Approach

In Alchian and Demsetz's (1972) original analysis the existence of the firm is explainable in terms of the incentive problems that arise when *team production*—production that involves non-separable production functions—is combined with *asymmetric information* and *moral hazard*. In this prisoners' dilemma setting, shirkers do not bear the full consequences (costs) of their actions, and viable shirking is the result. The way the market system copes with such shirking is through contracts. The "classical capitalist firm" is characterized by the existence of one central agent, who is both a monitor who meters the performances of other agents and a residual claimant and with whom other agents enter into contracts. Market forces then guarantee efficient monitoring of team production via the incentive structure confronting the monitor-residual claimant. Viable firms are those that succeed in minimizing the costs involved in monitoring team production.

A number of analytical addenda to this basic story have been presented. Jensen and Meckling (1976) recognized that the monitoring story as told by Alchian and Demsetz was not limited to team production. And Barzel (1987) demonstrated that the agent that was most likely to end up as monitor–residual claimant (principal) was he whose contribution to the joint product was the most difficult to measure.

Such refinements of the nexus-of-contracts approach came at a cost, however. Though the basic claim was present in Alchian and Demsetz's (1972) original discussion, it became clear that within this tradition the very concept of the firm as a planned order was difficult to uphold. What I ordinarily refer to as "a firm" is simply a complex set of market contracts (Cheung 1983), only distinguished from ordinary spot market contracts by the continuity of association among input owners. Given this, it comes as no big surprise that nexus-of-contracts theorists Eugene Fama (1980) and Steven Cheung (1983) call for an abandonment of the concepts of "the entrepreneur" and "the firm," respectively. Since all allocation of resources—including those "inside" the firm—are ultimately governed by relative price movements there can be little or no room for planned direction of resources as embodied in entrepreneurial plans.[9]

The Asset Specificity Approach

In the same way that the nexus-of-contracts approach seems to have increasingly centered upon one central analytical concept, the cost of metering quality of goods and services, the contractual approach associated with Williamson (1985) has increasingly focused attention on one central character: *asset specificity.* Asset specificity is said to exist when the opportunity cost of an asset is significantly lower than its value in present use. Typically, asset specificity will involve a high degree of *complementarity* among the relevant assets. The difference between these two values is a Marshallian quasi-rent that can be appropriated through *opportunism.* The tussle for rents in bilateral monopoly situations characterized by asset specificity, opportunism, and bounded rationality is the driving force behind firms' changing boundaries. It is, in other words, costly bargaining games that underlie the existence of the firm and its efficient boundaries.

As indicated by Grossman and Hart's (1986) refinement of this mode of analysis, it is not really the contractual "ink costs," and not even the appropriation potential relating to the rents from specific assets that underlies integration *per se.* It is rather the mutual desire to implement efficient investment incentives that determines to whom the ownership rights ("residual rights")—that is, the right to determine and control the use of (physical) assets in circumstances not spelled out in the contract—will be allocated.

One of the really recalcitrant problems in modern debates on economic organization has to do with specifying the costs of internal

[9]A referee pointed out that Armen Alchian under the influence of Williamson has changed his mind on this point. See Alchian (1984, p. 36).

organization. In the absence of such a specification one cannot solve the puzzle of why the economy is not organized into one big firm (Coase 1937, p. 86). Indeed, Williamson (1985, p. 132) refers to this problem as a "chronic puzzle," and highlights it with his "problem of selective intervention": Why can't a merger of two firms not always do the same or better than two independents, since management in the merger can always intervene selectively?

One of the important attempts to identify the (incentive) costs of internal organization is Milgrom (1988), who basically asks why the hierarchical organization continues to survive in a competitive market economy despite its bureaucratic costs. Applying insights from the rent-seeking literature, Milgrom identifies the sources of bureaucratic costs as subordinate "influence activities," viz. their strategic attempts to change the actions of superiors in their own interest. Such influence activities produce influence costs that usually have a negative impact on firm profitability. As Milgrom argues, centralized authority is particularly vulnerable to influence activities; the decentralized market provides fewer targets. The reason the hierarchy may survive after all is because the existence of strict bureaucratic rules have the beneficial function of dampening the influence activities of subordinates.

Summing up, I highlight the following specific concepts as those that are crucial to telling a story about why there should be firms in a market economy. *Asymmetric information* is absolutely crucial since in the absence of knowledge dispersion there would be no transaction costs; that is, economic organization would be indeterminate. Some notion of *linkedness of resources*—either in the form of Williamson's notion of asset specificity or Alchian and Demsetz's concept of team production—seems also necessary, since in its absence there would be no rents to appropriate. Finally, a notion of *self-interest seeking with guile* (opportunism, moral hazard) also seems necessary, since in its absence there would be no need for the services of a monitor, hierarchical fiat, bureaucracy, etc.; market contracts coupled with promises—that would always be credible—would be sufficient.

On a more general theoretical level, most modern theories of the firm bear an intellectual debt to property-rights theory (Coase 1960; Demsetz 1967). The structure of contracts that constitutes the firm implies an allocation of property rights. Finally, on a methodological level modern theorists of the firm and economic organization are committed to a method of comparative institutionalism which implies that for purposes of comparison the relevant yardstick is not the unattainable ideal of general competitive equilibrium but real, attainable institutions or market outcomes (Demsetz 1969).

I have asserted that the Austrians in some important areas can be seen as precursors of modern theories of economic organization, including the theory of the firm. In the next section I shall attempt to substantiate that assertion. I shall concentrate attention on the points where the Austrians directly anticipate modern developments and neglect those where there exist variance.

Austrians on Economic Organization

Sifting through the pages of the works of prominent Austrians confirms that while they generally have had very little to say about the theory of the firm *per se*, economic organization and its institutional embodiment have always occupied center stage. The kind of economic organization issues that have primarily occupied Austrian interests are, of course, issues in comparative systems, as represented most notably by the socialist calculation debate (Mises 1920, 1936, 1949; Hayek 1935a, 1935b, 1940, 1937; Lavoie 1985). Assuredly, it is an anachronistic fallacy to criticize the Austrians for not discussing a subject matter that became established in economics only with the beginning of the 1970s. But on the other hand the Austrians had so many of the necessary ingredients of a theory of the firm that it is surprising that it was left to non-Austrian (but subjectivist) Ronald Coase to raise the questions of the existence, boundaries, and internal organization of the firm. To locate some of these ingredients in the Austrian literature is the primary purpose of this section.

Kinds of Orders and Their Governing Rules

Perhaps the most pertinent overall distinctions to be made in a discussion of economic organization are the ones between "pragmatic" and "organic" institutions (Menger 1883) and "planned" and "spontaneous orders" (Hayek 1973). While pragmatic institutions are the results of "socially teleological causes," organic institutions are "the unintended result of innumerable efforts of economic subjects pursuing individual interests" (Menger 1883, p. 158). Menger's discussion is primarily oriented towards giving an explanation of the different ways in which institutions may arise, not to the same extent towards explaining how they are preserved—and their principles of operation—once established. Hayek's (1973) distinction between planned and spontaneous orders supplements Menger's discussion in this regard, since his distinction is based on the different organizing rules they comprise; the rules supporting the spontaneous order being abstract, purpose-independent, and general, while the rules (or

commands)that support a planned order are designed and specific in nature.[10]

Although Hayek tends to strictly dichotomize not only spontaneous and planned orders but also the relevant rules that direct them—in "nomos" and "thesis," respectively—precise distinctions are in fact difficult to draw, since, for example, spontaneous orders may be of a very different generality, planned orders may comprise elements of spontaneous orders, etc. I shall touch on these issues later on, and for now be content with noting that the distinction between planned and spontaneous orders closely parallels that between "markets and hierarchies" (Williamson 1975), or as Williamson (1991) now says, between "spontaneous" and "intentional governance." Here are some of the meanings I may ascribe to the contrast between these two modes of organizing economic activities:

(1) Full-scale comprehensive planning versus price-mediated exchange on the basis of private property rights.

(2) Market socialism versus price-mediated exchange on the basis of private property rights.

(3) Firm hierarchies versus price-mediated exchange.

(4) Quasi-hierarchies (e.g., joint ventures) or decentralized organizations (e.g., franchising) versus price-mediated exchange.

(5) Firm hierarchies versus government hierarchies.

The distinctions outlined in (1) and (2) were the themes discussed in the socialist calculation debate; (3) is the distinction examined by Coase (1937); (4) has been examined by the followers of Coase, particularly Williamson (1985); and (5) has been examined by property-rights theorists. It is only speculation about the distinctions in (1) and (2) that the Austrians have systematically and comprehensively contributed (Mises 1945 is probably the most comprehensive Austrian contribution to number 5 above). But as I shall briefly argue, the Austrian contributions to the calculation debate

[10]As Hayek (1973, pp. 49, 50) puts it: "[W]hat distinguishes the rules which will govern action within an organization is that they must be rules for the performance of assigned tasks. They presuppose that the place of each individual in a fixed structure is determined by command and that the rules each individual must obey depend on the place which he has been assigned and on the particular ends which have been indicated for him by the commanding authority. . . . [T]he general rules of law that a spontaneous order rests on aim at an abstract order, the particular or concrete content of which is not known or foreseen by anyone; while the commands as well as the rules which govern an organization serve particular results aimed at by those who are in command of the organization."

provided a number of insights which are extremely pertinent for theorizing about the distinctions presented in (3) through (5).

This is not a novel observation in itself. O'Driscoll and Rizzo (1985, p. 124) report that they find Coase's (1937) insights in economic organization "congenial" because they incorporate "the essential conclusions of the economic calculation debate."[11] And many theorists of economic organization have noted the affinities of Austrian insights in the calculation debate to modern theory (e.g., Williamson 1985, p. 8; Milgrom and Roberts 1992, p. 51). I shall, however, be somewhat more explicit and detailed about where the points of similarity are.

The Socialist Calculation Debate

The Austrian insights presented in the course of the calculation debate that are directly relevant to the theory of economic organization, in the sense that they anticipate modern developments, can be summarized in the following closely connected points:

(1) the insight that welfare assessments of institutions and outcomes should not be based on a "Nirvana approach" (Demsetz 1969);

(2) the importance of change to economic organization;

(3) the understanding that an economic organization should be sensitive to the knowledge and rationality that agents possess; and

(4) an understanding of the principal-agent relationship and the importance of incentives more generally.

To start with the general methodological point, it is apparent already from Mises's (1920) opening salvo in the debate—over later Austrian contributions and until Hayek's "Use of Knowledge" article—that what really irritated the Austrians was their socialist opponents' use of unrealistic and unattainable social ideals—Nirvanas—as standards of comparison. Naturally, on such standards, capitalism would appear inefficient and wasteful. Being the first to insist that socialist economic organization too should be approached with the tools of economic analysis (and that idealized, institutionless models should be banned as standards of comparison), the Austrians may be said to be the first modern economists consistently pursuing the Smithian

[11]Coase does not seem, however, to have been directly inspired by the calculation debate, although his article contains a reference to Hayek's 1933 essay, "The Trend of Economic Thinking." As Coase has later reported (1988), he had the crucial insight already in 1931, well before the calculation debate in its Anglo-Saxon form took place.

program of comparative institutionalism: that is, using economic analysis to compare the efficiency of alternative real-world institutions for the organization of economic activities.

Now, why exactly was it—in the opinion of the Austrians—that models like Oskar Lange's (1938) model of market socialism did not conform to such a program of comparative institutionalism? The answer is contained in the remaining three points above: (1) The socialist economists neglected the role of incentives (Mises 1936; Hayek 1940); (2) made unrealistic assumptions about the amounts of knowledge that agents can possess (particularly the planning authorities); and (3) formulated their reasoning within static models that obscured all significant economic problems. Or, in a more compact formulation, basing their theories on the economics of the stationary state, market socialists such as Oskar Lange could suppress the knowledge and incentive problems of real economies.

Mises, on the other hand, insisted that "the problem of economic calculation is of economic dynamics; it is no problem of economic statics" (1936, p. 121). And Hayek later seconded Mises when he made the observation that "economic problems arise always and only in consequence of change" (1945, p. 82). As Mises (1936, 1949) recognized, in a changeless stationary state, the political authorities could implement the existing allocation as its plan and everything would continue the way it was before. The lesson to be drawn from this Misesian insight is the general one that it is only when economic change is introduced that economic organization is determinate.[12] And the specific Austrian conclusion in the calculation debate was that in the presence of economic change economic organization on the basis of private property and a price system is strictly superior on efficiency grounds. But the Austrian insight of how change and economic organization are related is of a wider applicability and can be given various interpretations.

One of these interpretations is the general Austrian one, that the entrepreneurial market process is needed to cope with the knowledge problems that economic change introduces (Kirzner 1973), and that market process performs most efficiently when fueled by well-defined and protected private-property rights that provide appropriate incentives for entrepreneurial alertness (Kirzner 1973; Mises 1949).

[12]It is precisely in such a context that Williamson (1985, p. 8 ; 1991, p. 162) praises Hayek (not Mises). Misesian insights appear when Williamson discusses the adaptive properties of the hierarchy and in this context refers to Mises's (1949) distinction between "case probability" and "class probability" (Williamson 1985, p. 58).

But a more specific and perhaps more pertinent interpretation is to interpret the Austrian insight as anticipating the point that without change there would be no transaction and information costs; that is, in the absence of the knowledge problems introduced by a changing economic reality there would be no costs of discovering contractual partners, drafting and executing contracts, monitoring production, constructing contractual safeguards, judging quality, etc. And in the absence of transaction costs, the choice between price-mediated market transactions and firm hierarchies would be indeterminate. As the Austrians recognized, in real world economies, institutions like markets and hierarchies perform the function of economizing on bounded rationality and dispersed information,[13] precisely the factors that ultimately underlie transaction and information costs.

In a doctrinal perspective, this indicates a link between the Austrian insights in the calculation debate and the Coasian insights in economic organization, though not one that was recognized either by the Austrians or Coase, probably because they had concentrated on different institutions. Where Hayek (1945) praised "the marvel" of the price system, Coase had eight years earlier established that the reason firms existed was that the "telecommunications system" of prices did not perform costlessly. Indeed, some commentators have seen the analysis of Coase and that of Hayek as strongly opposed. Of course, they are not; it is only in the kind of dynamic economic reality visualized by the Austrians that Coase's argument acquires its full force.

On a more specific level, there are several other ways in which Austrian insights presented in the course of the calculation debate anticipate or complement modern insights in economic organization. One of the rapidly expanding areas in the theory of economic organization is principal-agent theory. And in the course of the calculation debate, the Austrians anticipated several insights from this theory. They pointed out that it did *not* follow that under socialism, individual managers (agents) would act in the interest of the principals, viz. the planning authorities (e.g., Hayek 1940). And the Austrians

[13]As Nelson (1981, p. 95) comments: "I propose that serious analysis of the strengths and weaknesses of private enterprise must come to grips with [the] bounded rationality problem. Arguments for private enterprise must take the form that, given man's limitations, patched up private enterprise is as good an organizational solution as can be devised."

It should be noted, however, that the bounded rationality problem that Nelson highlights is not identical with the knowledge problem identified by the Austrians. Whereas Nelson, following Simon, primarily focuses on the problems of processing vast amounts of already existing information, the Austrians focus on the problem of *discovering* the relevant knowledge in the first place. For a careful analysis of this point, see Thomsen (1989, chap. 4).

pointed out the existence of a problem of risk allocation between principals and agents: under socialism, managers would be either inefficiently risk averse or risk loving, in the face of career concerns and the presence of an institution (the planning authorities) that could act as an insurance institution and take over the moral hazard of individual managers (Mises 1936, p. 122; Hayek 1940, p. 199).

Furthermore, socialist economic organization would supply a number of opportunities for active rent seekers (Mises 1936, 1945, 1949), that is, in modern terminology (Milgrom 1988), it would provide a number of targets for influence activities and be associated with high levels of influence costs. The market socialists, in contrast, had no grasp of the principal-agent problem, or, if they had, assumed it away; as has often been pointed out, Lange (1938) implicitly assumed continual incentive compatibility between the individual managers and the planning authorities. One of the primary virtues of the market system organized on the basis of private ownership, as Mises saw it, was that it strongly mitigated potential principal-agent problems. In the capitalist economy, the

> operation of the market [does] not stop at the doors of a big business concern . . . [It] permeate[s] all its departments and branches . . . It joins together utmost centralization of the whole concern with almost complete autonomy of the parts, it brings into agreement full responsibility of the central management with a high degree of interest and incentive of the subordinate managers. (Mises 1945, p. 47)

Breaking the corporation up into separate profit centers is the way that top management monitors subordinate managers. And anticipating Fama (1980), Mises (1945, pp. 42–7) points to the existence of career concerns as important forces mitigating managers' shirking.

Now, principal-agent theory as well as the specific Austrian incentive arguments in the calculation debate rest on more general property rights–based reasoning. For example, it is fundamentally because agents usually do not have property rights to residual income streams from the productive activities they engage in that they may shirk their duties. Let us briefly examine some Austrian pronouncements on the subject of property rights.

Property Rights

To Menger property rights are directly derived from the facts of scarcity and human rationality; as he notes

> human self-interest finds an incentive to make itself felt, and where the available quantity does not suffice for all, every individual will

> attempt to secure his own requirements as completely as possible to the exclusion of others . . . Thus human economy and property have a joint economic origin since both have, as the ultimate reason for their existence, the fact that goods exist whose available quantities are smaller than the requirements of men. Property, therefore, like human economy, is not an arbitrary invention but rather the only practically possible solution of the problem that, in the nature of things, imposed upon us by the disparity between requirements for, and available quantities of, all economic goods. (Menger 1871, p. 97)

Ownership to scarce goods—*economic* goods—should be protected by the legal order (Menger 1871, pp. 97, 100); property rights to economic goods will arise under all conceivable circumstances (p. 100), and as regards economic goods it is logically fallacious to think that property rights *per se* can be disposed of under any kind of social organization. With goods that are not scarce, the situation is of course different; here "men are communists" (p. 100). But whether a good is economic or non-economic is fundamentally a subjective category and may change over time; that is, property rights to goods will be defined when goods that were once non-economic become economic.

Menger is one of the very few economists to discuss property rights before Coase, Alchian, and Demsetz in the 1960s laid the foundation for the property-rights approach.[14] And in some respects he anticipates modern developments, particularly in the dynamic perspective in which he places the development of property rights (see Demsetz 1967). But what Menger's discussion does not incorporate is the crucial partitioning of property rights in rights to use goods, appropriate their benefits, and exchange them. Furthermore, he did not investigate how different constellations of property rights influence allocation. It is a general conclusion from the modern property-rights approach that for efficient resource allocation to be fully defined, exclusive, individual, and fully tradeable rights are necessary. Mises came much closer to such insights. In *Human Action* there is a very clear statement of "tragedy of the commons" type problems (1949, p. 652), and the insight that more precise definitions of property rights—"rescinding the institutional barriers preventing the full operation of private ownership"—will eliminate such problems.

But Mises also understood that property rights are composite rights. As he noted, rights to appropriate the rents and profits from assets ("fructus") are crucial to the efficient working of the economy:

[14]The most important contribution in the interim is probably Knight (1924) in which Pigovian welfare analysis is critiqued on property-rights grounds.

> In an economic system based upon private ownership of the means of production, the speculator is interested in the result of his speculation in the highest possible degree. If it succeeds, then, in the first instance, it is *his* gain. If it fails, then, *he* is the first to feel the loss. The speculator works for the community, but he himself feels the the success or failure proportionately more than the community. (Mises 1936, p. 182)

And one of the reasons why the "artificial market" of market socialists will not work is precisely because the transfer of goods between socialist managers is not equivalent to the transfer of goods in a capitalist economy: Under socialism it is not full property rights that are transferred; prices and incentives are accordingly perverse. On property-rights grounds, it is inherently wrong to believe that "the controllers of the different industrial units" in a socialist economy can be instructed "to act *as if* they were entrepreneurs in a capitalistic state" (1936, p. 120; see also Mises 1949, pp. 702–5).

Where Mises perhaps most explicitly anticipates modern developments—specifically the modern work on how financial markets monitor management—is when he points out that for the efficient functioning of the economy, capital markets are absolutely crucial. They alone secured that the calculation problems in a dynamic economy could be solved through "dissolving, extending, transforming, and limiting existing undertakings, and establishing new undertaking" (1936, p. 215). Only unhampered capital markets and markets for corporate control could perform the two crucial tasks of monitoring management—a principal-agent problem—and pricing assets correctly. Or as Mises summarizes it:

> Under Capitalism, the capitalist decides to whom he will entrust *his own* capital. The beliefs of the managers of joint stock companies regarding the future prospects of their undertakings and the hopes of project-makers regarding the profitability of their plans are not in any way decisive. The mechanism of the money market and the capital market decides. This indeed is its task: to serve the economic system as a whole, to judge the profitability of alternative openings and not blindly to follow what the managers of particular concerns, limited by the narrow horizon of their own undertakings, are tempted to propose. (1936, p. 122)

Contrast this with Lange's (1938, p. 110) assertion about "private corporation executives, who practically are responsible to nobody." Modern theory would be more on Mises's side than on Lange's.

Capital Theory and Business Cycle Theory

While the connection between the Austrian insights in socialist economic organization and the role of property rights on the one hand and the theories of economic organization seems rather evident, capital theory and business cycle theory seem to be subjects much less connected to the theory of economic organization. The reason these theories are mentioned here is because they supply the last component in the set of concepts that are needed to make a coherent statement about economic organization in general and the firm in particular. The relevant component has to do with the intertemporal structure of production highlighted in Austrian capital and business cycle theory (e.g., Hayek 1931, 1941; Lachmann 1956).

To say that the production process of the economy is a matter of a series of stages of production that bears a temporal relationship to final consumption (Menger 1871; Hayek 1931, 1941; Lachmann 1956) is equivalent to saying that the relevant productive activities are in a relation of *complementarity* to each other. And to say that expansion of credit may introduce maladjustments in the structure of production that has to be worked out over time (Hayek 1931) is equivalent to indicating that some activities may be *specific* to each other (see also Lachmann 1956). These relations can only be adequately understood in a temporal perspective such as the one in Austrian capital theory and business cycle theory (ibid.); they are obscured in the usual production–function view of the productive process. And a phenomenon like vertical integration is much easier to portray and comprehend within a sequential framework like the Austrian than it is within a temporal framework such as the production–function view. As recent work in the theory of the firm has demonstrated, the notions of complementarity between resources—for example, in the form of Alchian and Demsetz's (1972) team production and asset specificity—are necessary to telling a coherent story about firms.

Summing Up

In the preceding sections I have argued that the Austrians anticipated a number of insights that have become central in recent attempts to understand economic organization in general and the firm in particular. The roles of knowledge, incentives, and property rights were strongly in focus in the Austrian theory, particularly in the context of the socialist calculation debate. This provides the opportunity to speculate why the Austrians did not piece all these components together into something like the contemporary theory of economic organization in general and the theory of the firm in particular, and why

that task was allotted to Ronald Coase. The candidates for explanation are many and very different.

One of them has to do with the allocation of research effort: The Austrians were continuously a rather tiny group of economists (unless a very far-reaching definition of "Austrian" is adopted), and the themes of the time, particularly in the 1930s, were very pressing; the subtle details of the economic organization of capitalist economies may have seemed to be of minor interest compared to debates with the market socialists on large-scale social reorganization, with Keynes on monetary policy, and with meeting the full-scale attack on Austrian capital theory that Frank Knight launched at almost the same time. But these debates meant the virtual elimination of the Austrians as a school.

And herein is a reason why the theory of economic organization in general and the theory of the firm in particular had to await the beginning of the 1970s before it could start blossoming: The virtual elimination of the Austrian school and the increasing focus on institutionless, idealized, formal models following World War II meant that preoccupation with the subject of institutions became regarded as the domain of Veblen-type "old" institutionalists, whom very few formal economists took seriously. However, developments in the 1960s in formal theory—e.g., the economics of information and uncertainty—together with developments in property-rights theory implied that the theory of economic organization could be increasingly addressed with economic tools. But this rather slow process could have been speeded up, had the earlier Austrian insights in economic organization not been so consistently neglected or misrepresented (on this last issue, see Lavoie 1985). Perhaps I may talk about a Kuhnian "loss of content" here.

It would be tempting in this context to say that Austrian theory simply was poorly articulated and "appreciative," not "formal" (these are Nelson and Winter's 1982 concepts). In this interpretation, serious attention to the details of economic organization simply had to await developments in basic microeconomic tools. Now, this may be true on the levels of analytical precision and operationalization. But obtaining his seminal insight, Coase (1937) simply applied the economic tools of his day, that is, substitution at the margin, and added the concept of transaction costs. There is no inherent reason why Austrian theory would not have been able to present a similar insight, particularly not that it was too poorly articulated.

I have to rest content, it seems, with noting that the sort of intellectual creativity that produces new theoretical insights is a function of many factors, particularly a set of components that can

be pieced together, a specific context that indicates the existence of some important and unexplained phenomenon, and finally a creative spark. As argued, the components were there; but what may have been missing was probably the insight that these components could fruitfully be pieced together into something like a theory of the firm, as well as some intellectual context that could initiate such creativity.[15]

Here it is tempting to propose that it was precisely the Austrian engagement in the calculation debate that blocked the application of general Austrian insights to the theory of the firm. Consider the following reasoning, akin to the one applied by Hayek (1945):

(1) economically important knowledge is local and often tacit;

(2) efficiency dictates that such knowledge be utilized by those who are closest to it;

(3) the market allows this and is, therefore, efficient;

(4) to stay in the market one has to perform efficiently;

(5) but I know that some firms can be observed to stay in the market;

(6) the firm uses centralized decision-making (cf. Minkler 1991, p. 9).

And that violates statement (2). Stated somewhat differently, what the Austrians did not supply was economic principles that could *discriminate* between firm and market on efficiency grounds. To do this was left to Ronald Coase and his later followers.

An Austrian Critique of the Modern Theory of the Firm

In the discussion of the foregoing sections I have deliberately suppressed those points where Austrian theory is in conflict with the modern theory of economic organization in general and the theory of

[15]The most comprehensive older Austrian discussion of economic organization within a capitalist economy appears in Mises's *Socialism* (1936), where vertical and horizontal integration and disintegration—among other things—is discussed in 7 pages (pp. 327–33). Here Mises explains that the firm's optimal size is determined "by the complementary quality of the factors of production," but does not, unfortunately, expand on this (p. 328). The discussion is formulated in the context of the Smithian perspective on the progressive division of labor. Rothbard (1962, pp. 544–50) discusses vertical integration and the size of the firm. Applying Austrian insights from the calculation debate, Rothbard argues that it is increasing calculation difficulties as the firm increases that set limits to the size of the firm. Despite a favorable reference to "the challenging article of R. H. Coase" (p. 901), there is no mention of transaction costs.

the firm in particular, and highlighted the points where the Austrians could be seen as precursors. But scattered in the Austrian literature there is a critique of contemporary economic orthodoxy that has implications for the theory of the firm, too, and perhaps particularly for the nexus-of-contracts part of modern theory. The critique of orthodoxy I have in mind is the strongly related standard Austrian critique that neoclassical economics is too prone to:

(1) neglect the distinction between spontaneous and planned order (Hayek 1973; O'Driscoll and Rizzo 1985);

(2) neglect the market process (Mises 1949; Hayek 1945; Kirzner 1973; O'Driscoll and Rizzo 1985; Lachmann 1986);

(3) neglect the activities of the entrepreneur (Lachmann 1986); and

(4) objectify costs (Vaughn 1982).

Let us see if this standard critique can be applied to the theory of the firm (see also Boudreaux and Holcombe 1989; Foss 1993a).

Spontaneous and Planned Orders

With regard to the distinction between planned and spontaneous orders there are two fundamental overall errors one can commit at the level of economic organization; the first one is to argue that what looks like a spontaneous market order is in fact the result of the plans of, typically, big enterprise, or more broadly to overlook spontaneous order altogether.[16] Historically, such arguments have been important to many proponents of socialism. The second error is to argue that spontaneous market forces are so pervasive that what looks like planned orders are in reality spontaneous orders. If the first kind of error—the "undervaluation of spontaneous governance" (Williamson 1991, p. 160)—were common in the days of the socialist calculation controversy, it is the second type of error that is committed in modern contributions to the nexus-of-contracts perspective. As "nexus" theorists, Michael Jensen and William Meckling assert,

[16]Simon's (1991, p. 27) parable of the "confused" mythical Martian is illustrative here: The Martian is approaching the Earth with a special telescope that reveals social structures. Boundaries of firms show up as green contours, and market transactions show up as red lines. Simon then states that "A message is sent back home, describing the scene, would speak of "large areas bounded in green connected by a web of red lines." It would not speak of "a network of red lines connecting green spots."

> it makes little or no difference to try to distinguish those things which are "inside" the firm (or any other organization) from those things that are "outside" of it.
>
> *The firm is not an individual.* It is a legal fiction which serves as a focus for a complex process in which the conflicting objectives of individuals . . . are brought into equilibrium within a framework of contractual relations . . . the behavior of the firm is like the behavior of the market; i.e., the outcome of a complex equilibrium process. (Jensen and Meckling 1976, p. 327)

Assuredly, the firm may itself, in a sense, be said to incorporate aspects of an exchange process, besides being embedded in an overall societal exchange process; after all, a firm's internal organization is characterized by various incentive schemes, such as internal job ladders. But this does not make the firm a spontaneous order, as Jensen and Meckling seem to imply; the relevant exchange process is still subordinate to some overall purpose, which is sufficient to make it qualify as a planned order. Furthermore, conceptualizing the firm the way Jensen and Meckling do basically disposes of the very problem that Coase set out to answer in 1937: Why do firms as planned, hierarchical entities arise at all in a market economy? Since movements of relative prices in the nexus-of-contracts view of economic organization basically underlie all allocation—including that "inside" the firm—there can be no room for entrepreneurship and planned direction of resources (see, for example, Boudreaux and Holcombe 1989). This is the fundamental reason "nexus" theorists Eugene Fama (1980) and Steven Cheung (1983) want to eliminate the concepts of the entrepreneur and the firm, respectively.

The Neglect of Process

The neglect of process is most acutely present in the most neoclassical of modern approaches to economic organization, the nexus-of-contracts approach. Although this approach is probably the one among modern approaches that most emphatically emphasizes the firm's (or, rather, "firm-like organization's") embeddedness in a web of market transactions, no attention is given to the market *process*. All (contractual) outcomes are efficient equilibrium outcomes. Much of this has to do with the way the nexus-of-contracts approach connects to property-rights theory, and particularly the reasoning contained in the Coase theorem (Coase 1960).[17] A common but often

[17]In fact, the nexus-of -ontracts approach is much closer to the reasoning in Coase's 1960 contribution than it is to Coase's 1937 contribution (Foss 1993c).

implicit interpretation of the Coase theorem is that if only property rights are well defined, reaching an optimal state is *unproblematic,* automatic. Of course, this is not so; neglecting problems of the empty core and trading under bilateral monopoly, it is obvious that agents need to *discover* opportunities for profitable trade before they can act on them (Kirzner 1973, p. 227). This process of discovery is neglected in many versions of the Coase theorem and in the nexus-of-contracts approach as well.

Process arguments figure somewhat more prominently in the theorizing of Williamson, particularly in the context of evolution of contract execution. Whereas contracting in the nexus of contracts is efficient on an *ex ante* basis, "the economics of time and ignorance" (O'Driscoll and Rizzo 1985) is present in Williamson's theory to the extent that he attempts to give a real-time account of contract execution (Williamson 1985). One consequence of this is that various *ex post* contracting institutions that exist to mitigate problems of *ex post* opportunism are given considerable attention (see further, Foss 1993a, 1993c). And in seeking the rationale for the existence of the firm, Williamson introduces the concept of "The Fundamental Transformation," viz. the semi-process argument that in the course of contract execution, what was initially a "large numbers" situation with many contractors may turn into a "small numbers" situation (e.g., a bilateral monopoly). But this does not mean that Williamson systematically places the firm or other kinds of economic organization in a market process context. Markets that are "large numbers" are implicitly taken to be in continuous equilibrium.

The Neglect of the Entrepreneur

Neglect of the market process usually goes hand in hand with neglect of the entrepreneur. It is not surprising, then, that the approach that pays least attention to the market process, the nexus-of-contracts approach, is also the one that pays least attention to the activities of the entrepreneur; indeed, it explicitly attempts to dispose of the very concept (Fama 1980). The reason for this, as argued, is the inability within the nexus-of-contracts tradition to uphold the distinction between planned and spontaneous order. Furthermore, the services of the entrepreneur is equivalent to the services of all

[18]See Fama (1980). This assertion goes back to Coase (1937). As he remarked in a critique of Knight (1921), Knight erred in seeing entrepreneurial judgment as a reason for the existence of the firm, since "we can imagine a system where all advice or knowledge were bought as required" (1937, p. 92). Coase totally missed Knight's point: it is precisely because idiosyncratic entrepreneurial judgment cannot be "bought as required" that the firm is needed (see also Boudreaux and Holcombe 1989; and Foss 1993a, 1993b).

other factor owners, and can be bought on markets as well.[18] Or, in other words, what may look like entrepreneurial services are in fact managerial services. And in the world portrayed in the nexus-of-contracts approach there is in fact no need for the services of the entrepreneur, since all contracting is efficient on an *ex ante* basis, implying that all gains from trade have been discovered and that no reallocations of property rights during contract execution have to take place.

Despite the fact that the account of agency in Williamson's theory is more dynamic than the one in the nexus-of-contracts literature,[19] no attention is given to entrepreneurship. An aspect of this is that questions of innovation and the creation of markets are (deliberately) suppressed (Williamson 1985, p. 142). As Williamson (1985, p. 87) points out, it is a heuristic starting point for his theory that "in the beginning there were markets." And since markets are given, so also are inputs, outputs, and technology.[20] As it is the case with the nexus-of-contracts approach, the agents that occupy Williamson's attention are *managers* of *existing* transactions, shifting transactions over the boundaries of the firm. In Kirzner's (1973) terms, they are "Robbinsian maximizers"; not alert entrepreneurs.

Regarding the neglect of process and entrepreneurship in modern theories of the firm, I may observe that in a sense process arguments and entrepreneurship are necessary for modern theories. Austrian economics and modern theories of the firm can be seen as complementary for the same reason that Hayek's "The Use of Knowledge in Society" and Coase's "The Nature of the Firm" can be seen as complementary: It is precisely in the kind of dynamic economic reality envisaged by the Austrians that questions of economic organization become really pertinent. To update insights from the calculation debate, there would be no transaction or information costs in a stationary state; hence, economic organization would be indeterminate. So I need change to make sense of transaction costs and economic organization. In such an interpretation, modern theories of the firm implicitly appeal to a changing and dynamic reality (Foss 1993a, 1993c). In such a "changing and dynamic reality" transaction costs arise because of the need, among other things, "to discover what the relevant prices are" (Coase 1937, p. 83). But who will perform this act of discovery if not entrepreneurs?

[19]For example, Williamson's concept of "opportunism" is broader than the moral hazard assumption of the nexus-of-contracts tradition.

[20]This is not *strictly* correct since Williamson's "Fundamental Transformation" is a story about changes in inputs and technology (Foss 1993a, 1993b, 1993c).

On a more general level, it can be argued that the neglect of process and entrepreneurship has meant that the kind of knowledge and coordination problems emphasized in Austrian literature (Hayek 1937; Kirzner 1973) are not present in the contemporary theory of the firm. The firm does not exist because it solves coordination of knowledge-type problems; the reason for its existence lies in incentive considerations. In the nexus-of-contracts approach, the existence of the firm has only to do with mitigating free-rider-type problems; in Williamson's approach, the firm exists to dampen incentives to opportunism (see further, Foss 1993b). As I shall argue in the next section, "Towards an Austrian Theory of the Firm," the type of coordination problems that interest Austrians should be incorporated in a more complete theory of the firm.

Costs

In equilibrium, costs can be said to be "objective" in the sense that they are accurately measured by prices; factors of production, for example, are paid their (marginal) opportunity costs. But outside equilibrium, prices do not fully reflect opportunity costs, simply because the marginal conditions are not satisfied. The inherent subjectivity of costs is only really obvious here. And the equilibrium theorist is therefore too prone to "objectify" costs, to assume, in other words, that real prices accurately measure opportunity costs (Buchanan 1969).

The tendency to neglect the inherent subjectivity of costs is manifest in modern theories of economic organization. This is not just a matter of a lack of a consistent subjectivist (opportunity cost) definition of the concept of transaction costs. It is also a matter of *production costs* not being allowed to influence the make-or-buy decision. As Harold Demsetz (1988, p. 147) has argued:

> The emphasis that has been given to transaction costs . . . dims our view of the full picture by implicitly assuming that all firms can produce goods or services equally well.

This reflects the common simplifying assumption that productive knowledge is given in explicit form to everybody. But given the facts of the dispersion of knowledge (Hayek 1945), the tacit nature of much of the economically relevant knowledge (Hayek 1935b, pp. 154–55; Nelson and Winter 1982), the distribution of entrepreneurial capabilities (Knight 1921), the Smithian benefits of specialization, and the positive costs of information, obviously this cannot be so. So even in equilibrium, production costs will differ. And outside equilibrium,

production costs may differ even more since factor prices do not measure the entrepreneur's or manager's subjective appraisal of the costs of production. Furthermore, as Hayek (1940, p. 196) points out, low-costs methods of production have to be *discovered* "and discovered anew, sometimes almost from day to day, by the entrepreneur."

What this implies to the theory of economic organization is that (subjective) production costs may in fact enter the make-or-buy decision; entrepreneurs may decide to bring some transaction under the corporate umbrella simply because its implied cost of production in the firm is lower than the price that would have to be paid for it in the market (Foss 1993b).

Summing Up

It seems that the relationship between modern theories of economic organization and Austrian economics is more encompassing than the issues of the Austrians as precursors and critics. In the corpus of Austrian economics, there are a vast number of insights that, as argued in this section, are not present in the contemporary theory of the firm. But there is also a constructive aspect to this, since it is possible to utilize specific Austrian insights not only to supplement existing theories of the firm, but also to construct a distinct Austrian theory of the firm. To argue this is the purpose of the following section.

Towards an Austrian Theory of the Firm

"Clearly, much more work needs to be done on a subjectivist or Austrian theory of firm behavior" (O'Driscoll and Rizzo 1985, p. 125).

A Toolbox

Our Austrian/contemporary theory of the firm toolbox now includes:

(1) a distinction between planned and spontaneous orders;

(2) the market process as a process of entrepreneurial discovery;

(3) property rights (incentives);

(4) specificity and complementarity of assets;

(5) the subjectivity of costs (including production costs);

(6) the private and tacit nature of knowledge ("impactedness"); and

(7) transaction and information costs.

Let us first examine in which respects some of these Austrian insights may *complement* the contemporary theory of the firm, and then briefly indicate how a distinct Austrian theory may be constructed.

Austrian Economics as Complementing The Contemporary Theory of the Firm

Where Austrian insights have the most to offer to the contemporary theory of the firm is on the level of process and knowledge. To start with the knowledge issue, the Austrian insight that most economically relevant knowledge is local and tacit is not systematically incorporated into contemporary Coasian theories of the firm, at least with regard to production knowledge (Demsetz 1988). In the non-Coasian work of Penrose (1959) and more recently Nelson and Winter (1982) on the theory of the firm, the firm is seen as possessing a set of "capabilities"—stocks of knowledge that are idiosyncratic to the relevant firm—a view of the firm that harmonizes with Hayekian insights about knowledge (Hayek 1945).

As O'Driscoll and Rizzo (1985, p. 124) put it, with reference to Nelson and Winter (1982), this view of the firm furthermore applies "a Hayekian theory of rules and evolved market institutions to firm behavior," in the sense that firms are placed in an evolutionary setting, incorporating both selection through the market and conscious adaptation (though not maximization), and portraying the firm as equipped with a set of "genotypes"—"routines"—on which these effects ultimately operate. Like Hayek's (1973) rules, Nelson and Winter's (1982) routines are stable and mostly tacit patterns of social behavior that are followed—largely unconsciously—because they produced success in the past, i.e., coordinated individual actions relatively successfully. It is from the firm's stock of routines or capabilities that its strategies and actions emerge.

However, not all routines or capabilities are equally efficient. And this provides a room for a view of the market as a continuous disequilibrium process, in which, for example, certain routines are selected against, in the sense that their share of the overall pool of routines is falling, closely akin to the way that Hayek characterizes cultural evolution. Such a view is consistent with Kirzner's (1979, p. 134) point that

> under conditions of disequilibrium, when scope exists for entrepreneurial activity, there is no reason genuine disparities may not exist among different producers.

Summing up, the "evolutionary" or "capabilities" view of the firm is broadly consistent with Austrian theory since it incorporates decentralized tacit knowledge, learning, and a commensurate role for the entrepreneur.

However, as previously noted, it may be somewhat contradictory to apply insights from the theory of spontaneous order—evolved rules, coordination, etc.—to a planned order, that is, the firm. The market or price system—the paradigmatic spontaneous order—was described by Hayek as

> a sort of discovery procedure which both makes the utilization of more facts possible than any other system, and which provides the incentive for constant discovery of new facts which improve adaptation to the ever-changing circumstances of the world in which we live. (1968, p. 236)

But may we not say that the firm, too, is a learning system in some sense? I think we can, and, in fact, should. But what saves us from committing the failure of identifying what is ultimately a planned order—the firm—as a spontaneous order, is the notion that the firm, like the entrepreneur, learns about *local* facts. The firm is a local learning system, not a global one, such as the spontaneous order of the market.

To put forward such a view of the firm is implicitly to criticize the contemporary (Coasian) theory of the firm. For, as noted, this theory is largely a static affair that pays little or no attention to the creation of markets, and assumes that inputs, outputs and technology are given, so that the economic problem has only to do with combining these in a transaction cost minimizing manner. But it is also to suggest that the Coasian and Austrian/evolutionary/capabilities view of the firm may be fruitfully combined (see also Langlois 1991). Conceptualizing the firm as a learning, evolved entity implies that the transaction costs associated with, for example, the firm's governance of internal transactions may change over time, e.g., may fall.[21] And conceptualizing the market as a learning system, too, implies that transaction costs associated with market exchange will also change. Based on an Austrian process-oriented view, it becomes

[21]This would involve more, for example, than management's increased knowledge about the capabilities of the firm's employees. It would also involve the formation of what business analysts call "corporate culture," that is, a set of stable firm-specific rules that delimits intra-firm behavior. Culture does more than solve Austrian-type coordination problems; it may also dampen various sorts of proclivities to moral hazard, and thus harmonize incentives. For a relevant early discussion, see Malmgren (1961).

conceptually possible, then, to theorize how the organization of transactions change over time, that is, how the boundaries of the firm change.

Summing up, I may conclude that Austrian insights complement the contemporary (Coasian) theory of the firm to the extent that one wants to go beyond merely addressing the efficient organization of existing inputs and outputs, and incorporate dynamic factors, such as learning. But it is also possible to construct a theory of the firm that is distinctively Austrian. To loosely indicate the character of such a theory is the purpose of the following section.

Elements of an Austrian Theory of the Firm

The Austrian concept that is most conspicuously neglected in the contemporary theory of the firm is probably that of the entrepreneur. Or rather, to the extent that "the entrepreneur" is mentioned, he is identified with the manager (see already Coase 1937). This simply continues a tendency in price theory to "understand the notion of the entrepreneur as nothing more than the locus of profit-maximizing decision-making within the firm" (Kirzner 1973, p. 27). However, the role of the manager is distinct from that of the entrepreneur, since the entrepreneur—to be an entrepreneur—is always occupied with the setup of new means structures. Neither is he *necessarily* to be identified with the owner/manager of the firm; what this last person maximizes *may* not be entrepreneurial profit, but rather Ricardian and Paretian rents from already acquired resources. This leads us back to the founding of firms as the relevant domain for exercising entrepreneurship. As Kirzner (1973, p. 52) explains, the concept of the entrepreneur is primary to that of the firm to the extent that

> The firm . . . is that which results *after* the entrepreneur has completed some entrepreneurial decision-making, specifically the purchase of certain resources.

But when we link this initial entrepreneurial purchase decision to the later existence of the firm, we may in a sense say that the entrepreneur continues his activities to the extent that he deploys the firm's resources in exceptionally profitable ventures.

What should interest us in this perspective is why the firm is needed at all? Why is the firm and entrepreneurial direction of resources necessary? Why is it necessary to make a distinction between "plan complementarity, the complementarity of [resources] within the framework of one plan, and structural complementarity, the overall complementarity of [resources] within the economic system," where

the first type of complementarity "is brought about *directly* by entrepreneurial action," while the second kind is brought about by the operation of the market (Lachmann 1956, p. 54)? One could, of course, provide Coasian answers to such Coasian questions.[22] But a more congenial, and in some respects also more interesting, way is to look for an explanation in the peculiar character of entrepreneurship.

We have it from Coase (1937) and Fama (1980) that entrepreneurship not only cannot provide a rationale for the firm, but more importantly is largely an irrelevant concept since the entrepreneur's services can be purchased in the market. What some theorists insist on calling an "entrepreneur" is simply an owner of some specialized human capital, whose services have a market price and an opportunity cost. To such assertions, we may invoke such questions as, who *decides* to hire entrepreneurs? Who *discovers* that some agents possess some superior stocks of human capital, etc.? What such questions indicate is that we simply cannot escape using the concepts of entrepreneur and alertness to hitherto undiscovered opportunities if we want to discuss market dynamics of almost any kind. And that is basically Kirzner's point (1973, 1979); to "move" the market, we have to transcend Robbinsian maximizing and add the category of entrepreneurial alertness. Furthermore, as Kirzner argues, entrepreneurship is—*contra* Coase and Fama—categorically different from all other factor services since it has no opportunity cost. Pure entrepreneurship is primarily an act of perception. What has all this to do with the firm?

What is noteworthy about Kirzner's argument is perhaps first of all that he argues that entrepreneurship is fundamentally non-contractible. One interpretation might be that entrepreneurial alertness—or "judgment," as Frank Knight called the same behavioral quality—is so very much inside a given individual's head—that is, tacit—that it is too "impacted" to be traded. In exploiting pockets of ignorance in the market, the entrepreneur applies this knowledge when he discovers what the market did not realize was available or even needed at all. Kirzner's pure arbitrating entrepreneur can in principle do this. But sometimes the realization of the entrepreneur's idiosyncratic judgment will require the formation of a firm.

Fundamentally, there are three different economic ways in which one can utilize knowledge that is specific to oneself:

[22]That would, however, lead one into (fallaciously) identifying the firm with vertical integration. On this, see Boudreaux and Holcombe (1989) and Foss (1993a).

(1) sell one's services through a contract;

(2) utilize it for arbitrage purposes; or

(3) start a firm.

The options that Kirzner considers are primarily (1) and (2). But option (3) is also relevant. And that brings us somewhat away from Kirzner's theory of the entrepreneur, and closer to the Turgot-Böhm-Bawerk-Rothbard view of the *capitalist*-entrepreneur who also owns capital.[23] One way to interpret option (3) is that non-contractability of entrepreneurial judgment may lead to the formation of a new firm,[24] incorporating a new resource use. The economic reason? There is simply no relevant market through which the entrepreneur's idiosyncratic vision can be communicated; knowledge transmission costs are exorbitant (see Silver 1984). The "telecommunications system of prices" fails as a means of coordination; conscious entrepreneurial direction "supersedes" (Coase 1937) the market.

Notice that this explanation of the existence of the firm has nothing to do with incentives; it is a story about market coordination that fails due to lack of necessary intersubjective points of orientation, that is, lack of so-called "Schelling points."[25] The thing to note about this explanation is that it should appeal to those bent on Austrian subjectivism; it takes to almost an extreme (some would say, seriously) the Austrian notions that "different men know different things" (Hayek) and "different men have different thoughts" (Lachmann).

This explanation can be extended from the issue of the existence of the firm to the boundaries issue. As Lachmann (1956, p. 131) notes:

> We are living in a world of unexpected change; hence, [resource] combinations . . . will be ever changing, will be dissolved and reformed. In this activity we find the real function of the entrepreneur.

Now, in his attempt to carry out his plan the entrepreneur will not bring all the economic activities that are complementary to the

[23]Arguably, Mises took this last position. Thanks to Murray Rothbard for this point.

[24]In Foss (1993a, 1993b) I argue that this was basically Knight's (1921) theory of the firm. It should be noted that in a Knightian context, there is also a moral hazard to firm formation, since the entrepreneur's services—because of their tacitness—are particularly susceptible to moral hazard—and adverse selection problems (on this, see Barzel 1987).

[25]As Malmgren (1961) argued, the emergence of behavior-coordinating Schelling points is not only a characteristic of the market, but perhaps even more of the firm. Fundamentally, when business analysts talk about firms as possessing different "cultures," what they—in this interpretation—mean is that firms come equipped with different Schelling points.

execution of his under his own ownership. Many goods and services can be acquired through the market without problems. But "in a world of unexpected change" there will sometimes arise a need for new resource combinations, involving, for example, new kinds of inputs. Unexpected change will feed plan revisions. And such revisions may result in changes in the boundaries of the firm. The reason? New combinations of resources will sometimes involve new inputs that are totally specific to the firm (Lachmann 1956). But it is often not possible to transmit precise knowledge about input requirements over the boundaries of the firm without high levels of information costs. Economizing on such costs may dictate internalization of production of the relevant input (Silver 1984).

Furthermore, the entrepreneur may decide to internalize the transaction simply because he thinks that his firm can produce the needed equipment in a more productive cost-effective way than can the market (other firms). The opportunity costs of purchase in the market are prohibitive, not necessarily because of incentive problems because of opportunistic suppliers, but simply because—as the entrepreneur ascertains the situation—the firm can produce more cost-efficiently. The reason? The firm as an evolved entity with a bundle of various resources held together by entrepreneurial direction and the rules that evolve within the framework of purpose defined by the entrepreneur, is fundamentally an entity that is specialized in *knowledge*. And such knowledge is costly to transfer (Demsetz 1988). So whether we look on it from the angle of knowledge-transmission costs or from that of production costs, we are led to a dynamic theory of firm boundaries, one that takes seriously the Austrian notions of dispersal, subjectivity, and tacitness of knowledge.

Conclusion

In the above, I have taken the theme of Austrian economics and economic organization through several variations. I hope to have taken steps towards establishing that not only were the Austrians important precursors of the contemporary theory of economic organization, but they may also contribute to existing theory as well as provide their distinctive perspective on economic organization. Space limitations have dictated, however, that I have been able to only scratch the surface. Assuredly, there is much more to be done on all the three themes I have been discussing, particularly on the last, constructive one.

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F. A. Hayek on Government and Social Evolution: A Critique

Hans-Hermann Hoppe*

As much market as possible, as much state as necessary.
(Motto of the 1959 Godesberg-program of Germany's Socialdemocratic Party)

Thesis One:

Friedrich A. Hayek is generally known as a champion of the free market economy and an outspoken anti-socialist; indeed, Hayek's life was a noble, and mostly lonely struggle against a rising tide of statism and statist ideologies. These facts not withstanding, however:

(1) Hayek's view regarding the role of market and state cannot systematically be distinguished from that of a modern social democrat; and

(2) the immediate reason for Hayek's social democratic views is his contradictory and hence nonsensical definition of "freedom" and "coercion." (Another, fundamental epistemological reason—Hayek's self-contradictory anti-rationalism—will be addressed in Thesis Two.)[1]

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[1]The following essay does *not* consider Hayek's achievements as an economist. As regards these, Hayek deserves great praise. But Hayek's economics is largely the one he adopted from his teacher and mentor Ludwig von Mises and thus is not original with him. What makes Hayek unique, and what fundamentally distinguishes him from Mises, is his political and social philosophy. It is this part of his work, not his contribution to economic theory, that has made Hayek famous. Unfortunately, as will be demonstrated in the following, this *original* part of Hayek's work is entirely false, however.

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On Government

According to Hayek, government is "necessary" to fulfill the following tasks (and may acquire the means necessary to do so through taxation)[2]: Not merely for "law enforcement" and "defense against external enemies," but "in an advanced society government ought to use its power of raising funds by taxation to provide a number of services which for various reasons cannot be provided, or cannot be provided adequately, by the market."[3] (Since at all times an infinite number of goods and services which a market does *not* provide exist, Hayek hands government a blank check.) Among these are "protection against violence, epidemics, or such natural forces as floods and avalanches, but also many of the amenities which make life in modern cities tolerable, most roads . . . the provision of standards of measure, and of many kinds of information ranging from land registers, maps and statistics to the certification of the quality of some goods or services offered in the market."[4] Additional government functions are "the assurance of a certain minimum income for everyone"[5]; government should "distribute its expenditure over time in such a manner that it will step in when private investment flags"[6]; it should finance schools and research as well as enforce "building regulations, pure food laws, the certification of certain professions, the restrictions on the sale of certain dangerous goods (such as arms, explosives, poisons and drugs), as well as some safety and health regulations for the processes of production and the provision of such public institutions as theaters, sports grounds, etc. . . ."[7]; and it should make use of the power of "eminent domain" to enhance the "public good."[8]

Moreover, it generally holds that "there is some reason to believe

[2]See on the following in particular the *Constitution of Liberty* (Chicago: University of Chicago Press, 1960), chap. 15 and part 3; *Law, Legislation, and Liberty* 3 vols. (Chicago: University of Chicago Press, 1973–79), chap. 14.

[3]*Law, Legislation, and Liberty*, 3, p. 41. Compare this to John Maynard Keynes's statement: "The most important Agenda of the state relate not to those activities which private individuals are already fulfilling but to those functions which fall outside the sphere of individuals, to those decisions which are made by *no one* if the state does not make them. The important thing for government is not to do things which individuals are doing already and to do them a little better or a little worse: but to do those things which are not done at all" (*The End of Laissez Faire* (vol. 9), *Collected Writings* [London: MacMillan, 1973], p. 291).

[4]*Law, Legislation, and Liberty*, 3, p. 44

[5]Ibid., p. 55.

[6]Ibid., p. 59.

[7]Ibid., p. 62.

[8]Ibid., pp. 62–63.

that with the increase in general wealth and of the density of population, the share of all needs that can be satisfied only by collective action will continue to grow."[9]

In the *Constitution of Liberty* Hayek wanted government to provide further for "monetary stability" (while he later on preferred a bizarre scheme for monetary denationalization)[10]; government should implement an extensive system of compulsory insurance ("coercion intended to forestall greater coercion")[11]; public, subsidized housing was a possible government task[12]; likewise, "city planning" and "zoning" were considered appropriate government functions—provided that "the sum of the gains must exceed the sum of the losses"[13]; and lastly "the provision of amenities of or opportunities for recreation, or the preservation of natural beauty or of historical sites or places of scientific interest, . . . natural parks, nature-reservations, etc.," were regarded as government tasks.[14]

Moreover, Hayek insists we recognize that it is irrelevant how big government is or if and how fast it grows. What alone is important is that government actions fulfill certain formal requirements. "It is the character rather than the volume of government activity that is important."[15] Taxes as such and the absolute height of taxation are not a problem for Hayek. Taxes—and likewise compulsory military service—lose their character as coercive measures, "if they are at least predictable and are enforced irrespective of how the individual would otherwise employ his energies; this deprives them largely of the evil nature of coercion. If the known necessity of paying a certain amount in taxes becomes the basis of all my plans, if a period of military service is a foreseeable part of my career, then I can follow a general plan of life of my own making and am as independent of the will of another person as men have learned to be in society."[16] But please, it must be a *proportional* tax and *general* military service!

In light of this terminological hocus-pocus and the above cited list of legitimate government functions, the difference between

[9]Ibid., p. 53.

[10]F. A. Hayek, *Denationalization of Money: The Argument Refined* (London: Institute of Economics Affairs, 1990).

[11]*Constitution of Liberty*, p. 286.

[12]Ibid., p. 346.

[13]Ibid., p. 351. What about Hayek's repeated pronouncements, *qua* economist, that all interpersonal comparisons of utility are scientifically invalid?

[14]Ibid., p. 375.

[15]Ibid., p. 222.

[16]Ibid., p. 143.

Hayek and a modern social democrat boils down to the question whether or not the postal service should be privatized (Hayek says "yes").

On Freedom and Coercion

The last quote in support of the previous thesis is at the same time confirmation of the thesis that Hayek's social-democratic theory of government finds its explanation in the absurdity of his definition of freedom and coercion.[17]

Hayek defines freedom as the absence of coercion. However, contrary to a long tradition of classical liberal thought, he does *not* define coercion as the initiation or the threat of physical violence against another person or its legitimately—via original appropriation, production or exchange—acquired property. Instead, he offers a definition whose only merit is its fogginess. By coercion "we mean such control of the environment or circumstances of a person by another that, in order to avoid greater evil, he is forced to act not according to a coherent plan of his own but to serve the ends of another,"[18] or "coercion occurs when one man's actions are made to serve another man's will, not for his own but for the other's purpose."[19] Freedom, by contrast, is "a state in which each can use his own *knowledge* [not: his own *property*] for his own purposes."[20]

This definition does not contain anything regarding actions, scarce goods and property. Rather, "coercion" refers to a specific configuration of subjective wills (or plans, thoughts and expectations). Yet then it is useless for the following reason. First, it is useless as a guideline for actions (what am I allowed to do here and now if I do not want to commit a coercive act?), because in general I do not know the will or plans of others and in any case, to know all other wills completely would be impossible. Even if I wanted to, I could never be sure from the outset (*ex ante*) that what I was planning to do would not coerce anyone. Yet individuals obviously must be permitted to act "correctly" *prior* to knowing anything about the plans of others, and even if they knew literally nothing but their own plans.

[17]See on the following Ronald Hamowy, "Freedom and the Rule of Law in F. A. Hayek," *Il Politico* (1970–71); idem, "Hayek's Concept of Freedom: A Critique," *New Individualist Review* (April, 1961); idem, "Law and the Liberal Society: F. A. Hayek's Constitution of Liberty," *Journal of Libertarian Studies* 2 (Winter 1978); Murray N. Rothbard, "F. A. Hayek and the Concept of Coercion," in: idem, *The Ethics of Liberty* (Atlantic Highlands: Humanities Press, 1981).

[18]*Constitution of Liberty*, pp. 20–21.

[19]Ibid., p. 133.

[20]*Law, Legislation, and Liberty*, 1, pp. 55–56.

For this to be possible, however, the criterion employed to distinguish between "freedom" and "coercion" must be an *objective* one. It must refer to an event/non-event that possesses a *physical* description (and over whose outcome an actor must possess physical control). Second, Hayek's definition is also useless as a retrospective (*ex-post*) criterion of justice (is the accusation of *A* against *B* justified; who is guilty and who isn't?). As long as *A* and *B* come to the *same* conclusion concerning innocence and guilt (including such questions as compensation and/or punishment), no problem arises for Hayek's criterion. However, in the case of unanimity *no* criterion can ever fail. Hayek's criterion fails miserably in those cases, though, for which it is intended: whenever plaintiff and defendant do *not* agree, and still a verdict must be reached. Since Hayek's definition does not contain any physical (intersubjectively ascertainable) criteria, his judgments are arbitrary. As mental predicates, Hayek's categories of freedom and coercion are compatible with every real, physical state of affairs. They possess no power to make *real* distinctions.

Correspondingly confused and contradictory are Hayek's attempts to apply his definitions:

1. In applying his definition, Hayek on the one hand reaches the conclusion that the initiation and threat of physical violence constitutes "coercion." "The threat of force or violence is the most important form of coercion."[21] "True coercion occurs when armed bands of conquerors make the subject people toil for them, when organized gangsters extort a levy for 'protection'."[22] On the other hand (witness the quotations above) he classifies acts of the initiation or threat of physical violence such as compulsory military service or taxes as "non-coercive," provided only that the victims of such aggression could have reliably expected and adjusted to it.

2. On the one hand, Hayek identifies physical violence with "coercion." On the other hand, he does not accept the *absence* of physical violence or damage as a criterion for "non-coercion." "The threat of physical force is not the only way in which coercion can be exercised."[23] Even if *A* has committed no physical aggression against *B* or his property, he may nonetheless be guilty of "coercion." According to Hayek, this is the case whenever *A* is guilty of *omitted help* vis-à-vis *B*, i.e., whenever he has *not* provided *B* with goods or services of his (*A*'s), which *B* had expected from him and regarded as "crucial

[21] *Constitution of Liberty*, p. 135.
[22] Ibid., p. 137.
[23] Ibid, p. 135.

to my existence or preservation of what I most value."[24] Hayek asserts that only a small number of cases actually fit this criterion: The owner of a mine in a mining town who decides to disemploy a worker allegedly "coerces"; and likewise it is supposedly "coercive" if the owner of the sole water supply in a desert is unwilling to sell this water, or if he refuses to sell it at a price which others deem "fair." But it requires little imagination to recognize that Hayek's criterion is in fact all-encompassing. Any peaceful action a person may perform can be interpreted by others—and indeed any number of them—as constituting "coercion," for every activity is at the same time always the omission of innumerable other *possible* actions, and every omission becomes "coercion" if a single person claims that the execution of the omission was "crucial to the preservation of what I most value."

Whenever cases of omitted help and physical violence are categorically identified as "coercion," however, inescapable contradictions result.[25] If *A*'s omission constitutes "coercion" toward *B*, then *B* must possess the right to "defend" himself against *A*. *B*'s only "defense" would be that he could employ physical violence *against A* (to make *A* execute what he otherwise would avoid doing)—but then acts of physical violence could no longer be classified as "coercion"! Physical violence would be "defense." In this case, "coercion" would be the peaceful refusal to engage in an exchange as well as the attempt to defend oneself against all forced (under the threat of violence executed) exchange. On the other hand, if physical violence were defined as "coercion," then *B* would *not* be allowed to "defend" himself against an omissive *A*; and if *B* nonetheless attempted to do so, then the right to defense would rest with *A*—but in this case, omissions could not constitute "coercion."

3. From these conceptual confusions stems Hayek's absurd thesis of "the unavoidability of coercion" and his corresponding, equally absurd "justification" of government. "Coercion, however, cannot be altogether avoided because the only way to prevent it is by the threat of coercion. Free society has met this problem by conferring the monopoly of coercion on the state and by attempting to limit this power of the state to instances where it is required to prevent coercion by private persons."[26] According to both of Hayek's definitions of

[24]Ibid., p. 136.

[25]See also Murray N. Rothbard, *Power and Market* (Kansas City: Sheed Andrews & McMeel, 1977), pp. 228–34; Hans-Hermann Hoppe, "Von der Strafunwürdigkeit unterlassener Hilfeleistung," in: idem, *Eigentum, Anarchie und Staat* (Opladen: Westdeutscher Verlag, 1977); idem, "On the Indefensibility of Welfare Rights," *Austrian Economics Newsletter* 3 (1989).

[26]*Contitution of Liberty*, p. 21; also p. 141 f.

"coercion," this thesis is nonsensical. If omitted help represents "coercion," then coercion in the sense of physical violence becomes necessary (not: unavoidable). Otherwise, if the initiation and threat of physical violence is defined as "coercion," it can be avoided; first, because each person possesses control over whether or not he will physically attack another; and second, because every person is entitled to defend himself with all of his means against another's physical attack. It is only unavoidable that so long as physical aggression exists, there will also be a need for physical defense. Yet the unavoidability of defensive violence has nothing to do with the alleged "unavoidability of coercion" (unless one confused the categorical difference between attack and defense and asserted that the threat of defending oneself in the event of an attack is the same kind of thing as the threat of attacking). If physical violence is *forbidden*, then it follows that one is *allowed to defend* oneself against it. It is thus absurd to classify attack and defense under the same rubric of "coercion." Defense is to coercion as day is to night.

Yet from the unavoidability of *defense* no justification for a government monopoly of coercion follows. To the contrary. A government is by no means merely a "monopolist of defense" who helps private individuals avoid otherwise "unavoidable" defense expenditures (as a monopolist: inefficiently). Because it could otherwise provide no defense activities, the government's monopoly of coercion includes in particular the *right* of the state to commit violence against private citizens and their complementary *obligation* not to defend themselves against government attacks. But what kind of justification for a government is this: that if a person surrenders unconditionally to an attacker he may save himself otherwise "unavoidable" defense expenditures?

Thesis Two:

The fundamental epistemological reason for Hayek's nonsensical theory of government and coercion is to be found in Hayek's systematic anti-rationalism.

(1) This anti-rationalism expresses itself first in the fact that Hayek rejects the idea of a cognitive ethic. Hayek is an ethical relativist (who, as already shown, does not even consider an unambiguous moral distinction between attack and defense to be possible).

(2) Second—in an even more dramatic fashion—Hayek's anti-rationalism is expressed in his "theory of social evolution," where purposeful action and self-interest, trial, error and learning, force and freedom as well as

> state and market (society) have been systematically eliminated as explanatory factors of social change and replaced with an obscure "spontaneity" and a collectivistic-holistic-organizistic principle of "cultural group selection." (Hayek's citation of Carl Menger as precursor of his own theory is false. Menger would have ridiculed Hayek's theory of evolution as mysticism. Menger's successor is not Hayek, but Ludwig von Mises and his "social rationalism."[27])

On Ethics

"Moreover, if civilization has resulted from unwanted gradual changes in morality, then, reluctant as we may be to accept this, no universally valid system of ethics can ever be known to us."[28] Furthermore, "Evolution cannot be just. . . . Indeed, to insist that all future change to be just would be to demand that evolution come to a halt. Evolution leads us ahead precisely in bringing about much that we could not intend or foresee, let alone prejudge for its moral properties."[29] Or: "To pretend to know the desirable direction of progress seems to me to be the extreme of hubris. Guided progress would not be progress."[30] (So much for the question whether or not Hayek can give any advice to the former communist countries of Eastern Europe: he suggests nothing but banking on "spontaneous evolution.")

It is characteristic of Hayek's anti-rationalism that he does not prove this counter-intuitive thesis, as is necessary. Indeed, he does not even attempt to make it plausible.

It is the same anti-rationalism that leads Hayek to state—often merely a few pages apart—something seemingly completely different (logical consistency is not a necessary requirement for an anti-rationalist). For instance, "Where there is no property there is no justice."[31]

[27]The documentation of this parenthetical thesis will be kept to a minimum and relegated to footnotes.

On the fundamental difference between Menger and Mises on the one hand and Hayek on the other see Joseph T. Salerno, "Ludwig von Mises as Social Rationalist," *Review of Austrian Economics* 4 (1990): 26–54; Jeffrey M. Herbener, "Ludwig von Mises and the Austrian School of Economics," *Review of Austrian Economics* 5, no. 2 (1991): 33–50; Murray N. Rothbard, "The Present State of Austrian Economics" (Auburn Ala.: Ludwig von Mises Institute Working Paper, 1992).

[28]F. A. Hayek, *The Fatal Conceit: The Errors of Socialism*, W. W. Bartley III, ed. (Chicago: University of Chicago Press, 1988), p. 20.

[29]Ibid, p. 74.

[30]*Law, Legislation, and Liberty*, 3, p. 169.

[31]*Fatal Conceit*, p. 33; see also the *Constitution of Liberty*, p. 140.

And John Locke is quoted approvingly with a passage which could not possibly be more rationalist: "'Where there is no property there is no justice', is a proposition as certain as any demonstration in Euclid: for the idea of property being a right to anything, and the idea to which the name injustice is given being the invasion or violation of that right; it is evident that these ideas being thus established, and these names annexed to them, I can as certainly know this proposition to be true as that a triangle has three angles equal to two right ones."[32]

Lastly, it is characteristic of Hayek when only one page later, while one is still wondering how to square the Lockean idea of an Euclidean ethic with the thesis of the "impossibility" of an universally valid ethic, Hayek returns, in a sudden dialectic twist to his relativistic point of departure. "The institutions of property, as they exist at present, are hardly perfect; indeed, we can hardly yet say in what such perfection might consist."[33] "Traditional concepts of property rights have in recent times been recognized as a modifiable and very complex bundle whose most effective combinations have not yet been discovered in all areas."[34] In particular the investigations of the Chicago school (Coase, Demsetz, Becker and others) "have opened new possibilities for future improvements in the legal framework of the market order."[35]

Hayek does not think it worth mentioning or he does not recognize, that the property theories of Locke and the Chicago school are incompatible. According to Locke, the principles of self-ownership, original appropriation (homesteading), production and voluntary exchange are universally valid ethical norms. Locke's theory of private property is a theory of justice, and Locke is an ethical absolutist. In contrast, the representatives of the Chicago school deny the possibility of a rational, universally valid ethic. There exists no justice in Chicago. Who owns what and who does not, and likewise who is the attacker and who the victim, is for Coase and colleagues not once and for all fixed and settled and does not depend on who has done what in the past. Instead, property titles are to be distributed among people, and with changing circumstances redistributed, in such a way that future economic efficiency is maximized. The person who is expected to make the most efficient use of a resource—as "measured" in terms of money—becomes its owner; he who will have to bear the lower monetary costs if he were to avoid the disputed activity is

[32]*Fatal Conceit*, p. 34.
[33]Ibid., p. 35.
[34]Ibid., p. 36.
[35]Ibid.

declared the attacker in a property-rights dispute; and whenever in the course of time the roles of the most efficient user or the "least cost avoider" change from one person to another, property titles must be accordingly redistributed.[36]

On Social Evolution

The mystic-collectivistic character of Hayek's theory of spontaneous social evolution comes to light in passages such as these:

1. "In the process of cultural transmission, in which modes of conduct are passed on from generation to generation, a process of selection takes place, in which those modes of conduct prevail which lead to the formation of a more efficient order for the whole group, because such groups will prevail over others."[37]

2. "In so far as such rules have prevailed because the group that adopted them was more successful, nobody need ever have known why that group was successful and why in consequence its rules became generally adopted."[38]

3. "Culture . . . is a tradition of learnt rules of conduct which have never been 'invented' and whose function the acting individuals usually do not understand. . . , the result of a process of winnowing and sifting, directed by the differential advantages gained by groups from practices adopted for some unknown and perhaps purely accidental reasons."[39] "Man did not adopt new rules of conduct because he was intelligent. He became intelligent by submitting to new rules of conduct."[40] "We have never designed our economic system. We were not intelligent enough for that. We have tumbled into it and it has carried us to unforeseen heights and given rise to ambitions which may yet lead us to destroy it."[41]

4. Civilization "resulted not from human design or intention but spontaneously: it arose from unintentionally conforming to certain traditional and largely moral practices, many of which men tend to dislike, whose significance they usually fail to understand, whose validity they cannot prove, and which have nonetheless fairly rapidly spread by means of an evolutionary selection—the comparative increase of

[36]See Ronald Coase, *The Firm, the Market, and the Law* (Chicago: University of Chicago Press, 1988); Harold Demsetz, *Ownership, Control, and the Firm* (Oxford: Blackwell, 1988); for a critique see Walter Block, "Coase and Demsetz on Private Property Rights," *Journal of Libertarian Studies* 1, no. 2 (Spring 1977).

[37]F. A. Hayek, *New Studies in Philosophy, Politics, Economics and the History of Ideas* (Chicago: University of Chicago Press, 1978), p. 9.

[38]*Law, Legislation, and Liberty*, 2, p. 5.

[39]*Law, Legislation, and Liberty*, 3, p. 155.

[40]Ibid., p. 163.

[41]Ibid., p. 164.

population and wealth—of those groups that happened to follow them."[42] "Moral traditions outstrip the capacities of reason."[43] "Mind is not a guide but a product of cultural evolution, and is based more on imitation than on insight or reason."[44]

Hayek's theory, then, consists of these three propositions:

(1) A person initially performs a spontaneous action—without knowing why and for what purpose; and a person retains this practice for no reason—whether or not it has resulted in a success (for without purpose and goal there *can* be no success and no failure). (Cultural mutation.)

(2) The new practice is imitated by other group members—again without any motive or reason. The proliferation of the practice comes to a halt once all group members have adopted it. (Cultural transmission.)

(3) Members of other groups do *not* imitate the practice. Those groups which spontaneously adopt and unconsciously imitate a *better* moral practice will exhibit a comparatively higher population growth, greater wealth, or otherwise somehow "prevail." (Cultural selection.)

Hayek claims that this theory explains the evolution of private property, of the division of labor and of exchange as well as of money and government. In fact, however, these practices and institutions provide perfect examples for demonstrating the theory's entire absurdity (such that Hayek cannot help but contradict his own theory over and again).[45]

Cultural Mutation

Hayek's theory of spontaneity may apply to vegetables (although it would even run into difficulties here because of Hayek's explicitly assumed "Lamarckism"[46]), but it is definitely not applicable to human actors. Every action involves the purposeful employment of scarce means, and every actor can always distinguish between a successful and an unsuccessful action. The concept of an unconscious-spontaneous action à la Hayek is a *contradictio in adjecto*. Acting is always

[42]*Fatal Conceit*, p. 6.

[43]Ibid., p. 10.

[44]Ibid., p. 21.

[45]See on the following also David Ramsey Steele, "Hayek's Theory of Cultural Group Selection," *Journal of Libertarian Studies* 8, no. 2 (1987).

[46]See *The Fatal Conceit*, p. 25.

conscious and rational. Hence Hayek's theory leads to an inescapable dilemma: If one applies Hayek's theory to itself, then his own activity of writing books is nothing but a purposeless emanation regarding which the questions of true or false and of success or failure simply do not arise. Or Hayek's writing represents a purposeful action. In this case his theory is obviously false, however, because in enlightening himself (and us) regarding the course of social evolution, Hayek no longer acts spontaneously but instead tries to shape social change consciously and rationally.

Regarding in particular the problem of the origin of private property, it is only necessary to insert into proposition (1) practices such as the original appropriation of a previously unowned good or the production of a capital good to immediately recognize its absurdity. Appropriation and capital goods production are purposeful activities. One engages in original appropriation and produces capital goods because one prefers more goods over less and recognizes the greater physical productivity of appropriated land and capitalist production. Even if the *invention* of a capital good such as, for example, a hammer or an axe, first happened by *accident*, the inventor still recognized for what purpose it was useful, and any *repetition* of the invented practice then occurred purposefully and with reason.

Cultural Transmission

Equally absurd is Hayek's theory of "spontaneous association" through unconscious imitation. The imitation of the practices of original appropriation and indirect, capitalist production by others is likewise motivated by the desire for greater personal wealth. It is a justified imitation. Neither external force, chance nor spontaneity are necessary to explain it. Nor are they required in order to then explain the emergence of division of labor and interpersonal exchange. People recognize and have always recognized that division of labor and voluntary exchange lead to greater physical productivity than if one were to remain in self-sufficiency.[47] Likewise, for the origin of a

[47]See Ludwig von Mises, *Human Action. A Treatise on Economics* (Chicago: Henry Regnery, 1966), chap. 8.

"If and as far as labor under the division of labor is more productive than isolated labor, and if and as far as man is able to realize this fact, human action itself tends toward cooperation and association; man becomes a social being not in sacrificing his own concerns for the sake of a mythical Moloch, society, but in aiming at an improvement in his own welfare. Experience teaches that this condition—higher productivity achieved under the division of labor—is present because its cause—the inborn inequality of men and the inequality in the geographical distribution of the natural factors of production—is real. Thus we are in a position to comprehend the course of social evolution" (ibid, p. 160–61). "Liberalism . . . regards all social cooperation as an

monetary economy one must not wait for a spontaneous mutation. Under conditions of uncertainty, in any barter economy sales-stoppages are bound to arise (whenever a double coincident of wants is absent). In this situation a person can nonetheless still increase his own wealth, if he recognizes that goods may be employed not only for personal use but also as a medium of exchange—for resale purposes—and if he then succeeds in acquiring a more marketable good in exchange for a less marketable one. The demand for a good *qua* medium of exchange further increases this good's marketability. The practice will be imitated by others to solve their own sales problems, and in the course of a self-reinforcing process of imitation, sooner or later a single universal medium of exchange—a commodity money—will emerge, which is uniquely distinguished from all other goods in being the one with the highest degree of resaleability.[48]

None of this is the result of chance. Everywhere, at the origin of private property, exchange and money, individual purpose, insight and self-interested action are at work.

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emanation of rationally recognized utility" (Ludwig von Mises, *Socialism* [Indianapolis, Ind.: Liberty Fund, 1981], p. 418).

Hayek *rejects* this explanation. According to him, to regard as Mises does "all social cooperation as an emanation of rationally recognized utility . . . is wrong. The extreme rationalism of this passage . . . seems to me factually mistaken. It certainly was not rational insight into its general benefits that led to the spreading of the market economy" ("Foreword" to *Socialism,* ibid, p. xxiii). One is wondering how else to explain the phenomenon, but Hayek does not say—except through reference to "spontaneous evolution." Still more wondrous must appear the fact that there existed no human society whatsoever that had no private property and no exchange at all. (Hayek's "primordial bands" [*Law, Legislation, and Liberty*, 3, Epilogue; *Fatal Conceit*, chap. 1] are a myth, similar to the Morgan-Engels myth of primitive communism, for which not a shred of anthropological evidence exists. And the transition from the face-to-face society to the anonymous, faceless economy was not at all a traumatic event which required fundamentally different motives and habits. The world market is nothing else but the sum of all interpersonal transactions and as such not much more difficult to grasp than a simple bilateral exchange of goods.)

Instead, Hayek then engages in an outright falsification when, despite all historical records to the contrary, he appoints Mises to the position of a somewhat less than fully evolved predecessor of his own (Hayek's) theory. "It seems to me that the thrust of Mises's teaching is to show that we have *not* adopted freedom because we understood what benefits it would bring: that we have *not* designed, and certainly were not intelligent enough to design, the order which we now have learned partly to understand long after we had plenty of opportunity to see how it worked. . . . It is greatly to Mises's credit that he largely emancipated himself from that rationalist-constructivist starting point, but that task is still to be completed" (ibid, p. xxiii–xxiv). In fact, Mises never said anything even remotely similar to what Hayek insinuates; and if credit must be given where it is due, Mises must be credited not for having himself emancipated from his rationalism but for never having abandoned it.

[48]See Carl Menger, *Principles of Economics* (New York: New York University Press, 1976), chap. 8; Ludwig von Mises, *Theory of Money and Credit* (Irvington-on-Hudson, N. Y.: Foundation for Economic Education, 1971), chap. 1.

Indeed, so patently wrong is his theory that Hayek frequently withdraws to a second, more moderate variation. According to this version, division of labor and exchange are "the unintended consequences of human action," "the result of human action but not of human design."[49] The process of human association may not proceed entirely unconsciously, but largely so. An actor may be able to recognize his personal gains from acts of appropriation, production, exchange and money-use—and insofar, the process of evolution may appear rational. However, an actor can*not* recognize the *indirect* consequences of his actions (and it is allegedly these unconscious, unintended consequences for society as a whole which are decisive for the evolutionary success or failure of individual practices). And since *these* consequences can*not* be known, the process of social evolution is ultimately irrational,[50] motivated not by true or false ideas and insights, but by a blind, unconsciously-effective mechanism of group selection.

However, this variant also is contradictory and absurd.

First, it is self-contradictory to characterize actions by their unconscious indirect consequences and then, in the next breath, name these consequences. If the indirect consequences can be named and described, they also can be intended. Otherwise, if they are indeed unconscious, nothing can be said about them. Something about which one cannot say anything, obviously cannot have an identifiable influence on anybody's actions; nor can it be made responsible for the different evolutionary success of different groups. Thus, from the outset it is nonsensical to describe—as Hayek does—the task of a social theorist as that of explaining the "unintended patterns and regularities which we find to exist in human society."[51] The task of the social theorist is to explain the direct as well as the indirect (*not*: the intentional and the unintentional) consequences of human actions and to thus contribute to a progressive rationalization of human action—an expansion of the knowledge of possible (intend-able) goals and the mutual compatibility or incompatibility of various goals.[52]

[49]F. A. Hayek, *Studies in Philosophy, Politics, and Economics* (Chicago: University of Chicago Press, 1967), chap. 6.

[50]Thus Hayek writes that is "perverted rationalism . . . which interpreted the law of nature as the deductive constructions of 'natural reason.'" Law instead is "the undesigned outcome of growth" (ibid., p. 101).

[51]Ibid., p. 97.

[52]At this point, one may want to compare Hayek to his alleged predecessor Carl Menger. For Hayek law is 'the undesigned outcome of growth'. "Our values and institutions are determined not simply by preceding causes but as part of a process of unconscious self-organization of a structure or pattern" (*Fatal Conceit*, p. 9).

In sharp contrast, Carl Menger considers all references in social science explanations to Hayekian categories such as "natural growth," "spontaneous evolution," "primordial

Secondly, the moderate variation also cannot explain the origin of division of labor, exchange and money. One can grant Hayek initially that it may be possible that a person who carries out an exchange or who acquires a medium of exchange for the very first time will thereby recognize only his own personal gain (but not the indirect, social consequences). He may not know (and mankind at its beginnings certainly did not know) that as an exchanger and a money user he contributes ultimately to the development of a world market, integrated through a single, universally employed commodity money (historically: gold), to steady population growth, to an ever more expansive division of labor and continuously growing global economic wealth. Moreover, it is impossible in principle to predict today (or at any present time) the diversity, quantities, prices and personal distribution of future goods. But from this Hayek's skeptic-anti-rationalist conclusion—that "guided progress is no progress," that "we cannot prejudge the moral properties of evolutionary outcomes," and that "we have never designed our economic system but have tumbled into it, and it may yet lead us to destruction"—does not follow.

For even if a person does not immediately grasp the indirect social consequences of his own actions, it is difficult to imagine how this ignorance could last for long. Once *repeated* exchanges between specific traders occur, or once one sees one's own practice of acquiring a

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nature" or "unconscious self-organization" as sheer mysticism. To *explain* a social phenomenon through forces such as these is not to explain anything at all—a scientific imposture: "The origin of a phenomenon is by no means explained by the assertion that it *was present from the very beginning* or that it *developed originally*. . . . a social phenomenon, at least in its most original form, must clearly have developed from individual factors. The [organicist, Hayekian] view here referred to is merely an analogy between the development of social institutions and that of natural organisms which is completely worthless for the purpose of solving our problem. It states, to be sure, that institutions are unintended creations of the human mind, but not *how* they came about. These attempts at interpretation are comparable to the procedure of a natural scientist who thinks he is solving the problem of the origin of natural organisms by alluding to their "originality," "natural growth," or their "primeval nature" . . . . attempts to interpret the *changes* of social phenomena as 'organic processes' are no less inadmissible than . . . theories which aim to solve 'organically' the problem of the *origin* of unintentionally created social structures. There is hardly any need to remark that the changes of social phenomena cannot be interpreted in a social-pragmatic way, insofar as they are not the intended result of the agreement of members of society or of positive legislation, but are the unintended product of social development. But it is just as obvious that not even the slightest insight into the nature and the laws of the movement of social phenomena can be gained either by the mere allusion to the 'organic' or the 'primeval' character of the processes under discussion, nor even by mere analogies between these and the transformations to be observed in natural organisms. The worthlessness of the above orientation of research is so clear that we do not care to add anything to what we have already said" (Carl Menger, *Investigations into the Method of the Social Sciences with Special Reference to Economics* [New York: New York University Press, 1985], pp. 149–50).

medium of exchange copied by others, one begins to recognize that one's own actions are not only one-sided but *mutually* beneficial. Even if one were still unable to systematically predict the development of future markets and the shape and composition of future wealth, then, with the nature of a bilateral exchange and a medium of exchange one would at the same time recognize the *principle* of interpersonal justice and of individual and universal economic progress: whatever results emerge from voluntary exchanges are just; and economic progress consists of the expansion of the division of labor based upon the recognition of private property and the universalization of the use of money and monetary calculation. Even if the division of labor, money and economic calculation become *routine* in the course of time, the recognition of the foundations of justice and economic efficiency never again completely disappears. Once for whatever reason it comes to a complete breakdown of the division of labor (war) or the currency (hyperinflation), people will be reminded of it. Then they must not unconsciously await the further course of social evolution—their own extinction. Rather, they are capable of recognizing the breakdown as such and know (and have always known) how to begin systematically anew.

Moreover, as the examples cited by Hayek of Carl Menger and Ludwig von Mises clearly demonstrate, it must not even come to a catastrophe before one regains consciousness. As soon as one has comprehended the thoughts of these men, one can act in full understanding of the social consequences of one's activities. The evolution does not proceed *above* the heads of the acting individuals but instead becomes a process of consciously planned and/or experienced social change. Each progression and each mishap in the process of economic integration can be identified and explained, and the conscious identification of mishaps in particular makes it possible that one may either consciously adjust to a catastrophe *before* it actually occurs or that a mistake will be consciously corrected (insofar as one possesses control over it).

Furthermore, just as people are not condemned to blindly tumble toward self-destruction, they also must not remain passive and powerless vis-à-vis a foreseen economic decline. Rather, at all times one can systematically expand the range of controllable—and hence correctable—mistakes. For any *institutionalized* derailment in the process of economic integration and association—such as government expropriations, taxes, currency depreciations or trade restrictions—must have the approval of the majority of the public. Without such support in public opinion, however reluctant it may be, their continued enforcement becomes impossible. Thus, in order to prevent a

decline, no more—and no less—than a change in public opinion is necessary; and public opinion can be influenced at all times by ideas and ideologies.[53]

Ironically, an unconscious economic decline is only possible if the majority of the public follows Hayek's advice to act 'spontaneously'—without really knowing why—and free of 'the extreme hubris of knowing the direction of progress'. One cannot act entirely without consciousness, of course. Yet in accordance with Hayek's recommendation one pays attention exclusively to the direct and immediate causes and consequences of one's actions and wealth. In contrast, knowledge and ideas regarding any indirect, to the naked eye invisible causes and consequences are considered unimportant, arbitrary or even illusory. One participates routinely in the division of labor because one recognizes its direct advantage; and one recognizes the direct harm of taxes, currency depreciations and trade restrictions. However, one does *not* recognize that by participating in the division of labor, one at the same time indirectly advances the welfare of all other market participants literally to the last corner of the earth, and indeed that the higher the personal profit, the greater one's contribution to the public good. Nor does one recognize that the direct harm done through government intervention to others, whether in the immediate neighborhood or at the other end of the world, always indirectly diminishes one's own standard of living. Yet this ignorance has fatal consequences; for he who does not understand the indirect causes and consequences of his actions acts differently. He will either act as if the economic advantage or disadvantage of one person has

[53]Since Hayek essentially denies the existence (or the importance) of ideas in the course of social evolution, he also (at least in his later writings) gives no mention to public opinion.

In distinct contrast, David Hume, whom Hayek himself claims as his precursor, attaches fundamental importance to ideas and public opinion. "Nothing appears more surprising to those who consider human affairs with a philosophical eye, than the easiness with which the many are governed by the few, and the implicit submission, with which men resign their own sentiments and passions to those of their rulers. When we inquire by what means this wonder is effected we shall find, that as Force is always on the side of the governed, the governors have nothing to support them but opinion. It is, therefore, on opinion only that government is founded, and this maxim extends to the most despotic and most military governments, as well as to the most free and most popular. The soldan of Egypt, or the emperor of Rome, might drive his harmless subjects, like brute beasts, against their sentiments and inclination. But he must, at least, have led his mamalukes or praetorian bands, like men, by their opinion" (David Hume, *Essays. Moral, Political and Literary* [Oxford: University of Oxford Press, 1971], p. 19).

See also E. de La Boetie, *The Politics of Obedience: The Discourse of Voluntary Servitude*, edited and with an introduction by Murray N. Rothbard (New York: Free Life Editions, 1975); and below, p. 91 ff.

nothing to do with that of another—and he will accordingly remain neutral or indifferent toward all government intervention which is directed against others. Or he may even act in the belief that one person's gain can be another's loss; and then he may even welcome government expropriation, taxes, currency devaluations or trade restrictions as means of bringing 'restitution' to 'unfair' losers (preferably oneself and one's own kind). As long as this intellectual attitude prevails in public opinion, a steady increase in government expropriation, taxes, inflation and trade restrictions, and the subsequent continuous economic decline, is indeed unavoidable.

However, Hayek's advice is false and nonsensical. It is impossible to act unconsciously or knowingly to be ignorant. And even if the indirect social causes and consequences of one's actions are unknown, they are still—with some delay and however mediated—effective. Thus, to know them is always and for everyone advantageous. The only beneficiary of Hayek's recommendation to the contrary is government. Only the representatives of state and government can have a personal interest in spreading a Hayekian consciousness (while they themselves recognize it as a "false consciousness"), because vis-à-vis an ignorant public it becomes easier for government to grow. Yet the public at large outside the state apparatus has no interest in entertaining a false consciousness (and thus know less than its government). It is personally advantageous to let one's actions be guided by correct ideas, and accordingly one is always receptive to ideological enlightenment. Knowledge is better than ignorance. And because it is better, it is at the same time infectious. However, as soon as the public is enlightened and a majority of it recognizes that everyone's participation in an exchange economy simultaneously benefits all other market participants, and that every government intervention in the network of bilateral exchange relations, regardless where and against whom, represents an attack on one's own wealth, an economic decline is no longer unavoidable. On the contrary, rather than remaining indifferent or even welcoming government intervention, the public will be unsupportive or even hostile to them. In such a climate of public opinion, instead of economic decline, a process of conscious social rationalization and continuously advancing economic integration will result.

Cultural Selection

According to Hayek, however, progress has nothing to do with enlightenment. As little as one is capable of recognizing the reasons for an economic decline, as little is progress due to insight. Just as one tumbles unconsciously and powerlessly into the abyss, so one stumbles

blindly forward. It is not true or false ideas that determine the course of social evolution, but mystic fate. Progress occurs *naturally*, without any insight of the participating individuals, as one group with coincidentally *better* practices somehow 'prevails' over another with *worse* practices.

Apart from the fact that this theory is incompatible with Hayek's own repeated observation that cultural evolution proceeds faster than biological evolution,[54] it is false for two reasons. First, the theory contains assumptions which make it inapplicable to human societies. Second, when it is nonetheless applied to them, the theory turns out empty and Hayek again reveals himself—intentionally or unintentionally—as a state apologist.

To make his theory work, Hayek first must assume the existence of *separated* groups. Hayek introduces this assumption when he alleges that a new "spontaneous" practice will be blindly imitated *within* a group, but not (why not?) outside of it. If the practice were imitated universally and if, accordingly, there existed only one single group, cultural group *selection* would by definition be impossible. Without some sort of competitor there can be no selection. Moreover, without selection, the concept of progress can no longer be employed meaningfully. All that can be stated regarding a "spontaneously"—without purpose or reason—generated and spontaneously universalized practice is this: that as long as it is practiced, it has not yet died out.

However, the assumption of separated groups, which Hayek must introduce in order to rescue the concept of cultural progress (within his anti-rationalist theory of action and society), immediately produces a series of insurmountable problems for his theory. First, it follows that Hayek's theory cannot be applied to the present. The present world is characterized by the fact that the practices of original appropriation and property, of capital goods production, exchange and monetary calculation are universally disseminated—no group in which these practices are completely unknown and absent exists—and that all of mankind is connected through a network of bilateral exchanges. In this regard, mankind is a single group. Whatever competition between different groups may then exist can have

[54] *Hayek, Law, Legislation, and Liberty*, 3, pp. 154, 156.

As David Ramsey Steele correctly notes ("Hayek's Theory of Cultural Group Selection," p. 179), "if cultural group selection is to be relied upon, human culture would evolve much more slowly than human biology. For the selection of groups is a slower process than the selection of individuals, and group selection according to culture cannot be expected to proceed any faster than group selection according to genes."

no relevance for these universal practices. Universal practices lie—as a constant—outside of any selection mechanism; and according to Hayek's theory, no more could then be said for the justification of original appropriation, capital goods production, or division of labor and exchange than that such practices have not yet died out.

Hayek's theory is also inapplicable to pre-modern or primitive societies. At this stage in human history, isolated groups existed. Yet even then, the practices of appropriation, production and exchange were universal. There existed no tribe, however primitive, that did not know and practice them. This fact does not cause any problems for a theory of action and society which recognizes these practices as the result of rational, utility-maximizing action. For such a theory, the fact is easily explainable: Each group comes to recognize independently the very same, universally valid rules. But for Hayek, this elementary fact constitutes a fundamental theoretical problem. For if appropriation, production, exchange and money are the result of spontaneous mutation, blind imitation, infection or mechanical transmission, as Hayek claims, it becomes inexplicable—except by reference to chance—why each group, in complete isolation from all others, should come up with the exact same patterns of action. Following Hayek's theory one should expect instead that mankind, at least at its beginnings, would have generated a variety of very different action and society mutants. In fact, if Hayek were correct, one would have to assume that in the beginning of mankind people would have adopted the practice of *not* appropriating, *not* producing and *not* exchanging as frequently as they adopted the opposite. Since this is obviously *not* the case Hayek would have to *explain* this anomaly. Once he identified the obvious reason for this fact, however,—that the adoption of the former practice leads to immediate death,[55] while the latter is an indispensable means for survival—he would have to acknowledge the existence of human rationality and contradict his own theory.

Secondly, even regarding isolated groups Hayek's theory of cultural group selection cannot explain how unconscious cultural progress could be possible. (His explanation of the concept of "prevailing" is accordingly vague.) Isolated groups—and even more so, groups connected by trade—do not compete against each other. The assumption, familiar from the theory of biological evolution, that different organisms are engaged in a zero-sum competition for naturally limited

[55]Besides, this form of extinction also does not fit Hayek's explanatory scheme, for a person or group that would forego all appropriation, production, etc., would die out on account of its own stupidity, not in the course of cultural group selection.

resources cannot be applied to human societies, and hence any attempt to conclude backward from the survival of a phenomenon to its *better* adaptation (as it is, within limits, possible in biology) fails here. A group of persons isolated from all others, which follows the practices of appropriation, capital goods production and exchange does not thereby reduce the supply of goods of other groups. It enhances its own wealth without diminishing that of others. If it begins to trade with other groups, it even increases their wealth. Between human groups, it is not competition, but self-reliant independence or mutually advantageous cooperation that exists. A mechanism of cultural *selection* thus cannot become effective here.[56]

Hayek, in his self-made theoretical difficulties, nonetheless indicates several possibilities. "Prevailing" means either that one group becomes wealthier than another, that it displays a comparatively higher population growth, or that it militarily defeats and assimilates another one. Apart from the fact that these criteria are mutually

[56]Although Hayek notices some obvious differences between biological and cultural evolution (*Fatal Conceit*, p. 25), he does not recognize the categorical difference between social *cooperation* and biological *competition*. Rather, he writes that biological and cultural evolution "both rely on the same principle of selection: survival or reproductive advantage. Variation, adaptation and competition are essentially the same kind of process, however different their particular mechanism, particularly those pertaining to propagation. Not only does all evolution rest on competition; continuing competition is necessary even to preserve existing achievements" (ibid, p. 26).

In contrast, Ludwig von Mises sharply distinguishes between cooperation and competition. He writes: "Society is concerted action, cooperation. Society is the outcome of conscious and purposeful behavior. This does not mean that individuals have concluded contracts by virtue of which they have founded human society. The actions which have brought about social cooperation and daily bring it about anew do not aim at anything else than cooperation and coadjuvancy with others for the attainment of definite singular ends. The total complex of the mutual relations created by such concerted actions is called society. It substitutes collaboration for the—at least conceivable—isolated life of individuals. Society is division of labor and combination of labor. In his capacity as an acting animal man becomes a social animal" (*Human Action*, p. 143). "What makes friendly relations between human beings possible is the higher productivity of the division of labor. It removes the natural conflict of interests. For where there is division of labor, there is no longer question of the distribution of a supply not capable of enlargement. Thanks to the higher productivity of labor performed under the division of tasks, the supply of goods multiplies. A pre-eminent common interest, the preservation and further intensification of social cooperation, becomes paramount and obliterates all essential collisions. Catallactic competition is substituted for biological competition. It makes for harmony of the interests of all members of society. The very condition from which the irreconcilable conflicts of biological competition arise—viz., the fact that all people by and large strive after the same things—is transformed into a factor making for harmony of interests. Because many people or even all people want bread, clothes, shoes, and cars, large-scale production of these goods becomes feasible and reduces the costs of production to such an extent that they are accessible at low prices. The fact that my fellow man wants to acquire shoes as I do, does not make it harder for me to get shoes, but easier" (ibid, p. 673).

incompatible—what is the case, for instance, if a more populous group is militarily defeated by a less populous one?—they all fail to explain *progress*. The apparantly most plausible criterion—wealth—fails because the existence of groups with different wealth has no relevance for their survival or extinction. Two groups practice appropriation, production and exchange independently of each other. However, the members of both groups are neither biologically identical, nor is external nature (land) for both groups the same. From this it follows that the results of their actions—their wealth—will be different as well. This is the case for groups and individuals. For individuals, too, it holds that through the application of one and the same practice of appropriation, production and exchange, *different* wealth results. But then the inference from "greater wealth" to "better culture" is illegitimate. The richer person does not represent a *better* culture, and the poorer a *worse* one, but on the basis of one and the same culture one person becomes comparatively wealthier than another. Accordingly, no selection takes place. Both rich and poor co-exist—while as a result of their shared culture, the absolute wealth of rich and poor alike increases.

Likewise, population size fails as a criterion for cultural selection. Group size, too, implies nothing concerning "better culture." Everything that holds for individuals applies to groups as well. From the fact that a person has no biological offspring, it does not follow that he followed other *worse* practices while he was alive. Rather, different individuals acting on the basis of the same rules produce different numbers of offspring. Just as poor to rich, the childless does not stand in competition to those with children. They exist independently of one another or they cooperate with one another. And even if a group should become literally extinct or if an individual committed suicide, this still would not imply any cultural selection. For the surviving follow the very same rules of appropriation, production and exchange which the extinct followed while they were alive.

The third criterion, the military conquest, succeeds in bringing groups out of a state of isolated independence or cooperation into one of zero-sum competition. However, military success no more represents moral progress than a murder indicates the moral superiority of the murderer over his victim. Moreover, the occurence of a conquest (or of a murder) does not affect the validity of *universal* rules, i.e., those that *neither* the murderer *nor* the murdered can do without: In order to introduce a military conflict between groups, Hayek must first make the assumption that in at least one of these groups a new practice spontaneously springs up. Rather than following the practices of original appropriation, capital goods production and exchange,

someone must have come up with the idea that one can also increase one's personal wealth by forcibly expropriating appropriators, producers and exchangers. However, as soon as this practice is then, according to Hayek's theory, blindly imitated by all other group members, a war of each against all would ensue. There would soon be nothing left that could still be expropriated, and all group members would die out—not because of a mechanism of cultural displacement or selection, but because of their own stupidity! Every person can independently appropriate, produce and exchange, but not everyone can expropriate appropriators, producers and exchangers. In order for expropriations to be possible, there must be people who continue to follow the practice of appropriation, production and exchange. The existence of a culture of expropriation requires the continued existence of a culture of appropriation, production and exchange. The former stands in a *parasitic* relationship to the latter. Then, however, military conquest cannot generate cultural progress. The conquerors do not represent a fundamentally different culture. Among themselves the conquerors must follow the same practice of appropriation, production and exchange, which was also followed by the conquered. And *after* the successful conquest, the conquerors must return to these traditional practices—either because all the conquered have died out or all booty has been consumed, or because one wishes to institutionalize one's practice of expropriation and therefore needs an ongoing productive population (of conquered people).

However, as soon as Hayek's theory is applied to this only conceivable case of cultural competition (rather than of independence or cooperation) in which a subgroup (the conquerors) follows a parasitic culture of expropriation while the rest of the group (the conquered) simultaneously appropriates, produces and exchanges, the result is an unabashed apology for government and state.

This manifests itself first in the way in which Hayek's theory explains the origin of a culture of expropriation. Just as the culture of appropriation, production and exchange is allegedly the result of an accidental mutation, so the practice of expropriation represents a "spontaneous" development. Just as appropriators, producers and exchangers do not understand the meaning of their activities, so the conquerors do not grasp the meaning of conquest. As appropriators, producers and exchangers recognize the immediate personal advantage of their activities, so the conquerors can recognize their personal gain from acts of expropriation. Yet as the participants in a market economy are then not capable of understanding that through their activities the wealth of all other participants is simultaneously

increased, so the conquerors cannot know that through expropriations the wealth of the expropriated is reduced. Put bluntly: A group of murderers, robbers or slave hunters does not know that the murdered, robbed or enslaved suffer thereby from a loss. They follow their practices as *innocently* as the murdered, robbed and enslaved follow their different practices of appropriation, production and exchange. Expropriation, taxes or trade restrictions are just as much an expression of human spontaneity as are appropriation, production and trade. Every group of conquerors will thank Hayek for so much (mis-) understanding!

Second, Hayek's theory fails just as lamentably in its attempt to explain the rise and fall of historical civilizations—and thereby once again yields absurd statist implications. Indeed, what more could a group of conquerors want to hear than that its own actions have nothing to do with the rise and decline of civilizations. Yet is is precisely this that Hayek's theory implies: For, according to Hayek, cultural progress is only possible, as long as one culture can somehow "prevail" over another. Regarding the relationship between a basic culture of appropriation and a parasitic subculture of expropriation, however, there can be no "prevailing." The parasitic culture cannot prevail, yet as a subculture it can continue to operate as long as a basic culture of appropriation exists. Progress through group selection is impossible within this relationship; and according to Hayek, then, strictly speaking nothing can be stated at all regarding the further course of social evolution. Because the members of the culture of appropriation supposedly do not comprehend that they promote the social welfare through their actions, and because the members of the expropriation culture are equally ignorant of the fact that their actions reduce the general welfare, spontaneous changes in the relative magnitude of both cultures may occur. Sometimes the culture of appropriation will attract more spontaneous adherents; at other times the culture of expropriation will. However, since there is no reason that such spontaneous changes, if they occur at all, should follow any specific—predictable—pattern, there is also no recognizable relationship between spontaneous cultural changes and the rise and fall of civilizations. Everything is chance. No explanation for the rise and the fall of the Roman civilization exists. Likewise, no comprehensible reason for the rise of Western Europe or the United States exists. Such a rise could just as well have happened elsewhere—in India or Africa. Accordingly, it would be "extreme hubris," for instance, to advise India or Africa from the standpoint of Western Europe; for this would imply—oh, how presumptuous—that one knew the direction of progress.

If this theory is rejected as empty, however, and it is pointed out that from the very description of the initial situation—the coexistence of a basic culture of appropriation and a parasitic subculture of expropriation—a fundamental law of social evolution follows, Hayek's entire anti-rationalist system once again breaks down. A relative expansion of the basic culture leads to higher social wealth and is the reason for the rise of civilizations; and a relative expansion of the parasitic subculture leads to lower wealth and is responsible for the fall of civilizations. Yet if one (anyone) has grasped this plain and elementary relationship, then the origin and the relative changes in the magnitudes of both cultures can no longer be interpreted as a *natural* process. The explanation, familiar from biology, of a natural, self-regulated equilibration process—of spontaneously growing parasites, a weakening of the host, a consequent shrinking number of parasites, and finally the host's recovery, etc.—cannot be applied to a situation where host and/or parasite are consciously aware of their respective roles as well as the relationship between them and are capable of choosing between these roles. A comprehended social evolution is no longer natural, but rational. So long as only the members of the parasitic culture understand the nature of the relationship, instead of a natural up and down of both cultures a planned, steady growth of parasitism will ensue. The members of the parasitic subculture do not vacillate between first faring absolutely better and then absolutely worse. Rather, because of their insight into the relationship between the culture of appropriation and that of expropriation they can act in such a way—by *not* expanding their practices spontaneously, but instead consciously restraining themselves—that their own absolute wealth will always grow (or at least will never fall). On the other hand, to the extent that the members of the basic culture understand the nature of the relationship between both cultures, not only the absolute wealth of the subculture will be threatened but its sheer existence will be endangered. For the members of a parasitic subculture always represent only a minority of the whole group. One hundred parasites can lead a comfortable life on the products of one thousand hosts. Yet one thousand parasites cannot live off of one hundred hosts. If, however, the members of the productive culture of appropriation always represent a majority of the population, then in the long run the greater physical strength is on their side as well. They can always physically defeat and destroy the parasites, and the continued existence of a subculture of appropriation is then *not* explained by its greater physical-military power, but rather depends exclusively on the power of *ideas*. Government and state must find ideological support which reaches far into the

exploited population. Without such support from the members of the basic culture, even the most brutal and seemingly invincible government immediately collapses (as most recently illustrated dramatically by the fall the Soviet Union and the communist governments of Eastern Europe).

The changes in the relative magnitude of the basic culture and the parasitic subculture that explain the rise and fall of civilizations are in turn explained by *ideological* changes. They do not occur spontaneously but are the result of conscious ideas and their dissemination. In a society in which a majority of the basic culture comprehends that each act of appropriation, production, and exchange enhances the welfare of all other market participants, and that each act of expropriation, taxation or trade restriction instead, regardless against whom it is directed, lowers the welfare of all others, the parasitic culture of government and state will continuously die off and a rise of civilization will ensue. On the other hand, in a society, in which the majority of the basic culture does not understand the nature and relationship between basic and subculture, the parasitic expropriation culture will grow and with this a decline of civilization will ensue.[57]

Hayek, who wants to ban ideas and rationality from the explanation of history, must deny all this. Yet in proposing his own theory of unconscious cultural group selection, he too affirms the existence and effectiveness of ideas, and he too acknowledges—whether he is aware of this or not—that the course of social evolution is determined by

[57]Writes Mises: "History is a struggle between two principles, the peaceful principle, which advances the development of trade, and the militarist-imperialist principle, which interprets human society not as a friendly division of labor but as the forcible repression of some of its members by others. The imperialist principle continually regains the upper hand. The liberal principle cannot maintain itself against it until the inclination for peaceful labor inherent in the masses shall have struggled through to full recognition of its own importance as a principle of social evolution" (*Socialism*, p. 268). "Liberalism is rationalistic. It maintains that it is possible to convince the immense majority that peaceful cooperation within the framework of society better serves the rightly understood interests than mutual battling and social disintegration. It has full confidence in man's reason. It may be that this optimism is unfounded and that the liberals have erred. But then there is no hope left for mankind's future" (idem, *Human Action*, p. 157). "The body of economic knowledge is an essential element in the structure of human civilization; it is the foundation upon which modern industrialism and all the moral, intellectual, technological, and therapeutical achievements of the last centuries have been built. It rests with men whether they will make proper use of the rich treasure with which this knowledge provides them or whether they will leave it unused. But if they fail to take the best advantage of it and disregard its teachings and warnings, they will not annul economics; they will stamp out society and the human race" (ibid, p. 885).

ideas and their adoption. Hayek produces ideas and wants to influence the course of human history through ideas, too. However, Hayek's ideas are false; and their proliferation would lead to the eclipse of Western civilization.

Conclusion

Friedrich Hayek is today acclaimed as one of the most important theoreticians of the market economy and of classical liberalism. Far more than his earlier work in the field of economic theory, his later writings on political philosophy and social theory have contributed to his fame. It is these later writings that currently support and feed an extended, international Hayek dissertation industry.

The preceding investigations demonstrate that Hayek's excursions into the field of political and social theory must be considered a complete failure. Hayek begins with a self-contradictory proposition and ends in absurdity: He denies the existence of human rationality or at least the possibility of recognizing all indirect causes and consequences of human action. He claims that the course of social evolution and the rise and fall of civilizations is incomprehensible, and that no one knows the direction of progress (only to explain progress then as the result of some unconscious process of cultural group selection). He claims that no universally valid ethical standards exist, and that it is impossible to make an unambiguous moral distinction between an attack and a defense or between a peaceful refusal of exchange and a physically coerced exchange. And lastly, he claims that government—whose causes and consequences allegedly are as incomprehensible as those of the market—should take on (financed by taxes) all those tasks which the market does not provide (which anywhere outside of the Garden of Eden amounts to an infinite number of tasks).

Our investigations support the suspicion that Hayek's fame has little to do with his importance as a social theorist, but rather with the fact that his theory poses no threat whatsoever to the currently dominating statist ideology of social democracy, and that a theory which is marked by contradiction, confusion and vagueness provides an unlimited reservoir for hermeneutical endeavors.

He who searches for a champion of the market economy and of liberalism must look elsewhere. But he must look no farther than to Hayek's teacher and mentor: the great and unsurpassed Ludwig von Mises.

The Philosophical Contributions of Ludwig von Mises

David Gordon*

A central theme unites Ludwig von Mises's frequent ventures into philosophy. Mises believed that economics as he practiced it gave access to "a third class of the laws of nature."[1] The method of economics differed fundamentally from that of physics and biology, the sources of the other classes of natural law. A sound theory of knowledge thus must place proper stress on deductive inquiry into human action, the method of economics. The place of economics in ethical theory is less direct; but here too, the results of economic analysis closely circumscribe the available options in value theory.

In sum, Mises wrote philosophy as an economist. Unlike his great rival John Maynard Keynes, who held philosophical opinions that molded his economic views, for Mises the direction of causation went in the opposite way: economics determined philosophy.[2] I shall endeavor to illustrate Mises's distinctive angle on philosophical questions, concentrating principally on the theory of knowledge and ethics.

The guiding thread in Mises's theory of knowledge was the defense of economics. His discipline needed to be guarded against metaphysical assault and scientific attempts to eliminate the category of human action. In Mises's opinion metaphysical arguments cannot be used to challenge economics, since human beings cannot

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[1]Ludwig von Mises, *Human Action* (New Haven, Conn.: Yale University Press, 1963), p. 885.

[2]I have attempted to show the influence of Keynes's philosophical views on his economics in "Keynes's First Principles," *Dissent on Keynes*, Mark Skousen, ed. (New York: Praeger, 1992), pp. 149–60.

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attain the ultimate truth that metaphysicians seek. "It is beyond the pale of a rational inquiry to enter into an analysis of any variety of metaphysics, to appraise its value or its tenability and to affirm or to reject it."[3] Thus all-embracing schemes, e.g., Hegel's depiction of the growth of the Absolute Idea to full self-consciousness, cannot rightly be used to challenge economics. To claim, with Werner Sombart, that economics rests on a "method of isolation" which correct philosophy has exposed as fallacious is illegitimate.[4] Economics, not metaphysics, sits in the driver's seat.

But why? How does Mises know that metaphysical inquiry is sterile? His argument is the following: In order to survive, human beings identify regularities in the world. Unless one can anticipate that objects will behave in a fixed manner, action is impossible. One can do nothing if the world is, in William James's phrase, "a booming, buzzing confusion." The assumption that objects operate in a regular order, however, cannot be proved. "There is no deductive demonstration possible of the principle of causality and of the ampliative inferences of perfect induction; there is only recourse to the no less indemonstrable statement that there is a strict regularity in the conjunction of all natural phenomena."[5]

The assumption of regularity is not the only principle human beings use to categorize the world, but all other principles depend on it. Thus, if it cannot be proved that the world really is regular, none of the other categories can be deductively derived. From the fact that human beings must think about the world in a certain way, it does not follow that the world really has the attributes we ascribe to it. "In epistemology . . . we are dealing neither with eternity nor with conditions in parts of the universe from which no sign reaches our orbit nor with what may possibly happen in future aeons."[6] It is this limitation of our thought that closes our access to truth about metaphysics.

Like Immanuel Kant, then, Mises thought that the human mind grasped the world only through its own categories. But this similarity hardly suffices to make Mises a strict Kantian. Unlike his great predecessor, Mises did not claim that a particular set of categories is a

[3]Ludwig von Mises, *The Ultimate Foundation of Economic Science* (Princeton, N. J.: D. van Nostrand, 1962), p. vi.

[4]I consider the German historical school in greater detail in *The Philosophical Origins of Austrian Economics* (Auburn, Ala.: Ludwig von Mises Institute, 1993).

[5]Ludwig von Mises, *Theory and History* (New Haven: Yale University Press, 1957), p. 4.

[6]Mises, *Ultimate Foundation*, p. 15.

necessary presupposition of experience. To Mises, the categories are ones that human beings now in fact use. He essays no transcendental argument in the style of the *Critique of Pure Reason* to derive them.[7] Indeed, as we have seen, he specifically denies that the causal principle can be demonstrated.

Instead of a logical derivation of the categories, Mises offers an evolutionary "just so" story. Human beings who did not use the assumption of regularity would be unable to survive. Their more fortunate relatives who did use this category would by comparison flourish. Through a process analogous to biological selection, a set of common categories gradually became entrenched in the human mind.[8]

At first sight, one might be inclined to object to Mises's evolutionary argument in this way: If people who use the regularity principle survive, while these who do not do so perish, what is the explanation of this fact? Does it not show that the regularity principle is true? If so, how can Mises assert that the principle cannot be proved?

But this objection fails: Mises is entirely right. From the fact that using a principle aids survival, it does not follow that the principle accurately characterizes reality. We do however know that the world has *this* property: those in it who use the principle have an advantage over nonusers. Perhaps the best explanation of the success of our categories is that they accurately describe the world, but this is very far from a proof that they do.[9] Further, as Mises well knew, the entire evolutionary scheme is speculative.[10]

In spite of Mises's claim that the principle of regularity cannot be proved, he places great stress on it. The "strict regularity" that he finds in all natural phenomena leads him to reject indeterminism in quantum mechanics. The Heisenberg uncertainty principle limits our knowledge: it does not show that the law of causality is false for subatomic particles.[11]

[7]For an excellent account of Kant's philosophy, see Paul Guyer, *Kant and the Claims of Knowledge* (Cambridge: Cambridge University Press, 1987). Admittedly, some "psychologistic" interpretations of Kant put him closer to Mises, but the similarity is no greater than that between Mises and, say, Herbert Spencer.

[8]Mises, *Ultimate Foundation*, p. 15.

[9]Peter Lipton, *Inference to the Best Explanation* (London: Routledge, 1991), pp. 172–73, discusses the best explanation argument for realism.

[10]Mises presents his evolutionary account as a "speculation." *Ultimate Foundation*, p. 15. In my view, evolutionary epistemology suffers from debilitating objections. For important criticisms, see Thomas Nagel, *The View from Nowhere* (Oxford: Oxford University Press, 1986) and Ralph Walker, *The Coherence Theory of Truth* (London: Routledge, 1989).

[11]For Mises's rejection of indeterminism in quantum mechanics, see *Theory and History*, pp. 88–89.

Mises's position appears vulnerable. He thinks that the principle of regularity is an essential category of the human mind; we *must* think in accord with it. But if this is right, should we not consider indeterminacy in nature unthinkable? Even if Mises is right to reject real uncertainty in nature, how does he account for the fact that the opinion he opposes can be genuinely considered? On his view it is absurd on its face. He might respond that, after all, quantum mechanics *is* very counter-intuitive. The paradoxes we encounter in this field illustrate Mises's contention that our categories of thought apply only to the world we know.

But what has all this to do with economics? Mises's account of regularity in nature sets the stage for a contrast. The study of human action does not proceed by inductive generalization from perceived regularities. Instead, its method is deductive and its starting point the concept of action. Through an analysis of this concept, the principles of economics can be deduced. "Action and reason are congeneric and homogeneous; they may even be called two different aspects of the same thing."[12]

Can Mises maintain consistently his contrast between the study of human action and the sciences of natural phenomena? Human beings are part of the natural world: why then do they stand immune from the principle of regularity? Mises believes that "determinism is the epistemological basis of the human search for knowledge."[13] If he is right, has he not undermined his fundamental philosophical goal—the defense of Austrian economics?

Mises's response provides a key to understanding his thought. Determinism *does* apply to human beings: "What a man does at any instant of his life is entirely dependent on his past, that is, on his physiological inheritance as well as of all he went through in his previous days."[14] But we do not know how human thought and action are determined by these factors. Determinism is thus of no use in the study of human action. Instead, we must assume that the mind operates autonomously. To claim this is not to assert that the mind really is independent of the physical world: this contradicts what Mises takes to be a basic assumption of science.

Instead, "[m]ethodological dualism refrains from any proposition concerning essences and metaphysical constructs. It merely takes into account the fact that we do not know how external events . . .

[12]Mises, *Human Action*, p. 39.
[13]Mises, *Theory and History*, p. 74.
[14]Ibid., p. 77.

affect human thoughts, ideas, and judgments of value."[15] Mises's vindication of praxeology, then, is this: In spite of the principle of regularity, we do not know how human thought is determined. Theories that assign particular causes to thought thus are metaphysical, not scientific, and must be rejected. Two features of this argument require stress. First, in line with his wish to defend economics rather than support a philosophy of his own, Mises assumes as little as possible. He does not assert that human beings are metaphysically free: he contents himself with the claim that in economics they must be treated as rational actors. More questionably, he manifests a strong hostility to metaphysics.

Mises's view of human action provides additional evidence that he is not a strict Kantian. As we have just seen, Mises's position is that human beings must be treated as rational actors, since we do not know how action is determined. Kant's was in part the reverse. He thought that the real or noumenal self is not determined. It is not that we have no access to the laws that determine human action, as Mises believes: we really are free.[16] In the world as we know it, i.e., the phenomenal world, the situation is otherwise. Human action is determined by the desire for happiness.[17]

In this latter view, Kant and Mises are quite close. Mises likewise assumes that "[h]appiness . . . is the only ultimate end."[18] We always aim to achieve the highest ranked of our preferences that we think attainable. Mises does not assume that we can freely choose our preferences: freedom, as he conceives it, is the use of reason to achieve our goals. But this similarity, to my mind, is not sufficient to place Mises in the Kantian camp.[19]

In the theory of knowledge, then, Mises is satisfied with a very modest conclusion: neither physical science nor metaphysics pose a challenge to economics. The limited nature of Mises's claim, however, failed to secure him immunity from attack. The logical positivists (the "Vienna Circle") advanced views that, if accepted, placed praxeology in peril. Mises regarded it as a vital task to reply to positivism, and

[15]Ibid., p. 1.

[16]For an important analysis of Kant's conception of freedom, see "Reason and Autonomy in Grundlegung III" in Onora O'Neill, *Constructions of Reason* (Cambridge: Cambridge University Press, 1989), pp. 51–65.

[17]For the comparison of Mises and Kant, I am indebted to discussion with Ralph Raico.

[18]Mises, *Theory and History*, p. 13. In support of his view, Mises surprisingly cites Ludwig Feuerbach.

[19]The main reason is that in my view Kant does attribute strong free will to the noumenal self.

I think his efforts in this area constitute his most valuable contribution to the theory of knowledge.

The clash of the positivists with praxeology resulted from their theory of meaning.[20] Briefly put, they held that deduction cannot give us any knowledge about the empirical world. All necessary truths are analytic; they are tautologies that are empirically meaningless. Since praxeology proceeds by deduction from a necessarily true axiom, the threat posed by positivism is apparent. Economics is supposed to apply to the world: it is not "an unearthly ghostdance of bloodless categories." If the method it uses must fail of its purpose, Misesian economics is ruined.

Mises's most important argument against the positivists was a simple one. They purport to banish metaphysics and follow science, but their own position is metaphysical. "[T]he epistemology of positivism is itself based on a definite brand of metaphysics."[21] If positivists accurately took note of praxeology, they would be forced to abandon their views. Praxeology is a deductive discipline that, contrary to positivist dogma, does give us knowledge of the real world. To declare illegitimate an existing science because it violates a philosophical doctrine is itself illegitimate: Metaphysics cannot overturn science.

The force of Mises's point is twofold. First, he himself agrees with the positivists that philosophy is subordinate to science. When he claims that a philosophic doctrine cannot overturn a conclusion of science, he speaks on his own behalf. But, more fundamentally, his argument works against the positivists even if one disagrees with Mises's view about the relation of science to philosophy. The positivists do agree with him here: his argument is thus an effective *ad hominem* retort against them. They, the opponents of metaphysics, are themselves engaged in metaphysics if they reject praxeology.[22]

Mises uses the same response to Karl Popper's falsifiability criterion. Popper, unlike the positivists, did not take all metaphysical statements to be meaningless. He instead adopted the more limited position that all scientific statements must be capable of being proved false. The theorems of praxeology, insofar as they are deductively derived from a self-evident axiom, fail this test: nothing can falsify them.

[20]For a full account of the logical positivists, see J. Alberto Coffa, *The Semantic Tradition from Kant to Carnap: To the Vienna Station* (Cambridge: Cambridge University Press, 1991).

[21]Mises, *Ultimate Foundation*, p. vi.

[22]For a discussion of *ad hominem* arguments in philosophy, see Henry W. Johnstone, Jr., *Validity and Rhetoric in Philosophical Argument* (University Park, Penn.: Dialogue Press, 1978), pp. 5–12.

Mises's reply is characteristically forthright. If Popper wishes to classify praxeology as unscientific, that is his affair. The proper tests of praxeology are the truth of its axioms and the validity of its arguments. Why should it matter whether praxeology meets the criterion of science proposed by a particular writer? Why does it count against a statement that it is metaphysical in Popper's sense?

Here once more Mises uses an *ad hominem* argument. Like the positivists, Popper contended that definitions do not describe real essences: they are arbitrary proposals for the use of a term.[23] Mises cleverly uses this view against Popper to show that his own characterization of scientific statements is an arbitrary proposal.

Mises has another argument that uses positivist doctrine against itself. "[T]he proposition that there are no synthetic *a priori* propositions is itself a . . . synthetic *a priori* proposition, for it can manifestly not be established by experience."[24] A positivist might deny this and assert that the claim was an inductive generalization. But then what justifies him in rejecting standard examples of a priori propositions, e.g., "whatever is colored is extended," not to mention the theorems of praxeology? Alternatively, a positivist might claim that the disputed statement is analytic, but it is unclear what would ground this assertion.

Mises does not confine his criticism to refutations of the kind just described. He directly examines the main contentions of the logical positivists and finds them wanting. The positivists claim that the propositions of mathematics and logic are tautologies. But even if this is true, we can learn something new from mathematical or logical investigation.[25] Even if all the theorems of geometry are restatements of the axioms used in their proofs, it does not follow that we can at once grasp the theorems when we learn the axioms. The distinction Mises draws here resemble Aquinas's separation of propositions "self-evident in themselves" from those "self-evident to us."[26]

Mises's criticism of the positivists seem eminently well taken; but even if one adheres to that philosophy, Mises has the resources to protect praxeology. He calls the propositions of economics synthetic *a priori* truths, but it is not at all clear that he has in mind what the positivists wish to exclude. What does Mises mean by a

[23]For Popper's "anti-essentialism" see Karl Popper, *The Open Society and Its Enemies*, 2 vols. (New York: Harper, 1967), pp. 9–21.

[24]Mises, *Ultimate Foundation*, p. 5.

[25]Mises, *Human Action*, p. 38.

[26]Aquinas uses this distinction in his criticism of St. Anselm's argument for the existence of God.

"synthetic" proposition? As discussed above, he replies to the claim that mathematical propositions are tautologies with the point that we can learn something new from some tautologies. Does he mean by a synthetic proposition, then, one that gives us new knowledge? If he does, his position is perfectly consistent with that of his positivist foes. They are concerned to exclude propositions that, in their sense of the terms, are both necessary and non-analytic. So far as I can determine, Mises did not take a position on this issue; he neither asserts nor denies, e.g., that the predicate of the action axiom is "contained" in the subject. He offers no formal account of synthetic propositions, however, so the suggestion that praxeology is immune from positivist attack in this way is conjectural.

Even if this suggestion is rejected, much of praxeology is still under no threat from the positivists. Although "[a]ll the concepts and theorems of praxeology are implied in the concept of human action," its inquiries are restricted "to the study of acting under those conditions and presuppositions which are given in reality."[27] To accomplish this, subsidiary postulates must be added to the axiom of action, e.g., the assumption that labor has negative utility. But "[t]he disutility of labor is not of a categorical and aprioristic character. We can without contradiction think of a world in which labor does not cause uneasiness, and we can depict the state of affairs prevailing in such a world."[28]

If praxeology includes empirical propositions, why would positivists object to it? They do not reject the use of logic in science: they instead think that logic by itself will not provide us with knowledge of the empirical world. But "[e]conomics does not follow the procedure of logic and mathematics. It does not present an integrated system of pure *aprioristic* ratiocination severed from any reference to reality."[29] The only theorems of praxeology, then, that conflict with positivism are those that do not include any empirical propositions in their derivation. Mises has powerfully argued that logical positivism should not be accepted; and, by extending points that Mises makes, we can show that praxeology is in little danger from it.

Of course economists influenced by positivism have followed methods of inquiry radically at variance with Mises's precepts. Many of them place great reliance on empirical testing, while Mises thinks this unnecessary and in many cases not possible. Milton Friedman goes so far as to say that the assumptions of an economic theory may

[27]Mises, *Human Action*, pp. 64–65.
[28]Ibid., p. 65; footnote number omitted.
[29]Ibid., p. 66.

be false, as long as the theory generates correct predictions. A greater divergence from Mises would be difficult to imagine. But none of these views follows from the verifiability criterion of meaning. A positivist sympathetic to praxeology might take the axiom of action to be a common sense empirical proposition, known by introspection to be true.[30]

One further point requires mention. If praxeology is consistent with positivism, does this invalidate one of Mises's key arguments against the positivists? The very existence of praxeology, he claims, refutes their view of science. But if praxeology is consistent with positivism, must not this argument be withdrawn? As usual, Mises is on safe ground: all that is required is a modification of it. Mises can pose this dilemma to positivist detractors: if praxeology contradicts their views, its existence as a science refutes them; if it does not, they cannot object to it. And in any case, Mises still has intact all his other arguments against the positivists.

Mises's primary aim in epistemology, I have endeavored to show, was to defend economics. "With regard to praxeology the errors of the philosophers are due to their complete ignorance of economics and very often to their shockingly insufficient knowledge of history."[31] In ethics, his main goal was similar but not identical. In his view, economics does not by itself support any ethical conclusions. But if one acknowledges a value judgment that he thinks almost universally acceptable, the establishment of a free market is imperative. Mises recognized that various schools of ethics had objections to the free market, and his aim in this branch of philosophy was to defend the market from attack. His method was a radical one: he denied the possibility of objective ethics altogether. If Mises is correct, all ethical objections to the free market immediately fail.

In Mises's view, it makes sense to ask: given a certain end, how can that end be best achieved? If someone wishes to build a house, the question of how he can best use his resources to do so admits of an objective response. Whether to build the house is up to him; how best to do so is not. Rationality is a matter of means, not ends. The matter is, however, somewhat complicated by the fact that an end can itself be a means to a further end.[32] Mises in fact holds that

[30]These remarks should not be taken as a defense of positivism. In my own view, the verifiability criterion ought to be rejected; further discussion is in my *Philosophical Origins*, pp. 36 ff. Rather, I am here addressing the question: if one did accept the verifiability criterion, how much of Austrian economics could be retained?

[31]Mises, *Human Action*, pp. 32–33; footnote number omitted.

[32]Mises, *Theory and History*, p. 13.

"[h]appiness in the purely formal sense in which ethical theory applies the term is the only ultimate end." Mises meant by this that we want things not for their own sake but for the satisfaction, assessed purely subjectively, which we expect them to bring us.

Mises's notion of values stands in opposition to two competing types of theory, and he explicitly opposed both. Some philosophers maintain that there are objective goods or ends "out there in the world." Regardless of what people think, certain things just are good or bad. Franz Brentano, a leading advocate of this position, maintained that value judgments were "correct" or "incorrect," analogously to the truth or falsity of factual propositions. Mises rejected Bretano's account; unfortunately he did not discuss Bretano's arguments.[33] Against aesthetic objectivism Mises is scathing: "Only stilted pedants can conceive the idea that there are absolute norms to tell what is beautiful and what is not."[34]

Some proponents of objective ethics agree with Mises that values are not properties that objects possess. Nevertheless, ethics is not subjective, since reason can show that we stand under certain obligations, regardless of the ends we happen to have. Mises has little time for this position. He says of its foremost proponent: the "weakest part of Kant's system is his ethics."[35]

By dismissing objective ethics, Mises has prepared the way for his own defense of the free market. Mises's primary concern to vindicate economics suggests an additional motive for his subjectivist conception of values. Someone who believes in objective values in the style of G. E. Moore but also accepts Austrian economics needs to fit two different kinds of value into his intellectual system. By accepting only subjective values, a drastic intellectual simplification becomes possible; and Mises may have found the temptation to wield Occam's razor too strong to resist. More prosaically, as an economist Mises was thoroughly familiar with subjective values and may have found any other approach conceptually uncomfortable. This in part accounts for the fact that Mises says little to support his condemnation of objective values: he treats the issue as virtually self-evident.

[33]Ibid., p. 36, n. 1. Brentano's views are presented in his *The Origin of Our Knowledge of Right and Wrong*, R. M. Chisholm and Elizabeth Schneewind, trans. (Atlantic Highlands, N. J.: Humanities Press, 1969). An interesting discussion of Brentano on value judgments may be found in Thomas L. Carson, *The Status of Morality* (Dordrecht: D. Reidel, 1984).

[34]Mises, *Theory and History*, p. 63.

[35]Ludwig von Mises, *Socialism* (London: Jonathan Cape, [1936] 1951), p. 430.

Although Mises does not usually address in detail the arguments of value-objectivists, on one occasion he does so, with illuminating results.

The political philosopher Leo Strauss claimed that many terms in our language fuse descriptive and evaluative components. If, one calls someone cruel, the judgment rests on factual criteria. Stalin acted cruelly, e.g., in bringing about the death of millions of Russian peasants. This judgment is not, to reiterate, a matter of subjective assessment; but is objective in exactly the same way as "Stalin was Lenin's successor." Yet to call someone cruel implies a negative evaluation of him. Thus, contrary to the value subjectivists, language imposes certain value judgments on us. To maintain that all values are subjective is to ignore for a large number of terms the criteria our language establishes.

Mises vigorously dissented. He considered three examples given by Strauss: "cruelty," "prostitute," and "pressure group."[36] In each instance, Mises maintained, one can either use the term in question in a value-neutral way or substitute another term that lacks the value-charged nature of the original. It is thus false that linguistic considerations prevent one from separating fact and value.

This is not the place for an assessment of the dispute. Rather, it is the existence of the dispute itself that merits notice. During the late 1950s and early 1960s one of the most important arguments in modern moral philosophy took place between Philippa Foot and Elizabeth Anscombe, on the one hand, and R. M. Hare, on the other. (All three were at the time teachers of philosophy at Oxford University). Foot and Anscombe adopted precisely the position of Strauss: there are criteria for the use of terms such as "rude" or "courageous." Once a term of this sort is applied, no separate act of evaluation is necessary: the terms are already valuational. Thus descriptive criteria imply an evaluative stance, and the "is-ought dichotomy" is at least in these instances false.

Hare demurred, in terms reminiscent of Mises: "But the primary evaluative words are so classified just because their descriptive meaning is secondary, and is therefore more able to give way when attitudes change, the evaluative meaning remaining unaltered."[37]

[36]Mises, *Theory and History*, pp. 299 ff. Strauss's argument is in his *Natural Right and History* (Chicago: University of Chicago Press, 1953), pp. 50 ff.

[37]R. M. Hare, "Reductio ad Absurdum of Descriptivism" in his *Essays in Ethical Theory* (Oxford: Clarendon Press, 1989), pp. 122. Philippa Foot's side of the argument is in her *Virtures and Vices* (Berkeley and Los Angeles: University of California Press, 1978). For Anscombe, see her "Modern Moral Philosophy" in *Collected Philosophical Papers* (Minneapolis: University of Minnesota Press, 1978), vol. 3, pp. 26–42.

Like Mises, Hare maintains that no description irrevocably commits us to an evaluation.

In both ethics and epistemology, then, Mises's contributions arise in the course of a defensive campaign on behalf of Austrian economics and the free market. If so, what lessons can be drawn about the way to study Mises's philosophy?

Most fundamentally, his philosophy must be approached through his own writings, taking particular note of the manner in which economic theory suggests to him philosophical positions. The greatest mistake one can make in this area, I venture to suggest, is to assign Mises to a philosophical school and to interpret his economics on that basis. As an example of what must be avoided let us consider the ascription to Mises of a "Bergsonian" view of time. When Mises discusses time in economics, he has in mind time as experienced by human beings, particularly in action. It does not follow from this that Mises should be saddled with either Bergson's criticism of time in physical science as an abstraction or his defense of the intuitive grasp of real duration.

Mises cites Henri Bergson on just a few occasions, and his remarks hardly constitute a ringing endorsement of his views. He agrees with Bergson that for human beings the real present is grasped in action. But he also states: "it is not recollection that conveys to men the categories of change and of time, but the will to improve the conditions of his life."[38] This in context appears to be a criticism of Bergson.

Again, Mises notes: "it is true, as Bergson has seen with unsurpassed clarity, that between reality and the knowledge that science can convey to us there is an unbridgeable gulf. Science cannot grasp life directly . . . . But if one thinks one has thereby pronounced an unfavorable judgment on science, one is mistaken."[39] Mises's conclusion is totally un-Bergsonian. The exact similarities and differences between Mises and Bergson are not our present concern. I have touched on the topic simply for purposes of illustration. Some thinkers are best approached through the careful search for sources and influences. At least in philosophy, Mises is not among them.

[38]Mises, *Human Action*, p. 100. The passage criticizes Edmund Husserl as well as Bergson. I have not discussed the patently absurd claim that Mises was a phenomenologist.

[39]Ludwig von Mises, *Epistemological Problems of Economics* (New York: New York University Press, 1981), p. 46; footnote number omitted.

The Contributions of W. H. Hutt

John B. Egger*

William Harold Hutt (1899–1988) was a courageous and independent maverick whose work has long been respected by those who work in the Austrian tradition. His scope was broad, encompassing the study of labor and the relationship between government and the economy, but he is probably best known for his monetary economics.

Those who know Hutt's scholarship are likely to consider it "underappreciated," either because his principal work was a criticism of Keynes published at the height of Keynes's influence (Hutt 1963) or specifically because its catallactic, individualistic method was hardly in keeping with the methodological spirit of the 1960s. It is also true, though, that Hutt's writings are difficult to follow and sometimes reflect a utilitarianism that is inconsistent with thoroughgoing subjectivism. Nonetheless, as I hope this survey will indicate, there is much in Hutt's work—particularly his monetary economics—that will delight anyone who is sympathetic to the approach of the Austrian school.

Born in 1899 to a working-class family in London (Seldon 1988), Hutt studied at the London School of Economics and taught from 1928 to 1965 at the University of Cape Town. He then moved to the United States and taught at several universities. From 1972 to 1982 he taught at the University of Dallas, and was an emeritus professor there at the time of his death (Ebeling 1988).[1]

Monetary and labor economics were Hutt's chief interests. His best-known work in monetary theory is *Keynesianism—Retrospect and Prospect* (1963); others in this field include *The Theory*

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[1]For an excellent brief summary of Hutt's life and work, see Salerno (1991).

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of Idle Resources (1939, second edition 1977), *A Rehabilitation of Say's Law* (1974), and *The Keynesian Episode* (a 1979 revision of *Keynesianism*). His rich appreciation of the market as a catallaxy explains his most important contribution: a superior analysis, Austrian in spirit, of money and its relationship to economic activity. Like Marget, Hayek, Hazlitt, and others of his generation, much of Hutt's monetary work was understandably associated with criticism of Keynes.

Hutt's principal work in labor economics is *The Strike-Threat System* (1973), but his first book was *The Theory of Collective Bargaining* (1930, 1980).

Throughout his life Hutt expressed great concern—perhaps reflecting his background—for persons of lower incomes. Their best friend was the market, he told us often; their major enemy was private groups' use of government to plunder them, a concern that led him into extensive work on the political process. Contributions to this literature include *Economists and the Public* (1936)—which one of his scholars and recent colleagues identified as "probably, Hutt's finest work" (Formaini 1989, p. 2)[2] and *Politically Impossible. . .?* (1971). His long-time friend Arthur Seldon wrote: "If Hutt had not been dismayed and distracted by the cul-de-sac of Keynesianism, I think he would have complemented James M. Buchanan and Gordon Tullock and now others in the US and Europe who are developing the fundamental economics of politics, democracy, and bureaucracy."[3]

Professor Hutt[4] knew that his works were not easy to read. He saw that as a regrettable necessity.[5] He respected language and used it with great skill, understanding that it shapes and is shaped by ideas. Although Hutt is often criticized for his use of unique terminology ("Huttite" has been coined to describe it), it was precisely his respect for the power of language, combined with his disapproval of trends that swept economics during his career, that produced his strong sense

[2]Each of us has his own interests and I certainly respect Bob Formaini's judgment, but I consider Hutt's *Keynesianism* books (and *Say's Law*) considerably better and more important.

[3]Seldon 1988, p. 34. See also Hutt's review essay on Buchanan and Tullock's *The Calculus of Concent* (Hutt 1966). Several other essays reprinted in Pejovich and Klingaman (1975) deal with the politics of South Africa. The Pejovich-Klingaman collection also contains the best published bibliography of Hutt's work of which I am aware, though it obviously omits the work of the last decade of his life.

[4]He preferred to be called "Professor," and often corrected those who called him "Doctor." He never received that degree.

[5]"[N]ew definitions are irritating things," he wrote in 1939, "and the mere process of multiplying terms may appear to be both pretentious and barren" (Hutt 1977, p. 45).

of obligation to resist certain popular economic terminology. A repeated theme is one expressed in *Keynesianism*: *"There are some kinds of language the habitual use of which hinders the perception of certain things as well as the saying of them"* (Hutt 1963, p. ix; italics his). Hutt's terminology places demands on the reader, who must not only follow his new and curious—though usually somewhat self-explanatory—terms (like "contrived incidental plenitude") but must also exercise caution with conventional terms, for sometimes his meaning subtly differs from that of works that now constitute orthodoxy.

Freedom, Government, and the Market

Morgan Reynolds, in his fine "Tribute to W. H. Hutt," insightfully identified William Hutt as a "classical political economist" (Reynolds 1989, p. xii). Hutt himself wrote: "A contemporary trend towards a return of economic science to what could be more appropriately described by the too long disused term 'political economy,' in which the function of vote-gathering is formally treated as an economic factor, may turn out to be one of the most promising developments of this age" (Hutt 1971, p. 23). From the catallactic perspective of Adam Smith and an underlying utilitarianism to his concern with matters of "public choice," Reynolds's term fits. Hutt knew that the individual initiative that liberates us from poverty thrives only under particular kinds of rules, and that these rules may only resemble the legislation that emerges from the political processes of a constitutional democracy. Hutt's lifelong concern for human welfare led him to a study of those processes. He properly considered the likelihood that private groups might wrest control and twist legislation to their own advantage, to be the greatest threat to the human condition.

He wrote courageously about the apartheid policy of his adopted home country, identifying it as a device by which the white unions had seized upon the government as a means to suppress competition from the non-whites.[6] A related and highly regressive policy was "rate for the job" legislation (like our "comparable worth"). Hutt fervently argued that outlawing the ability of the unskilled and inexperienced—or those discriminated against—to acquire the benefits of employment and demonstrate their worth by underbidding other applicants was terribly regressive, unfair, and anti-competitive.

For all of its potential danger, Hutt considered government to have great power to promote well-being, claiming in 1936 that "[w]e may regard the democratic State as the institution that is supposed

[6]See *The Economics of the Colour Bar* (1964). Earlier writings had resulted in the temporary withdrawal of his South African passport (Rothbard 1988, p. 33).

to interpret and make effective the will of the aggregate of citizens as electors" (Hutt 1936, p. 257). He acknowledged the need for some public welfare, but was convinced that a government enforcing the rules that give maximum range for individual initiative and enterprise permits the market to achieve the most for humanity that can be done, constrained only by "natural scarcities."

Hutt did not explicitly set forth a description of the source and nature of the individual rights that underlie his conception of liberty and government. Indeed, he described in 1930 a belief, so common today, that economics offers a superior alternative: "Economists are all clearly conscious of the desirability of a more equal distribution of wealth; indeed, they base their case for it upon the firm foundation that it will lead to a maximization of economic welfare, and not upon abstractions such as 'natural right' or 'justice'" (Hutt 1980, pp. 73–4).[7] This crude-utilitarian perspective is so prevalent even sixty years later that few economists consider the examination of "natural rights" necessary or advisable. Murray Rothbard, who takes a Lockean approach based on self-ownership, is an outstanding exception (Rothbard 1970, pp. 77–80). Hutt seems to take the utilitarian defense of freedom: it works.

In 1930, for example, he had argued that the economic defense of private property depends on the presumption that "the price determined under private enterprise is the one which best serves the common good" (Hutt 1980, p. 54, n. 29). He also admits (Hutt 1971, p. 46) to having "uncritically accepted" (in 1930) Edwin Cannan's defense of progressive taxation on the basis of diminishing marginal utility. His early thinking, he noted in 1971, "was founded on the fallacious belief that the utilities of income to different persons can be compared" (Hutt 1971, p. 46).

In his 1936 *Economists and the Public*, Hutt expressed most explicitly his sympathy with the utilitarian perspective. His warning of the philosophy's "truly unfortunate effect" (Hutt 1936, p. 300) on economics refers only to the misrepresentation of "economic man" as a short-run hedonist. By this time Hutt seemed to reject the explicit maximization of an aggregative concept of social welfare, explaining that the term "maximizing welfare" is acceptable "if we regard the term as having a purely subjective meaning and do not attempt to extend it to cover any summation of individual welfares into a broader objective unity as 'social welfare'" (Hutt 1936, p. 265, n. 2).

[7]When I cite "Hutt 1980" as evidence for what he said in 1930, I refer to those sections of the second edition of *The Theory of Collective Bargaining* that he left unchanged.

There is no doubt that utilitarianism can do immense damage when wielded by the untutored. Its "most unfortunate effect" today is the tendency of economists who are infatuated with technique and disdainful of philosophy to back into objective utility and interpersonal comparison without realizing it.

Yet these attractions of crude utilitarianism can be resisted by a strong sense of subjectivism and of the spontaneous coordinating forces of an unhampered market. Prominent economists of the Austrian school have joined Hutt in praise of a more carefully crafted position. Ludwig von Mises (1957, pp. 55, 58) has spoken approvingly of utilitarianism, referring to economics as "its finest product" and calling it a "philosophy of individualism." Much of F. A. Hayek's work reflects a strong utilitarian position. The example of Henry Hazlitt (1972) also shows that a utilitarian foundation can co-exist with a thorough appreciation of the nature of a catallaxy and the rules that it requires. An excellent informal discussion of a utilitarianism that requires and supports individual rights is offered in a 1991 interview with Leland B. Yeager, who notes that he occasionally feels that "Hazlitt has already said everything" (Yeager 1991, p. 6).

"What are the proper limits to the right of association?," John Stuart Mill asked, and in his 1936 book Hutt reported that he "can hardly imagine any problem which is more directly relevant to political economy." He found Mill's advocacy of "freedom to unite for any purpose *not involving harm to others*" to be unsatisfactory because it raised "the rights of combination" above "the free action of individuals" (Hutt 1936, pp. 194–95), and wrote approvingly that Mill's "principle of expediency" justifies "the suppression of economic coercion and private monopoly" (Hutt 1936, p. 196).

In Hutt's perspective, some "combinations" are inconsistent with freedom. He knew that an unhampered market was of great benefit to the relatively disadvantaged. But exactly what activities constitute an "unhampered" market?

To some writers a free market means the absence of legislative violations of individuals' natural rights to life and property. Hutt would duplicate most of their policy advice, say on matters of minimum-wage laws and producer subsidies. But a rights theorist is likely to interpret the formation of a combination as part of the functioning of a free market. Utilitarians make much of the deadweight losses and reductions in consumers' surplus that would result, but these are not consumers' rightful property. Unless government violates rights by enforcing a cartel, its success will probably be temporary. But its existence is fully consistent with a market that, in the natural-rights sense, is free.

This is not a perspective that would command Hutt's agreement. Combinations like industrial cartels and labor unions, even if unsupported by restrictive legislation, reduce the welfare—relative to a state of open competition—of the ordinary citizen. Throughout his life, Hutt shared the position of Henry Simons and many modern economists that the enforcement of antitrust laws is essential to a market system.

In 1971, for example, he appended to his phrase "provided the appropriate governmental agencies are carrying out their essential role in the functioning of the free market" a footnote explaining that "this role covers primarily the prevention of 'restrictive practices'—or the role of what in the United States is called 'anti-trust'... Emphasis on this role meets the common objection, 'Yes, but markets do not always work'"(Hutt 1971, pp. 95, 99). "If business," Hutt wrote, "including big business, is in any measure responsible for pricing output beyond the reach of income (subject to any degree of inflation) the remedy lies in anti-trust initiatives" (Hutt 1971, p. 78). He referred to resale price maintenance as "one of the most burdensome forms of restrictive practice" (Hutt 1971, p. 86).

Hutt disagreed that "in its complete form [competition] would be ruinous," (1935, p. 184) because he considered "aggressive selling" tactics that he thought might be ruinous (like predatory pricing) not in fact to be competitive. In his view, a legislative structure supporting the market system would outlaw such practices. His terminology (unfortunately) appears to have something in common with modern structure-oriented theorists of industrial organization: Competition could not produce monopoly, it seems, but a system in which the bargains among resource owners were limited only by natural rights could. According to this view—which I believe to be Hutt's—the preservation of the competitive order requires legislation that is not confined by the limitations of individual rights.[8]

The somewhat uneasy (to me, at least) combination of Hutt's powerful understanding of the benevolent forces of the catallaxy and his deep concern for the welfare of the common citizen is seldom more apparent than in his concept of competition. It is "the substitution for consumers' benefit of the least-cost method of producing and marketing any commodity (or of achieving any other objective involving

[8]He addressed some criticisms in 1977: "despite weighty arguments against antitrust which libertarian economists have been advancing in recent years, we adhere to the conclusion that a legal framework to create or protect incentives to substitute lower cost methods or preferred products is a necessary condition for market freedom to exist. This does not imply, however, that antitrust *in its present form* cannot be validly judged as more deleterious than nonintervention" (Hutt 1977, p. 223).

scarce means), irrespective of the institutional arrangements necessary for the realization of that result" (Hutt 1971, p. 99, n. 4).

It is significant that Hutt defined competition as a process, not as a structure. The modern economist is likely to visualize graphs depicting a perfectly-competitive outcome, a monopolistic outcome (smaller quantity, higher price), and a deadweight-loss triangle. Hutt would identify the entry and imitation by which the monopolistic position is moved toward the perfectly-competitive one as a competitive process. Even the creation of a deadweight loss triangle can be competitive if its cause is an entrepreneur's discovery and implementation of a lower-cost technique. As the competitive process continues, the price will be driven down, eliminating the deadweight loss and transferring surplus from producer to consumer.

Hutt's concept of "consumers' sovereignty," a phrase he originated in 1936, reflects some of the difficulties readers may find with his terminology. It is, to be sure, a healthy antidote to those who write as if producers can inflict their will upon consumers. By exercising their powers of choice, consumers in a market system provide both the incentive and the financing for producers to use resources as the consumers prefer.

Demonstrating the weakness of the substitution of a non-rights utilitarianism for a theory of natural rights, Hutt built his concept on an analogy between the market and government. "Regarded as an ideal," he asserted, "consumers' sovereignty rests on the same assumptions as does the ideal of representative government" (Hutt 1936, p. 262). In a semantic puzzle that reminds one, at times, of Marx, Hutt explained that an individual is sovereign in his role as consumer, and subject in his role as producer. He tells the story of an artist who eschews commercial assignments, at which he could earn incomparably more money, warning that "we cannot refer to producer's freedom as 'producers' sovereignty'. When he ignores society's demands, the producer and consumer aspects of the individual are merged in him. He exercises his sovereignty over the disposal of his own powers and property" (Hutt 1936, p. 263).

It is a perplexing notion, not clarified much by his assurance that he means "'sovereignty' in the sense of 'ultimate power', as opposed to 'source of authority'" (Hutt 1936, pp. 258–59). Hutt's concept of the free market is a society in which consumers' sovereignty is violated by neither government nor private groups. A producer's decision to take a vacation, or to produce a lesser-valued good for his own personal reasons, would be reckoned as his own exercise of his sovereignty as a consumer. His decision to collude with other producers would

not. The act of collusion is not his own act of consumption, but it does reduce the ability of others to consume.

Although one must develop some facility with "ideal types" in economics—the Kirznerian entrepreneur who neither labors nor owns property, for example—the notion that producers are slaves and only consumers have rights seems a little difficult to keep straight. Every individual plays each role, in Hutt's taxonomy, but his rights adhere only to his role as consumer; in either his role as producer or as resource owner, he is a slave to other consumers. Hutt expressed it this way: "Applying this standard, we must regard property-owners as the custodians of the community's scarce resources. The powers they possess in dealing with these resources must be regarded as delegated to them by society in its consumer aspect" (Hutt 1942, p. 157). The position is not nonsensical, but it appears to me to exemplify precisely the "*kinds of language the habitual use of which hinders the perception of certain things as well as the saying of them*" against which he warned us in 1963. Individuals have rights (or "sovereignty"), and to identify these rights with only one of the individual's many roles is confusing and dangerous.[9]

Hutt's unhampered market would be ruled by "natural scarcity," under which "given consumers' preferences, the sole factor determining the price of consumers' commodities will be the relative amounts of different kinds of productive resources and services available" (Hutt 1936, p. 260). Like many utilitarians, he seems to sidestep the fact that property rights may have something to do with what is "available," and at what terms. But "there are many deliberately created barriers to the most complete utilization of productive power" (Hutt 1936, p. 261), which he called "contrived scarcities." Although he attempted to explain that a producer's "sovereignty over the disposal of his own powers and property" (Hutt 1936, p. 263) could not contrive a scarcity, he identified collusive agreements and other "restrictive practices" like resale price maintenance as contrived scarcities that thwart the principle of consumers' sovereignty. To prevent this "private coercion," the firm enforcement of antitrust statutes was required on the behavior of both business and labor. Then—and only then—would resources be allocated according to "natural scarcities."

[9]The best discussion of "the metaphorical shibboleth of 'consumers' sovereignty'" is in Rothbard (1970, p. 560 *et passim*). On "the community" and "society" as the ultimate owners of scarce resources, see Ayn Rand's discussion of "the tribal premise" (Rand 1965, p. 7).

A Staunch Opponent—not of Unions, but of the Strike Threat

Hutt is often identified as a critic of unions. But he noted numerous ways in which a union may properly assist the worker in dealing with the employer, maintaining "that a labor union may provide the required knowledge of employment opportunities, supply the expertise and the finance to assist an individual to take advantage of those opportunities, and protect an individual's rights before the law regarding the wage contract as well as facilitate his recourse to the courts when necessary" (Hutt 1973, pp. 12–13).

In fact he opposed only their strike activity. His position was a simple extension of his opposition to private collusion, to the contrivance of scarcity. He fought what he considered to be the private exercise of coercive power, whether by collusion among labor or business. Since government should assure that competition is free to perform its function, economists must oppose this poverty-creating coercion. That means opposing much of government's direct intervention into the economy (e.g., comparable-worth legislation), of course, but it also requires that governments break up private collusion and restrictive practices, eliminating contrived scarcities whether caused by business or unions of laborers.

He believed that the public and policymakers were already convinced of the necessity of addressing business collusion and "restrictive practices." But labor monopoly had long been blessed and/or feared by both the public and the politicians. There can be no doubting Hutt's courage in attacking what he considered to be the most powerful of legalized vandals, who stomp about the country seizing wealth primarily from those who can least afford it—usually with their naive acquiescence.

The Theory of Collective Bargaining (1930) examined the history and theory of two claims: labor's supposed "disadvantage" in bargaining over wages, and the "indeterminateness" of the wage rate. His history notes that unions had been the elite, aloof from and superior to the masses of working men and not caring much about them (see also, Hutt 1973, p. 26). A union's concerted activity raises members' wages only by excluding nonmembers from the particular labor market. Whether this raises or lowers the total wage payment depends on the elasticity of demand for this type of labor—which Hutt noted depends, in turn, on a welter of other elasticities. But the quantity of product will fall and its price rise: "The evil in labor monopolies lies not only in their driving the less fortunate to relatively badly paid occupations but also in their raising the cost of living to them as well"

(Hutt 1980, p. 13). The principal "exploitation" is through higher prices of consumer goods, and "the greater part of the demand for consumers' goods is exercised by relatively poor people" (Hutt 1980, p. 73).

The belief that unionized labor can exploit capital dies hard. Hutt noted that surely capital can be exploited in the short run. Indeed, there is no more "sitting duck" than a producer who has sunk huge sums into highly specific capital goods. But using an argument like that of "rational expectations," Hutt reasoned in 1930 that "if it were really normal for labor to exploit capital invested in [a particular] class of undertaking, the result would be that less would be invested in this class" (Hutt 1980, p. 62). Investors will look for risk-adjusted returns, and among the risks will be that of the strike. Pre-risk yields on capital invested in different ways will correspond in a direct relationship, and quantities invested in an indirect fashion, to the *ex ante* risk and seriousness of strike. In 1973 he applied the same argument to *human* capital: "The volume of labor which will come forward to be trained for or otherwise become attached to any occupation in which (in the light of past experience) labor appears liable to 'exploitation,' will be reduced to the level at which the prospective long-term benefits are equated with the prospective benefits from training and employment in other occupations" (Hutt 1973, p. 5; all italicized in the original).

Arguing that the "*fear* of strikes inflicts far greater damage on the economic system than actual strikes" (Hutt 1973, p. vii, 1980, p. xviii), Hutt maintained that the result of the political acceptability of the strike is that the strike-threat is an ever-present "contrived" cost of doing business.

The harm that the strike-threat wreaks is often not evident in the unemployment statistics, but results from a pattern of resource use that is not optimal at dealing with "natural scarcity." This problem of "diverted resources" (perhaps better known as disguised unemployment) affects both capital and labor. The existence of this type of unemployment is not obvious, but the welfare of all of us, perhaps especially the poor, is lower than it could be. Hutt's position reflects an appreciation of the Austrian concept of the capital structure and the significance of patterns and types of capital good and labor. Comparing the second and first editions of *The Theory of Collective Bargaining*, Hutt identified as a "major improvement" "the emphasis I now place on the *composition* of the assets stock and the composition of the stock of complementary assimilated knowledge and skills (in reaction to prospective strike-threat depredations" [Hutt 1980, p. xviii]).

Hutt's analysis of the effects on standards of living of "wage-multiplying assets" and their increasing specificity are superb. His case that the strike-threat reduces welfare, despite the impossibility of quantifying it, is well made. But his conclusion that this warrants outlawing the threat is utilitarian. Without some form of contract, the agreeing among a group of skilled workers to withhold their labor unless paid nearly the whole value of the product violates neither capitalists' nor consumers' rights. A carefully prepared contract can, in principle, reduce the risk of becoming dependent on one employer or employee; without it, the risk is a cost of the increased productivity of specificity.

The enforcement of the antitrust laws is the only major issue on which I—as I believe most other Austrians—disagree with Hutt. To advocate the use of government to prevent actions that violate no rights opens a Pandora's Box.[10] Hutt's heartfelt concern for those of middle and lower incomes may, unfortunately, have made him a victim of "power-thought," an enemy of "rational-thought" of which he warns us in 1936 (Hutt 1936, p. 52 *et passim*).

Money, Macroeconomics, and the Influence of Keynes

Most economists who began their careers around 1930 were profoundly affected by the profession's spectacular embracing of John Maynard Keynes's *General Theory*. Like Hayek, Marget, and Henry Hazlitt, Hutt had read widely and had developed a respect for the monetary economics that had been developed by Hume, Say, Thornton, Wicksell, Mises, and others. "In my judgment," he wrote, "ever since the remarkable contributions of Locke and Hume, monetary theory has been one of the least unsatisfactory branches of economics" (Hutt 1963, p. 87).[11] A brief study of Hutt's interpretation of pre-Keynesian monetary theory will help us to understand his reaction to the *General Theory*.

Pre-Keynesian monetary theory, as Hutt saw it, recognized that the preferences of individuals in an economy are linked by their understanding that the use of money and markets can further their ends. Presupposing that individuals know something about physical reality, markets produce money prices, quantities, and production

[10]As I recall some of our conversations during the mid 1970s, Hutt also supported legislation against libel and slander, largely out of sympathy for the victim. Since one's reputation consists of others' attitudes, it is doubtful that such legislation can find support in natural rights. See Rothbard 1978, pp. 95–96.

[11]The text has "even" rather than "ever," which apparently was a typographical error. It was corrected in Hutt 1979, p. 56.

techniques that are determined by individuals' preferences for different goods, leisure, time, and liquidity. Anyone who cares to can use these simple money prices to compute relative prices, rates of interest, and a price level. But these constructs are all derivative from particular money prices.

Neither he nor other pre-Keynesian writers considered prices to be "perfectly flexible" (Hutt 1979, p. 77).[12] If that phrase requires traders instantly to identify the equilibria implicit in a new set of preferences, and to reprice just as instantly, it verges on the nonsensical. When a trader is still unconvinced that preferences have turned against him, he may prefer some combination of adjustment in quantity and in price. This quantity adjustment is the conventional explanation of unemployment. Hutt properly identified it as a natural part of the search for information, and called it "pseudo-idleness" (Hutt 1977, p. 83). The combination of changes in price and the disutility of "pseudo-idleness" provides the entrepreneurial incentive and information required for the redirection of resources. Although significant *changes* in either time or liquidity preferences might produce periods of unusually high "pseudo-idleness" (now called frictional or structural unemployment), Hutt repeatedly emphasized that no particular set of preferences —no *level* of time or liquidity preference—was inconsistent with full employment: "*there are no economic ends, and no entrepreneurially chosen means which are incompatible with 'full employment'*" (Hutt 1963, p. 79 [italics Hutt's]; also, pp. 24, 231, and elsewhere).

Hutt respected the gold standard for achieving a stable level of prices, and considered it the obligation of a monetary authority under more "modern" systems to maintain general price stability. Monetary expansion more rapid than the required rate could, of course, affect the market rate of interest and, by falsifying the information provided by the "uninflated" pattern of prices, increase employment and real output. Hutt noted that this had been understood as long ago as Hume; certainly Thornton and Wicksell made much of it. But it had been considered a very poor and costly—socially impoverishing—way of dealing with discoordination in the pattern of prices. Better to address institutional rigidities directly—say, by applying anti-trust legislation vigorously to both business and labor and outlawing the strike-threat.

[12]Hutt used the phrase "perfect price flexibility" as "the absence of money illusion" (Hutt 1979, p. 147), a meaning different from that below.

Idle Resources and Unemployment

Apart from a few comments quickly inserted into *Economists and the Public* (Hutt 1936, pp. 245–47) as both it and *The General Theory* were in press, Hutt's first direct response to Keynes was in the remarkable *The Theory of Idle Resources* ([1939] 1977).

The work's principal point was that we must be cautious in the conclusions that we draw from the observation that some resource is—or is not—apparently engaged in some kind of productive activity.[13] Hutt reasoned that by examining the *process* that determines whether a machine or person is either "working" or "sitting," one can evaluate the economic function of the activity in which the resource is engaged. Only by exploring the causal process behind the apparent "idleness" or production, he insisted, can one judge whether it is a sign of the market's proper functioning or whether it poses a problem that deliberate government policy might help to resolve.

This is not the place for a full-scale analysis of *Idle Resources*, but a brief description of Hutt's system of classifications of idleness will convey some of its flavor. It reflects those aspects of Hutt's work with which most Austrians would agree, as well as a few with which many would differ.

Although Hutt's first chapter is entitled "Definition of Idleness," and its Section 3 is "The necessity of definition," I can find no clearly stated expression of the meaning of "idleness." The chapter is, instead, a plea for consideration of different causes or types of idleness, and a fine (though brief) argument that it cannot be quantified (Hutt 1977, pp. 49–50). One must *infer* a general meaning from Hutt's detailed classification and from a knowledge of the rest of his works.

A resource is "valueless" if the sum of the *competitive* prices of its complementary inputs exceeds the price of the product. (If the sum exceeds the product price only because the other inputs are "monopolistically" priced, then Hutt would probably classify the resource as "enforced idleness." He was, as we have noted above, a supporter of the general goal of antitrust as applied to both business and labor.) As one might expect, most of the book deals with *valuable* resources.

The important category of "pseudo-idleness" embraces humans who are engaged in job search, education, or "productive consumption," and

[13] Arnold Plant's review noted the importance of the book: "For there is a widespread and growing determination to seek out the idle resources in our economic system and to set them to work; a determination which is surely praiseworthy so long as we recognize idleness when we see it, and in our anxiety to abolish it do not confuse with it many other things which it is even more vital to preserve" (Plant 1940, p. 199).

physical capital goods that are unused for certain reasons.[14] "Preferred idleness" includes humans who, though excluded from certain occupations by legislation and/or union activity that seeks monopoly rent, elect not to work elsewhere. "Participating idleness" is Hutt's general term for resources that are idle to gain monopoly rent; if they have no value in other employments, they constitute "pure withheld capacity" or (if enforced by legislation and/or union activity) "pure enforced idleness."

In this and later works, Hutt properly assigned great significance to the problem of "diverted resources," normally called "disguised unemployment" when applied to labor. Although these resources appear to be productively engaged, their employment is clearly "suboptimal" if it is the result of some kind of distortion or deviation from a free and competitive system. Hutt discussed, also, "aggressive idleness" (resources held back for the purpose of "predatory pricing"), "strike idleness," and a few other subsidiary classifications.

It is difficult to follow all of the qualifications and interconnections involved in Hutt's system of "at least six" (according to him) or ten (according to me) classifications of "idleness."[15] What is significant about the work is not the disagreement that one might have about Hutt's interpretation of a "free" market (see above, "Freedom, Government, and the Market"), but rather the delightfully insightful analysis of *process* that characterizes *Idle Resources* (particularly with its 1977 addenda).

The ability of unanticipated monetary expansion to reduce some measure of observable unemployment has been acknowledged for centuries. To Hutt, however, its primary effect was to draw resources out of productive "pseudo-idleness" by cutting short the process of search for employment that best satisfied "uninflated" demands. Perhaps acknowledging the popular belief that the word "unemployment" implies some kind of failure or problem, he suggested that we change the way we think about an individual who (in modern terms) is "frictionally" or "structurally" unemployed. His situation has "been mistaken for unemployment," Hutt wrote. "When *actively* searching for work, the situation is that he is really investing in himself by working on his own account without immediate remuneration. He is prospecting" (Hutt 1977, p. 83). Later he explained that he feels "that

[14]Hutt applied this concept of "pseudo-idleness" to cash balances, refuting those who associated the term "idle" with cash balances, in his respected "The Yield from Money Held" (Hutt 1956).

[15]I once prepared a flow chart, with boxes and circles and connecting arrows in the style of a computer programmer's layout, of Hutt's definitional system. It seems to be of some help in keeping the linkages straight (Egger 1980, p. 17).

the process [of job search] is productive employment rather than 'a productive way in which to use leisure'" (Hutt 1977, p. 126), as it had been described elsewhere.

Even readers who prefer to resist Hutt's implicit advice[16] to redefine frictional and structural unemployment as "employment" can accept his point that—given the perennial change of a dynamic free market and the "imperfections" of information—there is a clear sense in which these resources are, indeed, being used "optimally." Hutt had an abiding confidence in the process of free-market pricing to discover and promote patterns of resource use that best satisfy consumer demands. The power of deliberate policy to bring about this pattern of resource use (human and physical) was limited by the central planner's inability to obtain, and lack of incentive to act upon, the specific knowledge of individual preferences that would emerge from the market process.[17]

What the use of stimulative monetary policy *could* achieve, along with its immediate goal of a reduction in observable measures of unemployment, was "diverted resources"—the channeling of human and physical resources out of the search process and into occupations different from those in which it would have culminated. Warning of this problem, Hutt wrote:

> Superficially, manifestation of the disease in 'sub-optimal employment' seems to be the least harmful form. In reality, we are about to suggest, it is a symptom of the most malignant consequence of impoverishing discoordination. (Hutt 1977, p. 30)

and that:

> But we propose to argue further that the third, relatively *inconspicuous* and *ultimate* manifestation of the disease, namely, the employment of men and assets in sub-optimal activities, is even more detrimental to society; for it mitigates the pains of inflation as well as reduces the conspicuous idleness of human and physical resources. (Hutt 1977, p. 32)

The great detriment of the Keynesian emphasis on aggregate demand, and "employment" (or unemployment) conceived as an aggregate, was

[16]There is a clear possibility, here, of what Leland Yeager has called "the 'Austrian vice'—disposing of substantive issues or reaching ostensibly substantive conclusions by mere verbal maneuvering" (Yeager 1988, p. 209).

[17]"Yet officials not only cannot have the necessary detailed awareness which market signals provide; but most important, they cannot be caused to lose property through error nor be rewarded by the acquisition of property through success" (Hutt 1979, p. 76; italics Hutt).

its simplistic promotion of policies directed only toward these aggregates. Hutt's point that the "demand" so stimulated[18] was almost certain to "divert resources" from the employments consistent with individuals' real ("uninflated") preferences. His position is consistent with, though broader than, the Austrian theory of the business cycle.[19]

Price Flexibility as Recovery Policy

Hutt never wavered from his principle that the observed unemployment of labor and capital was due to the "mispricing" of particular goods. According to this thoroughly Austrian, pre-Keynesian "classical," Say's Law position, "*[t]he disease is discoordination of the economic system* caused through defects in the administration of the pricing mechanism" (Hutt 1977, p. 29), and the only truly effective remedy was for policymakers to eliminate every institutionalized barrier to price flexibility. Hutt's position is likely to be identified by the "classical" or Austrian scholar as courageous and principled, worthy of admiration and gratitude. No economist who is familiar with the powerful forces against which Hutt stood could suggest that this respect be even partially contingent upon complete agreement with his interpretation of "defects."[20]

The Great Depression of the 1930s posed a severe test to a position like Hutt's. It is interesting to compare his position with the policy advice of the better-known Ludwig Lachmann. Lachmann, while justly respected as one of the great Austrian economists, always perceived considerably more virtue in Keynes than did any other Austrian. Since Hutt shared much with Lachmann and the Austrians, but devoted most of his career to debunking Keynes, a comparison of their stories about the early years of the Great Depression is intriguing.

During the 1920s, Britain's persistently high unemployment had convinced Keynes that the institutionalized sources of nominal-wage rigidity were invincible. He concluded, in opposition to the dominant "Treasury View," that only a forced increase in demand—in the form

[18]I believe he would have called it mere "money-spending power." His Say's Law perspective led him to equate the *demanding* of one real good with the *supplying* of another (though usually, of course, with the intermediary of money).

[19]For a further discussion, substantially in the spirit of Hutt's work, of unemployed resources and the ability of macroeconomic policy to facilitate their use, see Egger (1992).

[20]For my own disagreement, see the discussion of antitrust and the voluntary withholding of labor services in the section on "Freedom, Government, and Market," of this paper. Hutt also considered the monetary authorities' failure to stabilize the level of prices to be a "defect" in most cases; see below.

of public works projects—could cure the malaise. Keynes's argument, however, left the "classical" *theory* intact. It was to prove the "classical" theory wrong, to prove that capitalism would be plagued by persistent unemployment even if institutional price rigidities were snapped and nominal prices and wages were freely flexible, that Keynes began in the late 1920s to develop the argument of *The General Theory*.

Not everyone was convinced. In a 1977 interview, Ludwig Lachmann recalled:

> two different letters to the *London Times* . . . appeared in October, 1932. . . . In one of them, Keynes and some Cambridge economists who were not, in general, his friends, like Pigou and Dennis Robertson, demanded that the government should take steps against unemployment. And three days later, Hayek, Robbins and Arnold Plant sent another letter saying that anything the government did by way of public works or similar methods would only make things worse and would not have the effect that Keynes claimed it would have. That is to say, the "Austrians" seemed to be committed to a policy of continuous deflation whatever happened. (Lachmann 1977, p. 2)

Arnold Plant had been one of Hutt's professors, and Hutt's later writings—like the 1939 *Idle Resources*—suggest his sympathy with the letter of Hayek, Robbins, and Plant. It is a little tougher, though, to identify Hutt with Lachmann's interpretation about "deflation," because—as we shall see—Hutt believed that, in most cases, monetary policy should stabilize the general level of prices. But he also was convinced that if the British government had acted quickly to break her economy's severe and destabilizing institutionalized price rigidities, no such deflation would have occurred.[21]

Ludwig Lachmann admired much about the Austrian theory of the business cycle (Egger 1986), and his 1956 work (Lachmann 1978) is the most advanced discussion of the Austrian theory of capital that is available. It is likely, however, that he disagreed with Hutt about the ability of free-market repricing to deal satisfactorily with the problems of the early 1930s.

I have been unable to draw a conclusion stronger than this, because Lachmann respected pricing and Hutt advocated (in some

[21]"In my judgment, however, the political obstacles were not insurmountable in Britain in 1931" (Hutt 1979, p. 45, n.17). "*In my judgment* there is not the slightest doubt that, in the absence of 'the sabotage of British industry' which Beatrice Webb (in those words) so deplored in 1931, Britain could have sailed to prosperity under free market discipline and the pre-1914 gold parity" (Hutt 1979, p. 63; italics Hutt's).

cases) monetary or fiscal stimulus. While Lachmann's recommendation for stimulus in the early '30s is relatively clear, the policy that Hutt recommended is not.

Lachmann adopted Hicks's terms, differentiating between "weak" (consumption-led) booms amenable to Keynesian analysis, and "strong" (investment-led) booms that fit the Austrian mold. He identified the American economy of the 1920s as a "weak" boom (Lachmann 1978, p. 113) and argued that "capital regrouping by itself [as a rule will not] suffice to overcome the situation following the end of a weak boom . . . and there may be much scope for the Keynesian nostrums. No doubt such an underconsumption crisis, due to a flagging 'effective demand' can be at least mitigated by increasing this demand" (Lachmann 1978, p. 119). "[T]here is danger," he wrote further, "that such an underconsumption crisis may degenerate into a cumulative depression. If so, a budget deficit may help" (Lachmann 1978, pp. 125–26). His principal concern, "capital regrouping," was the way in which capital goods were used; since they are reshuffled in response to price changes, I interpret his statement as disputing the efficacy of repricing as a cure for the collapse of a "weak" boom.

Price flexibility fared much better in Lachmann's remedy for the collapse of an investment-led "strong" boom, with which the Austrian theory deals. He recommended, in particular, that no attempt be made to hold the rate of interest down (Lachmann 1978, p. 124). But his *laissez-faire* recommendation was sharply qualified. Correctly noting that "[a]ny sudden and unexpected change in the 'real situation' will probably affect the demand for and the velocity of circulation of money" (Lachmann 1978, 119), Lachmann observed that "where the banks are involved . . . the danger of *secondary deflation* is always present. When that happens the 'recession' which succeeded the strong boom will turn into a 'depression,' a cumulative process of income contraction, as has often happened in the past. Of course it need not happen. But to avert the danger must always be the primary aim of monetary policy in a recession" (Lachmann 1978, p. 120).[22]

According to this analysis, the situation in the United States in the early 1930s would justify both fiscal (as the collapse of a "weak boom") and monetary (as a period of sharp drop in the money supply) stimulus. Lachmann's discussion of recovery policy left the flexibility

[22]A "secondary" deflation is a decrease in the velocity of circulation (an increase in the demand to hold cash balances) that results from speculation that a fall in prices initiated by a "primary" deflation will continue. It is the downward analog of the "flight into real goods." This "secondary inflation," or sharp increase in velocity, is induced by the expectation of a continuing "primary" monetary inflation.

of prices as an adequate remedy only in the case in which a "strong boom" ended with no attendant collapse of MV.

Other economists who share Lachmann's generally deep respect for the virtues of unhampered pricing agreed that the deflationary early 1930s posed a test that price flexibility could not meet. Nominal price fluctuations work well at providing information and incentive, argued Leijonhufvud (1973), but only if they are sufficiently small that prices remain within a "corridor" within which confidence in effective demand is not shaken, and that was not the case in the early '30s. In a recent apparent attempt both to explain the appeal of Keynesianism and rebut the "*laissez-faire*" (and Austrian) theory, Tyler Cowen (1989) based his case on quantitative historical data consisting of broad aggregates and averages.[23]

Professor Hutt discussed the "secondary depression" or "secondary deflation," like Lachmann's, but he also described a "purposeless deflation." I have not been able to discern clearly the relationship between these two categories of deflation. "Purposeless" identifies "deflation which is not a deliberately chosen means to an end, such as rectifying injustices in the distribution of income, or a determination to fulfill contractual convertibility obligations" (Hutt 1979, p. 229; 1963, pp. 125–26). Among those deflations that were not "purposeless," he used the apparent synonyms "corrective" (Hutt 1979, p. 70) and "rectifying" (Hutt 1979, p. 229, n. 24) to identify the collapse of an inflationary "cheap-money" boom. This was the bust or crash of Austrian and pre-Keynesian works, and it was "purposeful" in the sense of serving the clear, socially advantageous economic function of shaking out the distortions imposed by the preceding inflation.

A "purposeless deflation" offered no such advantages, and in fact imposed distortions of its own, and Hutt warranted that in "rare circumstances . . . credit expansion may be justified":

> In the purely imaginary case in which an expansion of MV merely reverses a former *purposeless deflation*, it may *restore prices* in the

[23]I am not sure what Cowen's goal was. One can accept his piece as a partial explanation for the popularity of Keynesianism. Cowen has a thorough knowledge of Austrian literature and understanding of its method. It is difficult, therefore, to believe that he had even the slightest intention that his comment might serve as a refutation of the theory of the *laissez-faire* remedy. Gene Smiley (1991) offered an extended critique of Cowen's argument, and in his rejoinder Cowen (1991, p. 115) noted that his "original essay was (deliberately) ambiguous on whether free-market economics had not explained the Depression satisfactorily or whether free-market economics *could* not explain the Depression." Since the second subsumes the first, Cowen believes *at least* that "free-market economics" has not yet "explained the Depression."

> industries which did not withhold capacity and *restore outputs* in industries which did withhold capacity. (Hutt 1979, p. 229)

He further claimed that "I cannot think of any non-Keynesian economist who would deny the possibility that there have been times in which deflations have been misconceived or ill-advised" (Hutt 1979, p. 229).

Hutt admitted of the possibility of "secondary deflation," but maintained that "as we have seen, speculative demand for money . . . arises when current costs or prices are higher than anticipated costs or prices, while *the speculation assists correctly discerned policy*" (Hutt 1979, p. 277). He argued that the need for a "secondary" deflation arises only from "*the unstable rigidities*" (Hutt 1979, p. 277) that interfere with the smooth repricing process. "If speculative demand for money accompanies the downward adjustment of wage rates and it is not offset by credit expansion, a rectifying deflation must be in progress" (Hutt 1979, pp. 277–78).

Was the 25 per cent drop in the M1 money supply of the United States, between 1929 and 1932, responsible for what Hutt called a "purposeless" deflation? Did it constitute a wild overshoot, going far beyond the corrective, rectifying process to inflict positive damage of its own?

Lachmann, Marget, and many others believed so.[24] As for Hutt, most of his discussions focus on the British rather than the American economy during the early 1930s, but he did concede that "[t]here are several non-Keynesian economists (notably Milton Friedman and Clark Warburton) who interpret the United States deflation of 1930 to 1933 in this light" (Hutt 1979, p. 229; also, p. 204). That was not much of a concession, and he may not have agreed.

In his *Keynesianism*, Hutt maintained:

> What "sound finance" *did* do in the pre-Keynesian era was to create every incentive to reprice services and products the sale of which was being held up, as well as to create a strong social motive to eradicate practices which reduced the flow of uninflated income. In the private sphere, the pressures were fairly successful, and had it not been for contrary action by the State, they could, I believe, have rescued the [British] economy—without inflation—from the great depression. (Hutt 1963, p. 42)[25]

[24]Marget was one of the twenty-four signatories of the "Harris Lecture Telegram," in January 1932, urging President Hoover to adopt a number of easier-money policies. Others were Irving Fisher, Lloyd Mints, and Henry Simons. The Austrian economist Gottfried Haberler, who delivered one of the Harris lectures, was not among those who signed the telegram. See Wright (1932).

[25]This wording is repeated with "British" and capitalized "Great Depression"—in Hutt 1979, pp. 124–25.

After noting, a bit later, that the Macmillan Report identified the great depression as "monetary" in nature "because monetary policy had failed to solve the problems caused by 'a conjunction of highly intractable nonmonetary phenomena'" (Hutt 1963, p. 80; 1979, p. 166), Hutt pointedly asked, in italics: "*But why should monetary policy be expected to solve such problems?*" He noted that "[w]e are abusing any monetary system if we try to use it to rectify nonmonetary discoordination" (Hutt 1963, p. 80).

This was a theme that remained strong in his writings throughout his career. Monetary policy (which, as Hutt used the phrase, included fiscal policy; he correctly saw no substantive difference[26]) is ill-suited as a remedy for an incorrect, discoordinated, pattern of relative prices, yet it is just such a pattern that particularly characterizes a depression. There is *never* such a problem as "insufficient aggregate demand," Hutt argued, so "stimulating it" is always the wrong answer.

Critics of a repricing policy—e.g., Cowen, cited above—associate it with "deflation," but a general reduction of prices and wages has *never* been the point.[27] "[P]re-Keynesian policy did *not* rely on changes in 'the general level' of money wages and prices," Hutt wrote (Hutt 1979, p. 159). The issue, for him and for most Austrian economists, has been a rearrangement of particular money wages and prices, changes in the structure of relative wages and prices. It is hardly coincidence, of course, that in a period of widespread unemployment most of the adjustments of nominal prices and wages happen to be downward.

[26]"It is important to explain that the term 'monetary policy,' as I use it, embraces 'fiscal policy'; for virtually the only difference between the two is that the latter has a certain political advantage—it puts what Keynesians sometimes call 'newly created money' (that is, an addition to the number of money units) initially into the hands of government instead of into the hands of . . . individual borrowers" (Hutt 1979, p. 184).

[27]See, for example, Hayek's observations in Shenoy (1972, pp. 109–10). Discussing one of the most entrenched cases of nominal rigidity, Britain of the 1920s, Hayek concluded:

> No doubt the situation then meant that full employment required that some real wages, perhaps those of many groups of workers, would have to be reduced from the position to which they had been raised by deflation. But nobody can say whether this would necessarily have meant a fall in the general level of *all* real wages. The adjustment of the structure of industry to the new condition adjustments in wages would have induced might have made this unnecessary. But, unfortunately, the *fashionable* macroeconomic emphasis on the *average* level of wages prevented this possibility from being seriously considered at the time.

Shenoy does not clearly date Hayek's comments but identifies them as from the draft of a lecture ("Competition as a Discovery Procedure") delivered in 1968 and later reprinted in Hayek (1978).

But the downward slide of *levels* or *averages* is incidental to the Austrian adjustment, not the essence of it. The only defense of a falling level of nominal prices that accompanies the reshuffling of relative prices is that there is no way to *prevent* such a decline without interfering with the process of the efficient restructuring of relative prices and wages.

Despite the many respects in which Hutt's perspective may appeal to Austrians, for a couple of reasons one must be a bit cautious before categorizing him.[28]

The first reason is that his concept of a "free market" (and, therefore, *laissez faire*) not only permitted but *required* government action against collusion (of both business and labor). If it were clear that the pattern of prices obtaining on the eve of a depression was the result of the exercise of such "private coercion," Hutt had no qualms about using the force of government to help to break the initial rigidities. "[O]ne thing *is* clear," he wrote. "There has never been a case for a government *to overrule* the market. Yet there is a case for the collective overruling of a privately contrived overruling!" (Hutt 1979, pp. 175, 176).

In his 1979 revision of *Keynesianism*, he specifically addressed the question "What do *you* recommend should be done about the restoration of 'general activity' in a depression" (Hutt 1979, p. 167)? His 10-page discussion may puzzle and dismay those who seek to identify him with *laissez faire* in its natural-rights sense, since it describes a "Special Authority" (Hutt 1979, pp. 171–72) with—among other things—the power to force wage reductions in industries where it is apparent that prior collective bargaining had driven them above market-clearing levels. (The reductions would stop when the affected industries reported that further reductions would not permit them to retain their workers.)

The critical reader must recognize that, to Hutt, the snapping of collusively established prices is hardly different from, say, the removal of a government-enforced price support on an agricultural commodity or of a rent ceiling. Furthermore, the practical success of collusive "withheld capacity" and above-competitive prices, over a number of years, usually *does* require the intervention of legislation that violates individuals' rights. Hutt did not insist that we accept his specific method of resolving this problem. But the reader should

[28]I note (without further comment) that there is disagreement, among economists usually identified with the Austrian school, about the nature of a proper monetary system—the dominant contenders are of a gold (or other commodity) standard, and "free banking."

be somewhat discomforted if he is inclined both to be harshly critical of Hutt and to believe that voluntary collusion doesn't work.

A second reason for caution about categorizing Hutt is his advocacy of the policy goal of a stable level of prices. He apparently became more convinced of the desirability of this goal between his 1963 *Keynesianism* and its 1979 revision, *The Keynesian Episode*; a page-by-page comparison often shows the insertion of new paragraphs emphasizing the stability of "M_r", "the aggregate value of money in 'real terms'" (Hutt 1979, p. 191), which seems to be simply M/P (or its quantity-equation equivalent, T/V).[29] He advocated a gold standard (e.g., Hutt 1979, p. 172), but as long as an institution like the Federal Reserve System continues to exist he believed that its mandate should be general price stability. "[I]f the value of the money unit *is* to be maintained at a *defined and constant value*," he wrote, "monetary policy will *have* to be flexible and the nominal money supply must rise in proportion to the flow of services" (Hutt 1979, p. 174).

Despite all of his emphasis on the snapping of institutionalized price rigidities and the abilities of competitive repricing to achieve coordination, Hutt was most distressed at *Keynesianism* reviewer David McCord Wright's characterization of him:

> Where I failed most seriously, however, was in leaving my critic with the impression that I am "a hard-shell, sound money, and price-flexibility man *who would never increase M or certainly not MV*" (my italics). Wright did perceive that some of my "qualifications" conflicted with any such judgment. But a large part of what I was trying to communicate was *exactly the opposite*—to show that, whereas in Keynes's equations M was a constant, I regarded it as a policy variable. (Hutt 1979, p.17)

Bringing this policy goal to bear on the question of the "secondary deflation," Hutt noted that market-clearing repricing is associated with deflation only "on the assumption that the increase in real income is confronted with monetary rigidity. But why *should* we always assume monetary rigidity" (Hutt 1979, p. 275)? He argued that when monetary policy either consciously aims at, or simply passively permits, a general rise or fall in the level of prices, "*the whole price system is immediately thrown out of coordination*" (Hutt

[29]"[In *Keynesianism*] I regarded it [M, the nominal money supply] as a policy variable. I hope that the changes that I have made to parallel passages in the present text demonstrate this beyond all possible doubt" (Hutt 1979, p. 17).

1979, p. 278). Although a deflationary repricing process will eventually shuffle things around at a lower level of prices, he found that to be "crude and wasteful":

> It is really superfluous, I feel, to have given as much attention as I have to so crude and wasteful a method of curbing secondary inflation [*sic*: deflation]; for a rectifying credit expansion is always possible. There is never any good reason why central banks cannot control the magnitude M so that MV is in constant relation to T. (Hutt 1979, p. 278)

The Austrian theory of the business cycle, with which Hutt was thoroughly familiar, provides a reason (and maybe a "good" one): it is impossible to increase M without affecting relative prices, a process that necessarily interferes with the market's efficient rearrangement of them. (Austrian business-cycle theory is built on the assumption that monetary policy is conducted in such a way that the particular relative prices whose work is systematically thwarted are those involving the rate of interest.) Hutt was not an enthusiastic supporter of the Austrian theory of the business cycle, although he appreciated its general approach.[30]

Evidently he believed that monetary policy could be conducted to minimize its effect on relative prices, while preventing the "crude and wasteful" process of price deflation by stabilizing the general level of prices. The benefits for long-range planning of a stable level of prices may have more than offset, to Hutt, any incidental and essentially random effects that a properly conducted monetary policy would have on relative prices.

So what are we to make of Hutt's stand on "secondary deflation," price flexibility, and monetary policy? What are the differences (once we get beneath the anti-Keynesian vs. Keynesian terminology) between his position and Lachmann's? As even those who deeply respect his work have come to expect, he does not make the drawing of a clear conclusion easy.

First and foremost, Hutt explicitly stated his conviction that a sufficiently courageous government could have snapped the "unstable price rigidities" for which (in Britain, at least) coercive union

[30]See Hutt (1936, p. 372) and (1979, pp. 148–49) for some comments. Considering the scope of this work, there is very little about the Austrian theory of the business cycle. He took a Wicksellian approach (or, more accurately, one of the several distinct Wicksellian approaches) to the "natural rate," identifying it with that rate of interest that corresponded to a stable general level of prices. If an increase or decrease in productivity produces a fall or rise in the price level, Hutt argues, unless there is a change in M "market interest . . . will diverge from the natural level" (Hutt 1979, p. 197).

activity was largely responsible, and that if this action had been taken no significant decline in the general level of prices would have occurred.[31] His analysis of Say's Law explains that a move toward equilibrium of the price in one industry increases the output (and, probably, employment) in that industry. This, in turn, stimulates the demands—in a natural and healthy way—for other ("noncompeting") goods, reducing the size and ameliorating the effects of the price adjustments necessary in their markets. Sufficiently early and vigorous repricing in just a couple of major industries might well have clipped off any general deflationary pressures.

Second, however, is Hutt's evident conviction that once a "secondary deflation" (at least one that is "purposeless") has begun, it is the foremost task of the monetary authority to stop this "crude and wasteful" process with a "rectifying credit expansion." Such advice seems to place him in the company of many, including Lachmann, whose dictum that avoiding secondary deflation "must always be the primary aim of monetary policy in a recession" (Lachmann 1978, p. 120) could just as well have come from the pen of Hutt. Like the Austrians, he identified its cause as the distortions produced by a preceding inflation, and he appears to have allowed for ("purposeful") "corrective" deflations (some of which might even be "secondary") that he would not offset with monetary stimulus (Hutt 1979, pp. 277–78). But when a deflation was "purposeless," the humane prescription was a "rectifying" monetary expansion.

Third, although he emphasized "price coordination" and wrote as if "purposeless deflation" was very rare, his clearly and frequently stated monetary goal of general price stability stirs up the issue a little more. Hutt is properly respected for his work on the coordinating effect of the repricing of particular goods; this position is much less radical if a stable price level is being taken for granted.

In summary of this section, I think the general reputation of Professor Hutt as a courageous advocate of price flexibility is correct and dominating, and it is largely that which will *and should* appeal to Austrian economists. But it misstates Hutt's position (and he would not appreciate that) to infer that in an economy confronting a sharp rise in the demand for cash balances, he would place the whole burden of adjustment on individual repricing decisions. He shared with others the belief that resource allocation through repricing worked best in an environment of a stable price level.

[31]See Hutt (1979, pp. 63, 64, 272–73).

A Few Observations on Keynes

Today we can only imagine the shock and dismay that monetary scholars like Hutt and Marget experienced at the popularity of the *General Theory*. Hutt wrote, "Keynes's confidence, eloquence and reputation—not his reasoning, which at first left me bewildered—dealt the hardest blow to my own intellectual confidence which it has ever received" (Hutt 1963, p. 4).[32] He worked hard on the *General Theory*, but found it so fraught with confusion and error that he hardly knew where to start. "Where he was right," Hutt concluded, "he was not original, and . . . where he was original he was wrong" (Hutt 1963, p. 11).[33]

Like most interpreters of the *General Theory*, Hutt identified the key element as the assumption of price rigidity. (Although Keynes discussed nominal rigidity, his great effort was to demonstrate that capitalism would be plagued by rigid relative prices even if nominal prices were perfectly flexible (Egger 1989, pp. 446, 448–50).) Surely, if something keeps relative prices from changing then only a specific pattern of preferences will be consistent with full employment, and a set of preferences (e.g., for time or liquidity) that is inconsistent with these rigid relative prices will produce lasting unemployment. The government can either force the expression of preferences that are consistent with the rigid prices (through the taxation and spending that constitute fiscal policy) or render the price rigidities ineffective by the deliberate distortions resulting from inflationary monetary policy.

Hutt's conclusion about the principal message of the *General Theory*, hidden among new terminology about multipliers and things, was that the effects of discoordinations caused by price rigidities could be concealed by increasing the supply of, or reducing the demand for, money. Hutt considered these insights to be among the oldest in monetary theory, but the whole of the Keynesian system seemed to be a contorted defense of their use.

The various spending "multipliers" functioned, Hutt demonstrated, only if they were accompanied by reduced demand for, or

[32]The impact on the well-read Marget of Keynes's brash dismissal of virtually all of his scholarly predecessors is evident in the Prefaces to the two volumes of Marget's *The Theory of Prices* (1938, 1942).

[33]Hutt noted that Henry Hazlitt wrote, about the same time, that "I could not find in it a single important doctrine that was both true and original." This judgment was not unique to Hutt and Hazlitt. Colander (1981, p. 7) attributed this—without further citation—to Frank Knight: "Keynes said some things that were new and some things that were true. Unfortunately the things that were new weren't true and the things that were true weren't new."

increased supply of, money. His brilliant chapter "The Acceleration Fallacy" (Hutt 1963, pp. 289–339) showed that the "accelerator" rests on a stock-flow confusion and an arbitrary specification of time period.[34]

But the fundamental confusions in Keynes's thinking, culminating in his false denial of Say's Law, were deep and conceptual. The modern student, imbued with the concepts of Keynes-inspired macroeconomics, will find it almost impossible to follow Hutt here. The Austrians—with their subjectivist, disaggregated approach and concern about "essentials"—are best equipped to appreciate Hutt's work.

Consumption, for example, is "the extermination of value (Say's definition)" (Hutt 1974, p. 13) and usually involves exchanging an asset for services (say, eating a can of beans). In no sense is it spending money, which is an exchange of one asset for another (buying another can). One generates income not by spending money but by creating productive services. These involve disutility, so they will be created (supplied) only for the purpose of demanding something whose value exceeds the disutility. It is not a matter of "supply creating demand" or vice versa; one can't do one without the other.

Some of the services might be consumed immediately by their creator (scratching one's chin), but the rest—unconsumed income—is at least temporarily *saved*. One cannot save *in general*, without those savings taking some specific form. Choosing that form is *investing*, the exchange of services for assets.

Rather than examine in detail Hutt's (1974) "rehabilitation of Say's Law," let us consider its principal effect on the typical undergraduate presentation of Keynesian macroeconomics.

If saving without investing is impossible, the whole Keynesian objection to Say's Law evaporates. The typical Keynesian story relies on different individuals doing the saving and investing, with some of them deciding to save while the others decide not to invest. I recall Hutt's exclamation, "How hopelessly wrong it all is!"[35]

The role of the rate of interest is a vital point on which Keynes was thoroughly confused. Hutt joined other "natural rate" writers in identifying it with individuals' time preferences. An individual would save, in the sense of increasing the relatively permanent level of his

[34]This chapter was dropped in the 1979 revision, because "the phenomenon plays so unimportant a role in Keynes's own theoretical system" (Hutt 1979, p. 7). Hutt's argument provided the inspiration for Peterson (1956), Rothbard (1970, pp. 759–64), and others.

[35]Hutt used this phrase occasionally; it appears, following a misinterpretation (by an American Keynesian) of Say's Law, in Hutt (1979, p. 154).

assets, only if he perceived the rate of return on available assets to exceed his own time preference. If nobody offered to borrow at a rate above his own time preference, and no asset that he could purchase himself (including additions to his own money balances) offered an implicit return in excess of it either, he simply would not increase his stock of assets. His preferred alternative would be to exchange his income services, through the intermediary of money, for assets (like the beans) whose services he would consume relatively quickly.

"There is *always* a 'demand for savings.' There are *always* 'investment outlets' or 'investment opportunities,'" Hutt wrote (Hutt 1963, p. 240), and it is probably his single most telling point against the general Keynesian system. There is no downsloping IS curve relating the rate of interest to the amount of output and employment. The rate of interest affects not the size but the composition of output, the time pattern of achievable future consumption, according to individuals' preferences.

Hutt pointed out that Keynes was able to develop an upsloping LM curve—a set of (interest rate, income) pairs at which the demand for and supply of money were equated—only because he confused liquidity and time preferences.[36] "He claimed that the determinants of the rate of interest are the supply of and demand for money (liquidity). Now, the intelligent tyro in economics jumps quite naturally to this kind of conclusion, which Keynes obviously thought he could make the keystone of his system" (Hutt 1963, p. 29).[37]

One of Hutt's best known arguments is that "the demand for money is not . . . a function of the absolute level of the rate of interest" (Hutt 1963, p. 106). A market rate of interest is implicit in the relationship between the price of assets and that of their services. A pure rise in time preference requires that the prices of assets fall and of their services rise. A pure rise in liquidity preference will reduce both asset and service prices, leaving their relationship unaltered.

Of Keynes's "opportunity cost" argument, Hutt maintained: "The extent to which people will sacrifice *pecuniary* interest in order to hold money is completely uninfluenced by the absolute level [of the rate of interest]; for a similar sacrifice has to be made in order to acquire or retain all other assets" (Hutt 1963, p. 106). This is—in part—a denial of the Keynesian dichotomization between the decision to save, and the decision to hold that savings in a particular form

[36]"[C]ertain mercantilist, Keynes-like, fallacies . . . such things as the confusion of saving-preference with liquidity-preference" (Hutt 1974, p. 7).

[37]In 1979, Keynes's position became that of "the intelligent novice" (Hutt 1979, p. 111).

(bonds or money): while the dichotomizing Keynesian naturally interprets explicit monetary interest as a cost of holding money, Hutt reminds us that it is really the cost of holding *anything except* bonds. Keynes's "speculative" reason for holding cash balances was more acceptable to Hutt, but was just an example of a combination of transaction costs and uncertainty about future prices—which itself was likely to have had monetary causes and, in any case, bears no necessary relation to the current level of interest.

All that was left of the Keynesian insights, after deleting these errors, was the thoroughly pre-Keynesian conclusion that a market system whose coordinating forces are hobbled by rigid prices would likely not employ resources fully, but that some obvious effects of those rigidities could be eliminated by monetary policy.

Late in Hutt's life, he was excited that others—particularly Clower, Leijonhufvud, and Yeager—seemed to express views that were importantly like his. The term "unemployment equilibrium" faded, to be replaced by the more satisfactory "unemployment disequilibrium." The problem became not that income services were not demanded, but that they were neither supplied nor demanded because of discoordinations in the pattern of relative prices. These advances seemed like an affirmation not only of his work, but of the pre-Keynesian monetary tradition he had striven so hard to uphold.

Conclusions

We feel that we understand another when his points seem consistent with our prior beliefs. The great difficulty that Hutt faced was that the concepts comprising the macroeconomic superstructure, in which—by now—so many have so much invested, are difficult to integrate with an understanding of how a money-using catallaxy functions. He believed that he had to go beneath them, to some kind of foundation on which we could all agree, and then construct almost a "parallel universe," a new (which he always insisted was old) conceptual structure adequate to the task.

His exposition is considerably less unfamiliar to those already well acquainted with the subjectivist analysis of catallactic processes. William Hutt was driven by his understanding that the market excels at producing and equitably distributing wealth. Economists could help, or at least not get in the way, only if they understood the functioning of a monetary catallaxy. Developing and conveying that understanding was Hutt's life work, and in it there is much of value that the well-read Austrian cannot afford to miss.

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Note

A Note On Jean-Baptiste Say and Carl Menger Regarding Value

Kenneth K. Sanders*

In this journal, an enlightening article appeared by Joseph T. Salerno (1988) concerning the neglect of the French liberal school in Anglo-American economics. The purpose of the present note is to reinforce a point contained therein. That point is: "The tradition [Smith-Say type approach to value theory] culminated in the work of F. B. W. Hermann who, starting from basic concepts formulated by Say, developed an approach to price theory 'emphasizing consumers' desires and incomes,' which came to serve later 'as the starting point of Menger's utility analysis'" (1988, p. 123).

Offered below, as evidence of an intellectual kinship on value between Say and Menger, is a citation from each. The quotation by Say is an excerpt from a letter that he wrote to Charles Robert Prinsep, the English translator of Say's *Treatise on Political Economy*. The letter is dated 1821.

> The costs of production are not the foundation of price; the foundation is found uniquely in the need that men experience for making use of the product. They consent to pay for making use of the product. They consent to pay the pains (the toils) or the price that the product costs, only by reason of the utility that it has. If this utility is great enough in order that the consumer consents to place on it the price which it costs, one makes it or else one acquires it from those who have made it; if its utility does not appear sufficient in order to be worth this expense, one does not create it, or one does not buy it if someone has had the folly of making it. I have need of a piece of cloth of a certain quality; this need determines me to employ 20 shillings for it; if its costs of production, or what you call *difficulty of attainment*, do not permit that one produce it at less than 25 shillings, I do not want it

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> any more; I would serve myself of another cloth; the difficulty which accompanies the possession of the first does not contribute to raise the price; it is not then a necessary *element* of its value, and when you reproach me in twenty places of not having expressed it thus, you reproach me of not having sustained a doctrine essentially false. What seems to me incontestable is only that the utility of things is the cause of the price that we place on them; but that this price would not be known to fall below the costs of production. When we present a vase under a fountain, it is not the rim of the vase which holds the water of which it is filled, but it is the rim of the vase which prevents the liquid from falling below a certain height. (Say 1833, pp. 144–46)

Similar sentiments were expressed by Menger in his *Principles of Economics* in 1871.

> The value an economizing individual attributes to a good is equal to the importance of the particular satisfaction that depends on his command of the good. There is no necessary and direct connection between the value of a good and whether, or in what quantities, labor and other goods of higher order were applied to its production. A non-economic good (a quantity of timber in a virgin forest, for example) does not attain value for men if large quantities of labor or other economic goods were applied to its production. Whether a diamond was found accidentally or was obtained from a diamond pit with the employment of a thousand days of labor is completely irrelevant for its value. In general, no one in practical life asks for the history of the origin of a good in estimating its value, but considers solely the services that the good will render him and which he would have to forgo if he did not have it at his command. Goods on which much labor has been expended often have no value, while others, on which little or no labor was expended, have a very high value. Goods on which much labor was expended and others on which little or no labor was expended are often of equal value to economizing men. The quantities of labor or of other means of production applied to its production cannot, therefore, be the determining factor in the value of a good. Comparison of the value of a good with the value of the means of production employed in its production does, of course, show whether and to what extent its production, an act of *past* human activity, was appropriate or economic. But the quantities of goods employed in the production of a good have neither a necessary nor a directly determining influence on its value. (Menger 1976, pp. 146–47)

In ending, a warning (and a plea) must be extended to Austrian economists—there is a danger, not of complete neglect of the French

liberal school, but of a lack of full use by Austrian economists of that tradition (Say in particular). Say presented a "mutual interdependence analysis of market processes" (Salerno 1988, p. 120) which is crystallized in his own Law of Markets. A *complete* understanding of Say's own Law of Markets, which is based on exchange and subjective value, would be of great theoretical and practical value to the Austrian school of economics. A reading is recommended of Say's *Cours Complet d'Économie Politique Pratique* (1828–1833). Also see Sanders (1990).

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Book Review

The Harvard Plan for Drugs
A Review of *Against Excess: Drug Policy for Results*. By Mark A. R. Kleiman. New York: Basic Books, 1992.

As the casualties from the war on drugs mount, the appeal for moderation in the title of Mark Kleiman's latest book on drug policy is most welcome. However, make no mistake about it, *this is no case for legalization*. Rather, the author makes a case for a technocratic solution to our drug-abuse and drug-policy problems. As the most recent and sophisticated defense of prohibition, it is worthwhile reading for everyone interested in drug policy. In view of the victory of the Clinton regime, *Against Excess* could serve as the blueprint of future drug policy.

This is the latest version of what I call the Harvard approach to drug policy—a hodge-podge of policies and programs designed to "rationalize" drug policy and to professionalize drug war management. While it has been said that Harvard hates America, I have found this simply not true. Harvard profits from America. What Harvard (not Kleiman) hates is that Americans still remember and still have some attachment to the Jeffersonian concept of self-government. It is this attachment and this concept that gets in Harvard's way of controlling and profiting from Americans through more government power and greater control over the individual's daily life. Not only is Kleiman's case for the drug war based on the lack of self government, his recommendations would create employment opportunities for yet another army of drug policy and law enforcement experts.

The basic Harvard argument on drug policy goes as follows: America is a liberal society; the liberal society relies on the self-government of individuals; drugs are different from other consumer goods in that drugs undermine the ability of drug takers to self govern and often create external harm for people who don't take drugs; therefore we need a special policy for drugs.

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However, not only are drugs different from other consumer goods but drugs differ from one another with respect to their effects and the harm that can occur from their abuse. As a result, the Harvard approach requires that each drug or group of drugs have a specially designed policy in order to minimize the costs of both drug abuse and drug policy.

Kleiman proposes, or rather endorses, the neo-prohibition of alcohol and tobacco that is sweeping this nation. Higher taxes, more regulations and restrictions, infringements on the right to free speech (advertising), and more government is the answer here. The benefits of alcohol, although widespread and well established by nearly a century of research and thousands of years of experience, are treated by Kleiman with skepticism—as if the latest research on the health benefits of alcohol was actually the first!

He accepts the neo-prohibitionist Gospel that the problems of fetal alcohol syndrome and second-hand smoke are highly significant when in the first case it has been blown out of proportion and in the second case it has yet to be scientifically verified. No doubt this proposal will be like sweet music (or fine red wine) to the army of bureaucrats, government researchers, and agencies that have been created and prospered from neo-prohibitionism.

Kleiman proposes to decriminalize marijuana. Marijuana would be highly taxed and regulated like alcohol and tobacco. This is the lone bone he throws to the supporters of legalization and will no doubt get some positive reception at *High Times* and N.O.R.M.L. I can sympathize with the author's insistence that public policy towards dangerous drugs convey a warning to consumers, but frankly the average purchaser of beer, wine, spirits, cigarettes, and freon knows that the average politician is collecting excessive excise taxes not out of concern for the consumers' health or environment, but out of concern for tax revenue. Nevertheless, this is a worthwhile section and I would also recommend Kleinmen's 1989 book on this subject, *Marijuana: Costs of Abuse, Costs of Control* (Westport, Conn.: Greenwood Press).

The author would continue the prohibition of narcotics, although attention would be shifted away from arrests and towards "inconveniencing" black-market participants. Drug-involved offenders would get free drug treatment and would be drug tested when on bail, probation, or parole. He also wants more government methadone maintenance, education, tighter controls on prescription drugs and federal control over treatment facilities. The clincher in Kleiman's program *against excess* is his recommendation for adding $20 billion to the war on drugs—a tripling of resources! Therefore, while Kleiman

is preaching for moderation in drug policy he is actually promoting a massive shift in resources, power, and rights away from the people to the central government. In his recent address to the Drug Policy Foundation, Nobel Laureate economist Milton Friedman warned us that the war on drugs was really a war against people by the government and that government is the problem. This important issue is completely neglected by Kleiman.

The conclusions and proposals in this book are based on the author's understanding of the perfectly rational consumer, an economic model that allows some economists to translate human action (however imperfectly) into mathematics. For Kleiman, it is this nearly perfect, rational consumer that is the prerequisite of the classical liberal society. The application of this model is both inappropriate and incorrect. First of all, the classical liberal society is not based on the methods of liberal welfare economists or on the presumption that all citizens are "rational" in all respects. Rather, it is based on the ideas of people who fought for freedom and the documents that represent their legacy such as the Magna Carta, the Declaration of Independence, the Articles of Confederation, and the Bill of Rights.

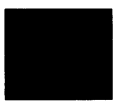
Second, the author does not fully understand the workings or limitations of the model. He notes that to have rational time preferences requires an individual to apply the same rate of discount to all decisions. His example of an irrational individual is one who is willing to lend money to a bank at an interest rate of 8 percent while at the same time borrowing money from the credit card company at an interest rate of 20 percent. Here he fails to realize that people also have liquidity preferences (the preference for cash on hand) as well as time preferences. An individual's liquidity preference will outweigh time preference under certain conditions, resulting in this very type of "irrational" action. The fact that individuals have limited information and have many different types of preferences (time, liquidity, leisure, risk, sex, etc.) makes it difficult, if not impossible, to describe any action as irrational in the typical economic sense.

One of my favorite pieces of "evidence" that Kleiman uses to support his contention that habit and addiction are stronger than the rational individual comes from a study based on personal interviews. A certain percentage of individuals regret having started various habits or for not quitting those habits. This evidence is pure after-the-factism (*post hoc* reasoning). Naturally, people will "regret" actions where most or all of the benefits have been received, but the costs have yet to be paid. Eating hot and spicy food, having unsafe sex, and buying on credit are just like smoking cigarettes or getting drunk—you get the benefits immediately, but you incur future costs.

It is human nature that we are willing (at the time of choice) to pay more later to get benefits now. If we are truly worried about time preferences and short time horizons, then the war on drugs is no answer. Prohibition destroys individual responsibility towards drugs and it is individual responsibility and maturity that instill a future orientation where drug abuse and other risky activities are avoided.

Kleiman has several remaining issues that undermine the viability of his policy recommendations. He is apparently worried that the costs drug abusers inflict on others would be greater under legalization, yet he seems unwilling to make users pay the costs themselves. In fact, he would offer *free* drug treatment and rehabilitation to all takers. (One might even suspect that the odds are good that Mr. Kleiman also supports some form of national health care system that would increase the "free rider" and "moral hazard" problems, thereby contributing to the irresponsible use of drugs.) He also bases his support for prohibition on the fact that the criminal justice system does not do a good enough job of preventing drug-related crime. Most informed observers, however, trace many of the problems in our criminal justice system to the burden and corruption placed on it by narcotics prohibition. Finally, I would note that even Mr. Kleiman realizes that only a small percentage of the population develops abuse problems with any specific drug and that we do not know what makes a given person have an abuse problem with a given drug. Why then does he recommend a nationwide policy that is oppressive, impersonal, and ineffective?

Mark Thornton
Auburn University



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Articles

Banning a Risky Product Cannot Improve Any Consumer's Welfare (Properly Understood), with Applications to FDA Testing Requirements

Robert Higgs

Neoclassical welfare economists maintain that consumers suffer when risky goods are supplied in an unregulated market. Consumers are said to possess imperfect information (Stiglitz 1988, pp. 78–79; Barr 1992, pp. 749–50) and limited ability to process complex information. Moreover, because information is presumed to be a public good, markets are *ipso facto* supposed to produce and disseminate a suboptimal amount of information (Stiglitz 1988, p. 79; Greer 1993, p. 416; Scherer 1993, pp. 98–99, 101). Under these conditions, neoclassical welfare economists maintain, consumers make choices that cause them to be worse off than they would be, say, if a regulator constrained their choices by banning very risky products from the market. The alleged market failure may stem from outright consumer ignorance, but it occurs even if consumers conduct what seems to them an optimal search for information. Given their inability to process complex information and the public-good problem with respect to information, inefficient risk bearing occurs (Greer 1993, pp. 413–14), as consumers bear more risk than they would choose to bear if they could process all information flawlessly and the public-good problem with respect to information creation and dissemination had been solved.

Some analysts have noted, however, that U.S. regulatory agencies

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such as the Food and Drug Administration, the Consumer Product Safety Commission, and the Department of Transportation, which enforce product bans, face incentives of the sort recognized in public choice theory that lead them to impose too much safety on consumers by denying some risky products access to the market (Weimer 1982; Grabowski and Vernon 1983; Gieringer 1985, 1986; Kazman 1990; Higgs 1993). To analyze and remedy this government failure, neoclassical analysts propose the application of social cost-benefit analysis (Peltzman 1974; Grabowski and Vernon 1983, pp. 11–13). As Austrian economists appreciate well, however, social cost-benefit analysis cannot solve this (or any other) problem, because, *inter alia*, it rests on unjustifiable implicit aggregation of different individuals' utilities (Buchanan 1979, pp. 60–61, 151–52; Pasour 1988, pp. 114–16; Formaini 1990, pp. 39–65; Cordato 1992, pp. 57–60, 111). Other analysts have tried to sidestep this problem by conducting an appraisal in terms of lives lost and lives saved by various regulatory decisions (Gieringer 1985; Kazman 1990, pp. 47–50). I shall criticize both approaches. Neither gets at what economic analysis is supposed to be about: consumer welfare as evaluated by the consumers themselves and demonstrated by their actions.

Fundamental Ideas

Risk is an inescapable condition.[1] However much people may prefer to live in a world of complete certainty, they simply cannot do so. Just banishing risk, whether by regulation or otherwise, is not a feasible option. Whatever the institutional arrangements for distributing the gains and losses associated with risky actions, someone must bear the risks inherent in the choices made. Insurance can pool and spread risks. Government can tax or subsidize risk bearing. But at any time, given the knowledge and resources available to the members of society, any set of choices has associated with it certain irreducible risks. As Mises (1966, p. 105) put it, "The most that can be attained with regard to reality is probability."

Given that no action has a completely certain outcome and that the degree of risk attached to various actions differs, every consumer choice represents a selection in two dimensions: (a) selection of good X (itself a package of attributes) instead of alternative goods and (b)

[1]I do not make the Knightian distinction between risk and uncertainty. If consumers lack an acceptable estimate of probabilities from an external source, they must necessarily proceed in terms of subjectively formulated probabilities. To deny this proposition is to suppose that consumers appreciate that outcomes are contingent but act as if they know nothing at all about the likelihood of possible outcomes. Compare Langlois (1982, pp. 9, 24, 31, 38–39).

selection of a certain degree of risk instead of the alternative degrees of risk associated with goods not chosen. If people care about the degree of risk assumed, which I suppose they generally do, then each choice they make represents a deliberate selection from alternative two-dimensional objects, each being a good-*cum*-risk package. "The opportunity cost of the selection . . . is not the utility of outcomes foregone but some foregone convolution of utility and probability" (Langlois 1982, p. 29 and Figure 3). People choose the most preferred package. Risk-averse consumers make tradeoffs, choosing something other than the good with the greatest expected benefit whenever a lower degree of risk associated with another good more than compensates them for the sacrifice of the greater expected benefit. Having different tastes for risk, people make such choices differently.[2] As Buchanan (1969, p. 50) has noted, "In the face of uncertainty, the evaluation of alternatives by the actual decision-taker may differ from the evaluations of any external observer."

Every market, then, involves allocations of both goods as such and risk-bearing. Economists, especially those in the field of finance, are familiar with the principle of market efficiency that takes account of both dimensions. Just as market exchange of existing goods can improve the subjective well-being of consumers with different preferences, so the opportunity to trade in the risk dimension of goods can improve the subjective well-being of consumers otherwise stuck with some fixed distribution of risk bearing.[3] In both cases, one presumes that a restriction of the field of choice can make some or all traders worse off but cannot make anybody better off. Yet neoclassical welfare economists continue to argue that market failures of the sort mentioned above may invalidate this general presumption in favor of unimpeded consumer choice of risk bearing.

Can Free Choice in Risk-Bearing Make Consumers Worse Off?

Suppose that, left to my own discretion, considering everything I know about the prospective benefits and risks of consuming good *X*, I choose to consume it. Now suppose that you know something about *X* that I do not, say, that it causes death once in every 100,000 cases in which someone consumes a certain amount of it daily for a year.[4]

[2]Eraker and Sox (1981) document the wide variation in attitudes toward risk-bearing of persons considering alternative medical therapies.

[3]"Efficient risk-taking will generally lead consumers to buy some risky products and to forego some safety precautions" (Viscusi 1991, p. 52).

[4]The marginal annual risk of death for a person drinking one saccharin-sweetened

Can we say that preventing me from consuming the good improves my welfare?

We cannot. Two possible cases exist. In one case I would have chosen to consume X even had I known what you do about its risk, because I would have regarded the risk as worth taking in order to gain the expected benefits of consuming the good. In the other case I would have refrained from consuming X had I possessed your knowledge. But *banning the product is quite different from giving me new information*. By simply denying me the option to consume X, you have definitely made me worse off, because you have removed my most preferred object of choice from the set of alternatives open to me. The utility that consumers maximize by their choices is *prospective and subjective* utility, not *ex post* utility and not utility as gauged by someone else in possession of different information (Rothbard 1977; Buchanan 1969, pp. 42–44; 1979, p. 59).

Of course, consumers sometimes conclude afterward that they regret a particular choice. Their regret only validates the fact that their choice was indeed risky, that an undesired contingency could occur. Consumers know this when they choose, and they make their choices in the light of that knowledge.[5] To deny them access to a particular risky option does not differ essentially from denying them access to goods of a particular taste, color, location, or any other dimension of choice. The perceived degree of risk is a dimension of goods considered by consumers when they make a (forward-looking) choice. To ban a good because a third party believes it to be in some sense riskier than the consumer believes it to be or because a third party values risk-avoidance more than the consumer does is simply to impose the third party's preferences on the actual consumer.

This remains the case even though the consumer would have chosen differently had he known what the third party knows. The neoclassical economist's lament with regard to "imperfect information" rests on an irrelevant and misleading standard of reference

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soda a day has been estimated to be 1 in 100,000; for someone eating four tablespoons of peanut butter a day, 1 in 25,000. See Greer (1993, p. 443).

[5]The three preceding sentences provide, I submit, a more satisfactory understanding of the Rothbardian position than the criticism advanced by Cordato (1992, p. 43), who objects that "Rothbard's conclusions [that free-market exchanges increase social utility] would only hold in an error-free world of perfect knowledge, where expectations necessarily coincide with results." See also Gordon (1993, pp. 103–5). Whether the product in question "ultimately" proves more or less toxic or more or less effective than consumers initially supposed has no bearing on the present analysis. Choices must be made on each day prior to that "ultimate" day. Should the attributes of the good ever become known fully by everybody, the present analysis no longer applies.

("perfect information"). In reality, everyone without exception is necessarily ignorant of many things known by others. If consumer choice were to be permitted only to consumers whose knowledge, whether of risk or any other dimension, equaled or exceeded that of all other persons, then persons in general would not be permitted to choose anything for themselves, and no genuine market order could exist.

An arrangement in which only the most knowledgeable may choose raises problems of its own. Who will identify the most knowledgeable person for each dimension of choice, determining that John knows most about colors, Mary about textures, Carlos about risks? How will disputes about who has the most knowledge be resolved? Does everybody agree as to how risk ought to be conceptualized and measured? What will be done if even when Juanita is recognized as the most knowledgeable about the risk of getting a headache from using product *X*, some consumers seem to care a great deal about avoiding a headache whereas others seem to care hardly at all?[6]

Even if someone knows the degree of risk better than I, important questions remain. Why don't I know? Is it because I am not concerned about this particular risk? Is it because I regard the expected cost of acquiring knowledge of the risk to be greater than the expected benefit of possessing such knowledge? Again, no one can possibly acquire more than a few sorts of knowledge. Should consumers who decide to direct their information search along other lines be forbidden to choose all goods that someone else knows to be riskier than the consumers in question do?

It is instructive to apply to the information question the general Misesian position as stated by Cordato (1992, pp. 19, 21). "Since there is no optimal outcome [in the market for information] apart from that which is generated by the actual interaction of market participants, there is no standard by which to argue that 'too little' [information] is being produced. . . . There is no way for the economist or policy maker to know the preferences of market participants [with respect to how informed they wish to be on various subjects] apart from what the individuals reveal them to be through action."[7]

Of course, it is trivially true that if I had the superior knowledge now possessed by others, I might be able to improve my *post-choice*

[6]Lave (1987, pp. 291–92) observes: "There is no single optimal decision for all people. The key issues in medical decision-making are the extent and quality of information about the outcomes of alternative interventions, the incentives influencing the ill person and those treating him, and the preferences of those involved. . . . [R]egulators usually make the most conservative (that is, worst case), plausible assumption in each situation."

[7]See also Buchanan (1979, pp. 61, 86–87; 1986, pp. 73–74).

evaluation of my welfare. But this is only to say that if people knew more, they could act successfully more often. So what? If altruists were to disseminate free information, some people might take the time to absorb that information and be glad they did. But again, so what? Are we to allow individuals to reveal their own valuations of information by the efforts they make to inform themselves, or are we to wait for more altruists to spread free information before allowing individuals to make their own choices in the market? How many more altruists are necessary? Who will decide when consumers are finally well enough informed to make decisions about their own consumption, and on what grounds will the decision rest?

The neoclassical argument that, because of the public-good character of information, people will be suboptimally informed cannot justify a policy of banning a risky product. The argument is general. How can it justify banning a new medicine but not a pork chop? If it be countered that the medicine is harder to understand and therefore consumers expose themselves to greater danger by consuming it at their own discretion, the counterclaim itself may be questioned. Who really knows the dangers best? What justifies the assumption that one or a few federal bureaucrats actually know more about risks than consumers? Andy Rutten has written, "The real flaw in the traditional argument is that [neoclassical economists] invoke the information arguments so as to avoid the difficult (because impossible) work of showing that third parties really would make better decisions."[8] If it be countered that some consumers are obviously dullards, then the question becomes: How can one justify a comprehensive ban rather than a ban applicable to the dullards alone? And if a discriminatory ban is to be enforced, who will classify each member of the population as either a dullard or not, and what will be the basis for making the discrimination?

Upon closer inspection, the neoclassical argument founded on the public-good character of information appears to depend on the implicit assumption that someone omnisciently looking down on a situation populated by imperfectly informed (i.e., real) actors can say what the "correct" degree of information is. Further, to justify government restrictions of the market, the neoclassical analyst must imagine that this heavenly onlooker counsels government employees, such

[8]Rutten to the author, September 1993. Says Block (1992, p. 103), "to concede a monopoly on truth to a government agency acting as absolute scientific czar is fraught with peril far exceeding that of so-called snake-oil information governments so fear." Seidman (1977, p. 32) observes that "there are points in the [FDA's drug or medical device approval] process where single individuals can block approvals." What is the likelihood that each such individual will have more knowledge than anyone else?

as the drug reviewers at the FDA, as they make a decision about the date—the same for all persons, regardless of differences in their knowledge, health condition, or attitude toward risk bearing—when it will be "optimal" for everyone simultaneously to gain access to a new drug.

"Perfect information," as it is commonly understood in neoclassical analysis, is not a condition that can exist in reality; nor is it an appropriate standard of reference in welfare economics.[9] We may choose only among feasible institutional arrangements for conducting our affairs. Comprehensively banning a beneficial but risky product from the market is the bluntest of policy instruments, the crudest sort of central planning. A free market in risky goods, on the other hand, permits the flexibility for individuals to adjust their choices to the differences in their conditions and preferences. Some consumers desire to become very well informed before taking the risk of using a new drug or device; others are willing to assume the risk quicker, either because they are more comfortable with risk bearing or because they stand to lose more, in their own subjective estimation, by waiting longer before using the product (Eraker and Sox 1981). In the free market each individual can adjust the mix of products consumed, the kind of risk borne and, within limits, the degree of risk borne. Inasmuch as both the expected benefit of using a product and the burden of risk bearing are subjectively experienced and knowable only to the individual actor, and both vary from one person to another, it should be clear that no central planner can possibly improve on the outcome of a flexible market process by crushing it beneath the weight of a single comprehensive decision imposed on everybody from above.[10]

Finally, consider an alternative argument in support of banning a risky product. Suppose one could establish that, by banning product *X* from the market, life expectancy definitely would be increased. May we now conclude that the product should be banned? Of course not. A policy founded on such a decision rule implicitly enforces a one-dimensional utility function: only length of life has value. Clearly people do not have such limited preferences. Every day in various

[9]In the words of Cordato (1992, p. 116), "[Neoclassical] economists have . . . constructed a parallel universe that looks very little like the one with which we must cope, and assessed the efficiency problem that would exist in that universe."

[10]See Higgs (1993) for further contrasts of central planning and free markets as institutions for allocating the risks associated with the use (or nonuse) of medical goods. Also, excellent discussions may be found in Gieringer (1985, 1986) and Weimer (1982, pp. 263–77).

ways people choose to place their lives at risk in order to pursue other goals.[11]

If a risky new medicine may justifiably be banned, why shouldn't the government also ban portable ladders, cigarettes, red meat, fast cars, firearms, private aircraft, and countless other goods that consumers value and purchase, all of which may reduce the user's life expectancy? It might be countered that ordinary people can more accurately estimate the risks of using these goods than they can the risks of using a new medicine. But this need not be so.[12] Who really knows all the risks (or benefits of) of eating beef steak or drinking cow's milk? To give people the *option* to consume a risky good is not to insist that they consume it. People are free to consult expert sources of information and advice before making their choices, and the experts may know a great deal—far more than government regulators know—about the probabilities of adverse contingencies. Moreover, consumers may bear a much greater cost—which, because it is subjective, only they can know—by foregoing the use of the new medicine than by foregoing the use of a ladder.

In sum, banning a risky product, which often appeals to paternalists, is indefensible in relation to the maximization of consumers' utility properly understood. Banning a product *always* represents the imposition on consumers of someone else's preferences. (Every parent understands this proposition.) Banning a product cannot make anyone better off in terms of the properly construed objective analyzed in economic theory: maximization of the *prospective and subjective* utility of responsible adult consumers.

Applications to FDA Testing Requirements

Since 1962 the Food and Drug Administration has permitted the marketing of a new drug only after the manufacturer has conducted to the agency's satisfaction an elaborate series of tests, including laboratory and animal experiments and three phases of clinical trials with human subjects, to establish that the drug is both safe when used as recommended and effective for its intended use (Grabowski and Vernon 1983, pp. 21–27; Weimer 1982, pp. 246–50; Gieringer 1986; Kazman 1990, pp. 37–40). As the regulations have become more

[11]For estimates of a number of commonly borne risks, see Wilson and Crouch (1987, p. 236) and Greer (1993, p. 443). Reporting on studies of "the implicit values of life reflected in decisions involving a broad range of risky product and job choices," Viscusi (1991, p. 51) notes that "the preferences with respect to risk follow patterns one would expect if these risks were the result of rational tradeoffs."

[12]Gieringer (1985, p. 201) notes that "the overwhelming number of drug accidents are due to old, not new, drugs."

extensive and the agency's requirements and standards more demanding and unpredictable, the time and expense of the necessary testing have grown. Presently the average drug takes about a decade to complete the approval process (DiMasi, Bryant, and Lasagna 1991, p. 480). While the product awaits approval, consumers who might have benefited from it suffer unnecessarily and, in many cases, die prematurely.

To evaluate this regulatory system, I construct a simple model based on the ideas expressed in the preceding section of the paper. The model provides a means of assessing several different aspects of the FDA's regulations. Each aspect can be seen as a restriction that cannot improve the well-being of any consumer but can—and no doubt does—diminish the well-being of some consumers.

The model shows the relations between two sources of marginal utility and the testing time t of a drug before it is permitted on the market. In general, the more demanding the FDA standards for establishing safety and efficacy, the longer the time required to satisfy the standards. Thus the duration of testing can serve as a measurable index of other dimensions of the required testing such as number of subjects, number of separate tests, number of variables monitored, total expense, and so forth (Weimer 1982, p. 256; Ward 1992, p. 49). Notice, however, that letting the duration of testing serve as a proxy for other dimensions of testing is only an expositional convenience. The basic logic of the model remains the same, even if one considers the problem piecemeal for each separate dimension of the testing.

Figure 1 is a diagram of the model. Note first that the diagram pertains to a given individual, Person A, at a given date. Person A may relocate the functions at any time in accordance with changes in personal valuations. The units in which each individual measures the marginal utilities are known to that individual only. Interpersonal utility comparisons cannot be made. Nor can the utilities of different individuals be aggregated to arrive at a "social benefit function." There is no common unit for such aggregation; nor in reality is there an institutional arrangement by which a common unit might be revealed as it is, for example, by dollar prices in the neoclassical model of a perfectly competitive economy in general equilibrium with the dollar serving as a numeraire. By labeling the functions as marginal utility (MU) functions, I hope to forestall anyone's confusing these functions with the social marginal cost and social marginal benefit functions used by neoclassical analysts to analyze issues of this sort. The Austrian analysis offered here, unlike the corresponding neoclassical analysis, rests squarely on methodological individualism and subjectivism.

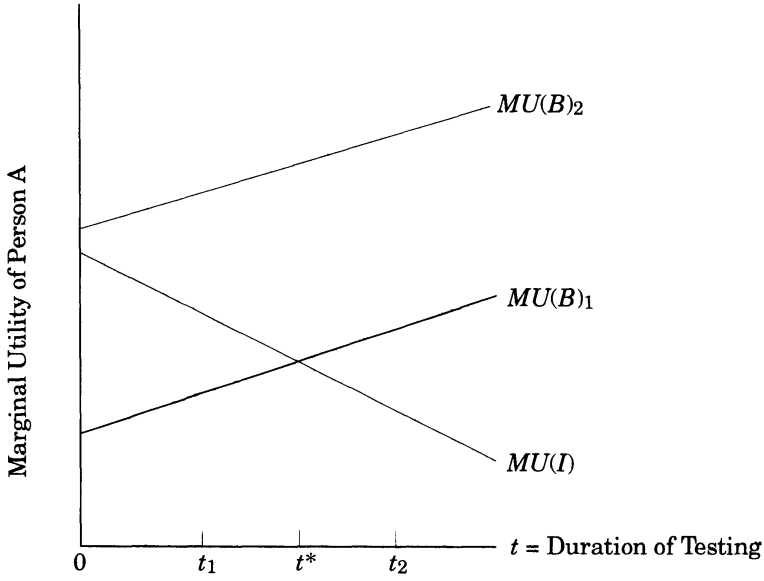

Figure 1. Determination of An Individual's Optimal Testing Duration

When testing first begins, the individual gains a definite marginal utility, denoted $MU(I)$, from acquiring the information yielded by the test about the drug's efficacy, its toxicity, and other side effects. One is reassured to know, for example, that the test subjects did not drop dead after taking the drug on day one. As the duration of the testing increases, then eventually if not immediately the marginal utility of the information gained from the last day of testing declines: $MU(I)$ is a decreasing function of t.[13] I assume nothing else about the shape of $MU(I)$; the linearity of the function as drawn in Figure 1 is arbitrary. One may also think of $MU(I)$ as depicting the *marginal benefit* of testing good X as evaluated by Person A on a given date.

On the other hand, the longer the duration of the premarket testing, the longer the consumer must forego the benefits of using good X, denoted $MU(B)$. While the foregone marginal utility of using

[13]Wardell (1979, p. 33) notes that "current Phase III trials [the final stage of the clinical testing], although the most costly and time-consuming part of the clinical development process, add very little to what has already been learned about a drug's efficacy and toxicity by the end of Phase II." Conceivably, $MU(I)$ might increase in the early stage of testing, but eventually it *must* decline, if only because the human lifespan is limited. In using the model, nothing is gained by considering an initially rising portion of the $MU(I)$ function.

good X may be low at an early stage of the testing, $MU(B)$ rises as t increases. The longer one waits to use X, the greater the likelihood that one's condition will worsen to the point that X will no longer suffice to alleviate the problem. Hence, $MU(B)$ is an increasing function of t. I assume nothing else about the shape of $MU(B)$; the linearity of the functions drawn in Figure 1 is arbitrary. One may also think of $MU(B)$ as depicting the *marginal cost* of testing good X as evaluated by Person A on a given date.[14]

In extreme cases people will soon die without access to a potentially life-saving drug. Such persons might be willing to use a new product immediately, notwithstanding the possible hazards associated with its use, which are initially quite uncertain because it has been tested only in the laboratory and with animals. A member of this desperate group would have an $MU(B)$ function like that labeled $MU(B)_2$ in Figure 1. At any positive test duration, the marginal utility of the benefits foregone because of another day's testing exceeds the marginal utility of the information gained by another day's testing. For these people, the optimal test duration is zero days.

For others, presumably the more typical cases, immediate use of X would be undesirable. Before the good has undergone any clinical testing at all, the marginal utility of the information gained from at least a few days of testing would be worth waiting for, because the marginal utility of benefits foregone would be relatively low for low values of t. As t increases, however, $MU(B)$ increases and, as shown by the function labeled $MU(B)_1$ in Figure 1, it eventually equals and then exceeds the value of $MU(I)$, which falls as t increases. The test duration t^* at which the two MU functions have equal values is the optimal one for Person A. This person will not voluntarily use X before it has undergone a test period of this duration. However, this person would object should the premarket test period be prolonged by regulators beyond t^*, judging the foregone benefits associated with additional waiting to use X greater than the benefits of the additional information acquired.

Now, suppose that a regulatory agency effectively fixes the duration of premarket testing, as the FDA does.[15] Two cases are possible.

[14]I can imagine conditions such that $MU(B)$ would not be a monotonic increasing function of t. For the model, all that matters is that if $MU(I)$ ever intersects $MU(B)$, it does so from above. Otherwise the model allows an absurdity: that a person favors early use of the product but, beyond a certain period of testing, prefers to wait for more testing.

[15]The agency does not set the test duration at the beginning of the process. Rather, it extends the period sequentially (and unpredictably) by advising the applicant from time to time that more information must be submitted or additional tests performed or simply by spending more time processing the initial application.

One possibility, shown as duration t_1 in Figure 1, is that the regulator sets t below the individual's optimum, which is t^*. In that case the individual refrains from using the product, after it becomes available in the market, until it has undergone further testing. For all such persons, the regulation is not a binding constraint. These persons desire more testing than the regulator requires. The regulator's restriction brings them no benefit whatever.[16]

In the second case the regulator effectively fixes a test duration such as t_2 in the figure, which exceeds the individual's optimum. In this case individuals cannot consume the good as soon as they wish. Even though a consumer is willing to accept the risk of current use, the manufacturer is not permitted to sell the good. The well-being of the consumer is diminished. The consumer will gain some utility from further testing, but the utility sacrificed by additional waiting is greater than the utility gained from the information yielded by the additional testing.

We have then two possibilities. Either the regulator sets t equal to or less than an individual's optimum, in which case the regulation neither helps nor hurts the consumer; or the regulator sets t higher than an individual's optimum, in which case the regulation definitely reduces the well-being of the consumer. In short, marketing restrictions like those enforced by the FDA can make no one better off in the sense relevant in economic theory, but they can—and, as indicated by the many public complaints registered against the FDA, they clearly do—make some consumers worse off.[17] Overall, restrictions of this kind, which ban a product from the market, can only hurt consumers.[18]

Using the model, one can evaluate various aspects of the FDA's policies with regard to premarket testing requirements. Consider, for

[16]Whether the manufacturer voluntarily performs the additional testing desired by Person A is a separate issue, which I presume depends on the seller's estimate of whether, given the expected incremental streams of cost and revenue, the additional testing will increase the present value of the firm.

[17]Some of the complaints, which have appeared recently in the press, are quoted in Higgs (1994).

[18]In a paper that is for the most part excellent, Weimer (1982, pp. 253–55) comes close to reaching this conclusion, but his analytical framework, cast in terms of hypothetical numerically comparable costs and benefits for different *groups*, can be, as he recognizes, only a means of illustrating a point, not a compelling demonstration. Weimer's analysis remains tied to the neoclassical concept of *social efficiency*: "So long as there were patients who would elect to take drug X after being informed of the benefits and risks associated with it, the regulatory decision not to allow marketing would be socially inefficient" (p. 255). In fact the decision is much worse than merely "socially inefficient": it harms some consumers and helps nobody.

example, how an individual's optimal testing time t^* would change if it were discovered that a drug might be helpful in treating a second illness as well as the one for which it was originally intended.[19] In this case the $MU(B)$ function shifts upward, as Person A is foregoing not only the marginal utility of using drug X to treat condition 1 but also the marginal utility of using X to treat condition 2. Because the $MU(I)$ function remains fixed, the intersection of the $MU(I)$ and the $MU(B)$ functions must now occur at a lower value of t. This conclusion is intuitively obvious: the more conditions a drug can alleviate, *ceteris paribus*, the sooner a consumer will desire access to it.

The FDA, however, regulates drugs so as to preclude this result. Even if solid scientific studies or extensive clinical uses indicate that a previously approved product will prove useful in alleviating an additional condition, the product may not be legally marketed for that indication.[20] The seller is required to conduct a new, separate set of tests complete with years of clinical trials, and to present the FDA with a New Drug Application based exclusively on the additional therapeutic claim (Weimer 1982, p. 279; Gieringer 1985, pp. 188–90; 1986, p. 10; Ward 1992, pp. 47–49). Consumers' welfare is diminished by the delay in the seller's advertising and marketing for the new use of a product already on the market.[21]

Consider next the effect on Person A's optimal U.S. testing time t^* if information on drug X's efficacy and side effects were to become available from tests or consumer experience in other countries. In this case the $MU(I)$ function would shift downward, as the marginal utility of any particular increment of U.S. testing now would have lower value to Person A. With the downward shift of $MU(I)$, given that the $MU(B)$ function remains fixed, the two functions intersect farther to the left and hence the value of t^* is lower than before. Again, this

[19]One frequently sees news items like those from the *Wall Street Journal* whose headlines announced "Study Finds Bristol-Myers Heart Drug Slows Down Kidney Disease in Diabetics" (November 11, 1993) and "Breast Cancer Drug Now Gaining Favor May Also Reduce Risk of Heart Disease" (September 1, 1993).

[20]For example, by the 1980s, on the basis of extensive research reported in the medical literature, physicians accepted that patients with heart disease can reduce their risk of heart attack by taking a little aspirin each day, but the FDA forbade the sellers of aspirin to mention this benefit in their advertising to the public. See Pearson and Shaw (1993, pp. 12–15, 55–56, 81–84). Of course, no drug company will spend hundreds of millions of dollars to gain FDA approval to make a new claim when the product cannot be patented and many different companies can produce it.

[21]Physicians are legally free to use drugs for unapproved indications, but in practice they are reluctant to do so because of fears related to malpractice litigation. See Gieringer (1985, pp. 189–90; 1986, p. 17) and Nicholas Bachynsky, M.D., in the foreword of Anderson and Anderson (1987, pp. viii, xi–xii).

conclusion comports with intuition. Given that more information is already available for gauging the benefits and risks of using X, the consumer will be satisfied with a shorter period of premarket testing in the United States.

The FDA, however, usually does not alter its testing requirements in recognition of foreign testing or consumer experience. Even drugs that have been used abroad safely and beneficially, sometimes for decades, must undergo the same elaborate, expensive, and time-consuming testing as those never used or tested previously (Wardell 1979, p. 30; Grabowski and Vernon 1983, p. 69; Gieringer 1986, pp. 11, 14).[22] Hence arises the notorious "drug lag," the delay between the introduction of drugs elsewhere and their marketing clearance by the FDA for sale in the United States (Temin 1980, pp. 141–51; Wardell and Lasagna, 1975; Anderson and Anderson 1987; Kazman 1990).[23] Whereas consumers want quicker access to drugs already tested and used abroad, the FDA as a rule does nothing to accommodate this desire, thereby thwarting consumer satisfaction in still another way.

Consider now the effect on Person A's optimal testing time t^* if the new drug X is chemically related to an existing drug. Because the mechanism of action of the new product probably will be the same as that of the existing product in at least some respects, the consumer—advised by doctors and pharmacists who understand such things—will get less valuable new information and hence less utility from any particular increment of testing of the new product. The $MU(I)$ function will shift downward. Given that the $MU(B)$ function has not changed, the intersection of the $MU(B)$ and $MU(I)$ functions occurs farther to the left, that is, the value of t^* declines. Again intuition agrees. The consumer wants quicker access to the new product because the information yielded by additional testing is less valuable, given that the consumer expects certain "family resemblances" among products.

In such cases the FDA does not act in conformity with consumers' desires. The agency requires every new product to undergo the same testing procedures even though manufacturers have already established the efficacy and side effects of products of the same chemical family.[24] Consumers gain access to the new product no sooner than

[22]In a few instances in recent years the FDA has taken into account foreign information, but these instances are quite exceptional.

[23]Anderson and Anderson (1987) catalogue 192 generic and 1,535 brand-name tested drugs available abroad but not approved for sale in the United States.

[24]The FDA has designated some products for consideration on a "fast track." See Grabowski and Vernon (1983, p. 27). But this distinction represents the attempt of a

they would if it were completely novel in chemical composition and mechanism of action. Again consumers' satisfaction is thwarted.

Finally, consider how consumers would set t^* for a more threatening condition (e.g., cancer), relative to a less threatening one (e.g., the common cold). In this situation the $MU(B)$ function for the more threatening condition would lie above the $MU(B)$ for the less threatening condition, as each day's delay entails greater foregone benefit in the former case than in the latter. Higher $MU(B)$ functions intersect the $MU(I)$ function farther to the left, that is, at a lower value for t^*. *Ceteris paribus*, the consumer desires quicker access to the drug when it can alleviate a more serious condition.

The FDA does not accommodate this consumer preference. Whether the condition to be treated is life-threatening or simply unpleasant, the agency requires the same rigid, elaborate, and time-consuming testing. Once again, the regulators frustrate the desires of consumers by insisting that one size (testing procedure) fits all (drugs and patients), regardless of the urgency with which consumers desire access to certain drugs. In some cases this regulatory intransigence creates the absurd situation in which the FDA denies dying patients access to a new drug because the manufacturer has not yet established beyond a reasonable doubt that the drug will not harm the users.[25]

Conclusion

Banning a product can never improve the well-being of consumers properly understood, that is, understood as individual consumers' prospective and subjective utility. This proposition remains valid even when risk is incorporated into the analysis. Risk of inefficacy or adverse side effects is simply another dimension of each good, like taste, size, or location, about which the consumer has preferences. Government restrictions have the same effect on consumer welfare

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few bureaucrats to "pick winners." There is no reason to believe that they can do so more successfully than others can. See William Wardell (quoted in Kazman 1990, p. 45) for a case of egregious misclassification. In any event the agency's discrimination usually reflects judgments of life-saving potential rather than the priorities of consumers, who might, for example, place a relatively high value on expediting the availability of a drug to prevent a disfiguring disease such as severe acne or a painful and debilitating disease such as arthritis, even though the disease is not fatal. Moreover, the FDA's "fast-tracking" efforts, along with its attempt to speed the development of so-called "orphan drugs" and other exceptions, have not actually reduced the average time required for approval. See DiMasi, Bryant, and Lasagna (1991, p. 480), Weimer (1982, p. 249), Anderson and Anderson (1987, p. x), Siegel and Roberts (1991, pp. 71–73, 77), Ward (1992, p. 51), and Kazman (1992, p. 6).

[25]Drugs for the treatment of AIDS furnish the outstanding example, but by no means the only one. The AIDS story is told in dramatic fashion by Kwitny (1992).

regardless of the dimension of the good that is restricted; in this regard there is nothing special about risk.

A simple model incorporating this approach to thinking about risky consumers' goods allows us to establish that the FDA's regulation of drugs (and likewise its regulation of medical devices), both in general and in several of its specific forms, has detrimental effects on consumers' welfare. Nothing in economic theory, correctly understood, supports the imposition of product bans such as those enforced by the FDA through its testing requirements. The bans help no consumer; they definitely hurt some consumers.

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Slavery, Profitability, and the Market Process

Mark Thornton

The economic interpretations of the slave economies of the New World, as well as those social interpretations which adopt the neoclassical economic model but leave the economics out, assume everything they must prove. By retreating from the political economy from which their own methods derive, they ignore the extent to which the economic process permeates the society. They ignore, that is, the interaction between economics, narrowly defined, and the social relations of production on the one hand and state power on the other.[1]

Introduction

The most significant recent development in the study of economic history has been the investigation of the profitability of American slavery made famous in Robert Fogel and Stanley Engerman's *Time on the Cross*. Their book not only rewrote the history of antebellum slavery, it ushered in a completely new methodology of economic history: the cliometric revolution.[2] The book was also very well received by the media, something extremely rare in an academic study.[3]

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[1]Fox-Genovese and Genovese (1983, pp. 35–36).

[2]Also known as the new economic history. Notable among the first cliometric works to appear are Conrad and Meyer (1958) and Fogel (1960).

[3]See David and Temin (1979, p. 213) and Stampp in (David et al., p. 7). Also see Gutman (1975, p. 3) for a description of Fogel and Engerman (1974) as the major methodological assault on traditional history by cliometricians.

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Although often obscured in the technical terms of the scholarly debate, the profitability thesis provides an *ex post facto* justification for the Civil War, one of the most destructive and significant events in American history. From this justification perspective, slavery was profitable and would have continued indefinitely had it not been for the Civil War. Therefore, the Civil War is the primary motive for debating the profitability of slavery. Was slavery *the* cause of the Civil War? Would slavery have eventually collapsed without the war? Or would it have continued? As Gavin Wright, the noted economic historian, put it, "The knowledge that slavery would not have died out through purely economic mechanisms may relate to the historical 'necessity' of the war."[4]

This relationship between the profitability of slavery and the Civil War underlies a more general relationship between the evils of slavery and the market. The literature clearly implies that slavery was an institution of the market and was sustained by market forces. In other words, the bounty of freedom was delivered on the backs of slaves. We are left with the apparent contradiction: "How is it that the arrangement that produced one of the great examples of a reasonably free market system also produced one of the most pernicious examples of a slave labor system?"[5]

The profitability thesis provides one resolution to this contradiction by accepting the Civil War as a political solution for a market-created problem of slavery. According to this revisionist thinking, America's bloodiest and most destructive conflict becomes the solution to the vexing problem of the morally intolerable institution of slavery.[6]

This paper offers an alternative explanation of the profitability of slavery that is consistent with traditional history and economic theory. This explanation, based on economic theory, finds the profitability thesis wrong where it is relevant and irrelevant where it is correct. This explanation disputes the implications that slavery and the slave trade are market phenomena and that slavery was

[4]Wright (1973, p. 459). Wright gives several reasons for the importance of the profitability thesis, all of which are related to the necessity of the Civil War or are of a purely theoretical interest. When discussing Fogel and Engerman's contributions to the profitability thesis, David and Temin (1979, p. 213) caution that the "validity of these findings" are "of crucial importance within the larger structure of Fogel-Engerman's proposed reinterpretation of American Negro slavery."

[5]Ransom (1989, p. 43).

[6]Goldin (1973, p. 84) argues that the war was not a cost-effective emancipation mechanism. However, this justification was established after the fact (when costs tend to matter less) and may well be responsible for the substantial popularity of this revisionist view (also see Goldin and Lewis 1975).

"profitable." Slavery is found to be theoretically and historically a political institution incapable of existing in open-market competition.[7]

Slavery is demonstrated to have survived in the antebellum South, not because of the market, but because political forces prevented the typical decay and destruction of slavery experienced elsewhere. Modern slavery was abolished throughout the remainder of the Western world without deadly civil war among free people. Brazil, the largest slave state, became the last American country to abolish slavery in 1888. In ancient Greece and Rome, slavery was viewed as a temporary status as slaves were often encouraged to buy their freedom. These slave systems, like the indigenous African variety, could only be sustained through a continuous influx of new slaves obtained through war.

State slave codes restricted and prevented the market-based method of emancipation and therefore precluded a general emancipation of slaves. More precisely, two typical state statutes that significantly reduced the private costs of slavery are shown to have been largely ignored, thereby propagating the impression of slavery's efficiency. Specifically, slave patrol statutes socialized the costs of policing slavery and recapturing runaway slaves by drafting non-slaveholders into slave patrols. Second, state statutes prohibited or effectively restricted private manumission of slaves. Combined with statutes that prevented immigration, required emigration, and restricted the movement and rights of free blacks, the slave codes significantly reduced the costs and risks of the slave owner by reducing and socializing the enforcement costs of slavery.[8]

Time on the Cross: The Profitability of Slavery

Who would have thought that the development of the computer would have a major impact on the historical interpretation of slavery? When Alfred Conrad and John Meyer (1958) published their article, "The

[7]The market should be understood to be a separate and distinct phenomenon from government. "Capitalism" refers to the entire social system that consists of a market economy that is subjected to government intervention. Understanding the results of capitalism therefore requires that the effects of the market process be isolated from the effects of the political process.

[8]All of the great histories of antebellum slavery contain some discussion of the slave codes. In particular, the impact of the codes on the legal status and treatment of slaves is often discussed at some length. While Stampp (1956) recognized that the slave patrols "played a major role in the system of control" and Fogel and Engerman (1974) recognized that manumission laws had been erected, and others have shown that these laws often prevented slaveholders from granting freedom to slaves (see for example Mathias 1973), the economic implications of these statues have largely been ignored.

Economics of Slavery in the Ante Bellum South," they did just that.[9] Not only had they *established* a new view of slavery, they had inaugurated the cliometric era in the study of economic history. Their computer-processed calculations have become the foundation for the revisionist view that slavery was a profitable institution of the market.[10]

Prior to Conrad and Meyer, the major body of professional opinion held that slavery could not compete against free labor. "On this point the eighteenth and early nineteenth-century authors on agricultural management were no less unanimous than the writers of ancient Rome on farm problems."[11] With reference to the antebellum period, U. B. Phillips found that slaveholding was "essentially burdensome," and that the system of slavery was an "obstacle to all progress."[12] The world-wide collapse of slavery combined with economic opinion and Southern experience to substantiate the traditional view that slave labor could not compete with free labor.[13]

The first major assault on the traditional view of slavery was Kenneth Stampp's *The Peculiar Institution* (1956), where Stampp argued that slavery was a profitable institution. The profitability of slavery was the testable proposition that Conrad and Meyer employed the computer to solve, sending methodological shockwaves through academia that ripple on to this day. The empirical literature questioning and confirming the view that slavery was profitable continues to grow.[14]

Stampp has also argued that slavery was a key factor in the economic growth of the antebellum South. In 1961, Douglass North

[9]"We were explicitly testing the hypothesis that slavery in the South must have fallen before very long *because* it was unprofitable. . . . Our demonstration of that fact means that the imminent demise of slavery in the ante bellum South must be argued on grounds other than unprofitability from now on" (Conrad and Meyer 1983, p. 443).

[10]Butlin (1971) found early contributions such as Conrad and Meyer (1958) and Yasuba (1961) to be incorrect or misleading and their methods and conclusions often unfounded.

[11]Mises (1949, p. 632).

[12]Phillips (1929, p. 275).

[13]Slave labor was considered by many to be a major impediment for the Confederacy and its bid for independence. There were, however, some exceptions to the traditional view such as Lewis Cecil Gray (1933), Thomas Govan (1942), and Robert R. Russel (1938, 1941). Phillips, like many Progressive era academics, was racist and his views are widely considered to have biased his otherwise pathbreaking contributions.

[14]See for example Dowd (1958), Yasuba (1961), Evans (1962), Saraydar (1964), Sutch (1965), Foust and Swan (1970), Parker (1970), Aitken (1971), Butlin (1971), Wright (1973), Engerman and Genovese (1974), Fogel (1975), Vedder and Stockdale (1975), Fogel and Engerman (1977), David and Temin (1979), Wright (1979), Fogel and Engerman (1980), Bateman and Weiss (1981), Field (1988a, 1988b), Grabowski and Pasurka (1989), and Hofler and Folland (1991).

published his influential *The Economic Growth of the United States, 1790–1860*, where he concluded that King Cotton not only stimulated economic development in the South, but that it was the leading force in the expansion of the entire American economy. This two-pronged attack was so successful that, according to Ransom, the views of U. B. Phillips were "almost totally abandoned."[15]

The pinnacle of this revolution was the publication of Robert Fogel and Stanley Engerman's *Time On The Cross*. Based on an historical method that relies on "technical mathematical points" and the discovery of new data, this approach brought Southern antebellum slavery from a burdensome system to one that is now considered to have been *more* profitable and efficient than the free labor system of the North.

Fogel and Engerman's principal contribution was to find that slavery was highly profitable and 35 percent more efficient than northern family farming. They found that slavery also worked well in the cities. Indeed, as the antebellum South grew rapidly, slavery became ever more entrenched and slaveholders anticipated unprecedented prosperity on the eve of the Civil War. They found slaves to be hardworking, highly motivated, and more efficient than their white counterparts. They found that the general condition of the black family, specifically the extent of sexual exploitation, promiscuity, and slave breeding, to have been greatly exaggerated or untrue. In fact, the material conditions of the slave did not differ substantially from that of the free laborer. They estimated that the slave was allowed to keep 90 percent of lifetime productivity (only 10 percent exploitation) and that the use of whippings was largely kept to a minimum.

Fogel and Engerman's primary objective was to establish the "record of black achievement under adversity." Among the major historical contributions to slavery, Aptheker created the archetype of the rebel, Elkins created the Sambo, and Stampp created the timid rebel. Fogel and Engerman introduced a Horito Alger characterization of the antebellum slave, and while this is surely an exaggeration of fact, the notion of a productive, managerial, and incentive-responsive slave is an important addition to our understanding of the diversity of antebellum slavery. Unfortunately, this historical typecasting, as if one were casting for a movie, is both unnecessary and misleading from an economic perspective. A variety of slave types did of course exist in the antebellum South, differing within and across plantations, states, and time.

[15]Ransom (1989, p. 10).

Fogel and Engerman's overriding concern with demonstrating the record of black slave achievement tends to confuse the evaluation of the institution of slavery. In the antebellum debate, economic development was the primary economic concern while individual profitability was considered neither an effective defense nor an effective indictment of slavery. The economic argument against slavery emphasized the inferior nature of slave labor, restrictions on entrepreneurship, and the constraint that slavery placed on capital accumulation. Rather than refuting these accusations directly, the antebellum defenders of slavery, like Fogel and Engerman more than a century later, argued that slavery made the Negro more productive and that slaves were better cared for than free labor in the North.

Fogel and Engerman state that their "cliometric research has served to emphasize the deeply moral nature of the antislavery crusade."[16] However, rather than clarifying matters between ethics and economics, Fogel and Engerman have only added (unintentionally) to the condemnation of the market economy by *implication*. In their *Time,* it was the market economy that created and sustained slavery. While implications are difficult to prove, some indication may be gleaned from their chapter headings and subheadings, such as "The Level of Profits and the *Capitalist Character* of Slavery."[17] Based on his thorough empirical critique of Fogel and Engerman's *Time on the Cross*, Herbert Gutman describes their primary message as follows:

> The enslaved and their owners performed as actors and actresses in a drama written, directed, and produced by the "free market." That is the main theme of *Time on the Cross,* its essential message.[18]

Fogel and Engerman are clearer about the implication of their research on the crucial association between profitable slavery and the Civil War. They found that the percentage of free blacks in the population was shrinking and that there was nothing in the statistical record "to encourage the view that southern slavery was on the brink of its own dissolution."[19] The fact that slavery was profitable

[16]Fogel and Engerman (1980, p. 689).

[17]Fogel and Engerman (1974). Also see "*Markets* for Slaves," "*Profits* and Prospects," "The Economic Viability of Slavery," and "The Level of Profits and the *Capitalist Character* of Slavery" (my italics added). It should be stressed that these implications exist not just in Fogel and Engerman (1974) but in much of the literature on slavery.

[18]Gutman (1975, preface).

[19]Fogel and Engerman (1974, p. 37), as quoted from the final sentence of the introductory chapter. Just prior to this concluding statement the authors do mention stricter laws and restriction on voluntary manumission but fail to integrate them into their analysis or discussion of their conclusions.

"punctured the claim that the Civil War was a tragic blunder." Slavery was not to expire due to economic causes but from "econocide . . . a political execution of an immoral system at its peak of economic success, incited by men ablaze with moral fervor."[20]

A storm of protest developed in the wake of the publication of *Time on the Cross*. Virtually all of the prominent economic historians of the Civil War joined the debate with the combined assault leaving little of Fogel and Engerman's startling conclusions and extensions intact. Their most fundamental problem was said to be systematic errors and misuse of "fact." A second set of problems centered on the misspecification and limitations of models they developed. Even when properly specified, their models often failed to address the issues they wished to consider or failed to support the types of comparisons they proposed, such as comparing northern and southern farming. A third problem with *Time* was that the conclusions which the authors wished to make about the characteristics of the antebellum slave and slaver were not necessarily warranted on the basis of the evidence.[21]

It is beyond the scope of this paper to repeat all the previously published critiques of *Time*. The sheer number and detail of these critiques testify both to the importance and the extent of error in *Time*. Some introduction, however, is in order. Gutman, for example, concludes that on important matters of fact the conclusions of Fogel and Engerman are:

> based upon flawed assumptions about slave culture and slave society, based upon the misuse of important quantitative data, or derived from inferences and estimates that are the result of a misreading of conventional scholarship.[22]

The full import of the *Time* perspective is captured by noted social historian, Kenneth Stampp:

> Fogel and Engerman appear to be so preoccupied with the efficiency of slave agriculture that they disregard irrationality, friction, and conflict. As a result, two cliometricians who want to restore to blacks their true history in slavery have written a book which deprives them of their voice, their initiative, and their humanity. *Time on the Cross*

[20]Fogel (1989, pp. 390, 410).

[21]See Gutman (1975) and David et al. (1976). Another frequently cited problem is the difficulty of following their arguments and checking their sources because of a failure to provide citations, complete references, as well as adding confusion to traditional arguments and the creation of "unacceptable" strawman arguments.

[22]Gutman (1975, p. 8).

> replaces the untidy world of reality, in which masters and slaves, with their rational and irrational perceptions and their human passions, survived as best they could, with a model of a tidy, rational world that never was.[23]

It is worth noting one particular example of factual error which indicates the types of problems in *Time*. Fogel and Engerman reported that according to 1860 census data there were no slave prostitutes in the city of Nashville, a "fact" that would support their claim that sexual exploitation by whites and promiscuity among blacks had been exaggerated. However, according to the same census, no occupation is listed for any slave in Nashville. The census simply did not list slave occupations.[24]

Time on the Cross which debuted to much fanfare and suffered the torture of a thousand cuts, is still remarkably well regarded in the profession. The authors may have silently (or partially) conceded most of their primary "corrections to the record," but *Time* remains the most generous evaluation of slavery and the authors remain standard bearers of both the cliometric methodological revolution and the profitability thesis, both of which continue to dominate the profession. However, with the dust settled, a primary target of this paper, the profitability thesis, can be examined in specific detail.[25]

Profitability and the Economic Theory of Slavery

Harold Woodman proposed a crucial methodological question when he asked, "Can the economics of slavery be discussed adequately in purely economic terms?"[26] On one hand, general agreement could be reached on the point that the question of slavery cannot be "decided" solely on the basis of economic considerations. On the other hand, it can be argued that slavery has never been discussed in purely economic terms.

The literature on the economics of slavery, for the most part, covers the history of an institution that had important economic consequences, rather than theoretically examining the institution from the strictly economic perspective. Economists of the cliometric bent and otherwise have largely followed the lead of historians. Their

[23]Stampp, in (David et al. 1976, p. 30).

[24]Gutman (1975, pp. 157–62), or Gutman in (David et al. 1976, pp. 153–54).

[25]See Haskell (1979), Schaefer and Schmitz (1979), David and Temin (1979), and Wright (1979).

[26]Woodman (1963, p. 324).

contribution has been to mechanize, test, and rewrite *history*.[27] Little remains of the profitability thesis except that investment in slaves might have earned a "normal rate of return." This is what an economic theorist would expect, but this is no defense of the viability of slavery. The contributions of Fogel and Engerman concerning slave treatment, productivity, etc. while overstated, can be usefully employed in this and the following section to show how the market process *undermined* the institution of slavery.

First of all, it should be understood that slavery is a political institution that is based on the use of force, not contract.[28] Unfortunately, it is not obvious enough that there is a world of difference between making contracts involving the exchange of labor for money and the institution of slavery where the individual is completely and perpetually subordinated to an owner or master. Market exchanges are voluntary with wages accepted demonstrating the highest valued option. Likewise, it is illogical to argue that an individual can voluntarily sell oneself into slavery. Such an arrangement is not contractual because no matter how willing the "slave" is, individuals are incapable *in fact* of permanently and completely transferring their will and of preventing a change of mind in the future. Labor is alienable, the individual's will is not.[29]

While this logic is virtually indisputable it is also practically irrelevant because slavery is typically not of the "voluntary" type. Indentured servitude was popular as people fled the repressive conditions of Europe for the freedom and opportunity of the colonies. However, this market-based approach did not result in slavery in the accepted use of the term, and as Eric Williams described, "[t]his temporary service at the outset denoted no inferiority or degradation."[30] While this capitalistic approach did not result in slavery in

[27]A similar view was expressed about the New Economic History in general by Douglass North (1965): "Too much of it has been dull and unimaginative, and there seems to be a widespread conviction that econometric techniques, the computer, and running a few regressions can substitute for theory and imagination. . . . Too much of it shows that the writer clearly has no fundamental understanding of the way by which an economy operates. In particular, a lot of it shows that the role of prices in resource allocations and the implication of price behavior have completely eluded the writer."

[28]Thompson (1941, p. 60).

[29]The labor of an assembly line worker is physically given and received. The individual's will, however, can never be physically given or received. Slavery, therefore, can be distinguished from labor contracts and indentured servitude where a certain amount of labor is to be given in the exchange. The promise is neither perpetual nor does it involve inalienable components of the individual. See Rothbard (1982).

[30]Williams (1944, p. 10).

fact, it did take on many appearances of slavery under the watchful eye of the Colonial Board which was established in 1661 under the leadership of the King's brother in order to "control" the trade.[31] Nonetheless, real slavery as we understand it is not a result of voluntary agreement.

The African slave trade is often thought to have been introduced by Europeans as an instrument of capitalistic aggression. However, Robin Law has clearly shown that slavery existed in Africa long before contact with European traders.[32] In fact, slavery was a central, indeed prominent, institution of African statecraft.

Prior to extensive European contact, Slave Coast states closely controlled their societies, including the emerging marketplace. The state, led by an hereditary "king," was based largely on militarism geared for the personal material gain of the leaders of the state. At the heart of their motivation, as exhibited even in their military tactics, was the taking of captives for sale as slaves.[33] The absolutism of this form of slavery was amply demonstrated by their brutality and aggression against slaves. Some of the captives from the losing army would be tortured and decapitated with the head presented to the victorious army's king. Presumably, many of those tortured and killed had been injured during the battle and were therefore of little economic value to the victors.[34]

This form of absolute slavery was supplemented by the more general slavery of the populace. Indeed, the head of all inhabitants "belonged" to the king. This established the right of the king to all persons, places, and possessions throughout the kingdom. It was also the basis of the king's right to administer "justice."[35] Of course the normal measures of partial slavery, such as forced labor and taxation, were a normal part of Slave Coast life.[36]

[31]Ibid., p. 14–18.

[32]Law (1991).

[33]One of the few descriptions of early African military tactics indicates that armies would battle to maximize the number of captives which could be sold as slaves.

[34]Tales of African savagery and cannibalism have often been exaggerated. According to Lovejoy (1983) though, cannibalism and human sacrifice were important components of indigenous African slavery. It should also be remembered that slavery and slaughter were also quite common in Europe at this time. Among the important economic distinctions between western Africa and western Europe was the former's lack of written language and ocean travel.

[35]To help reinforce the perception of the king's monopoly on law and order all justice was absent after the death of a king and before his successor was named. In the absence of the king's system of "justice" many crimes, including murder, would take place during this period and go unpunished. This situation made the populace eager to have a new king.

[36]Law (1991).

Originally, it was believed that the militarism and slavery exhibited in the development of the Dahomian state was the result of European contact.[37] However, these traits existed in the predecessor states of Allada and Whydah. Militarism "clearly had its roots in the political culture of these earlier kingdoms." In fact, when the Portuguese began trading in Africa in the 1480s, they purchased slaves largely for resale within Africa.[38] Therefore, while the rise of the Dahomian state may in part be attributed to European contact and the expansion of the Atlantic slave trade, it would be incorrect to impart the total responsibility on the Europeans.[39]

The Atlantic slave trade, rather than being the result of a market process, developed under the confluence of two non-market factors. First of all, slavery already existed in the tribal African societies, which were the sources of slaves, before the arrival of Europeans. Second, the slave trade was not founded by private firms but was established by the colonial powers which instituted monopolies to exploit the indigenous slavery. The Dutch West India Company was chartered in 1621, and the Royal Company of Adventurers for the importation of Negroes was formed in 1662 (Royal African Company). These organizations were companies in name only. They were governmental military structures that had been organized on the basis of the profit motive to allow for independent decision making on locations in Africa which were too distant from Europe for direct control. Under these conditions, they were able to maximize their efficiency in generating slaves, revenues, and domestic influence. Therefore, while it is true that the "Negroes therefore were stolen in Africa to work lands stolen from the Indians," it would be more accurate to place most of the blame for these crimes on the governments involved.[40]

One area of general confusion among economists and other social scientists concerns the origins of slavery in the American colonies. This confusion is amply exhibited by Thomas Sowell who states that, "It is not known when slavery began, because the first *captured* Africans became indentured servants, like an even larger number of

[37]Davidson (1961).

[38]Law (1991, pp. 97, 116).

[39]Dahomey in the interior conquered Weme in 1716, Allada in 1724, and Whydah by 1728. Whydah was located on the coast where many of the trading centers were located. Allada was earlier the middleman state located between Whydah and the interior controlled by Dahomey. There was a constant dispute over control of the slave trade that would often degenerate into war and the intermittent disruption of the slave trade. The rise of Dahomey could therefore be viewed as a successful attempt to vertically and geographically integrate the slave trade in Africa.

[40]Williams (1944, p. 9).

contemporary whites."[41] It should have been obvious to Sowell that slaves, not free labor, must be captured. The general confusion on this issue most likely arose from a debate about the dating of the origins of American slavery, a debate which was itself ignited over concern about modern race relations rather than the historical record. This "debate" might never have developed, if historians had depended more on the facts rather than on "interpretation." There is no persuasive evidence that Negroes were ever treated like white servants upon their arrival in 1619 and 1640 when their status as slaves was first indicated in legal records.[42]

What is certain is that they were slaves *before* they arrived in America. Because slavery was not accounted for in British common law, it is logical that the legal system of slavery developed only after the importation of African slaves. The legal structure that attended the introduction of African slaves took time to develop, developing first in custom and then in law. "[I]n short slavery as Americans came to know it, was not accomplished overnight."[43]

It was also accomplished with the help of various government programs and subsidies. For example, a British Parliamentary subsidy for American indigo was a primary reason for the proliferation of slavery in South Carolina. According to Rosengarten, it was not until England enacted a subsidy for Carolina indigo, in order to suppress indigo from the French West Indies, that the black slave population expanded and surpassed the white population in the sea island region. The subsidy was of course revoked during the American Revolution, but it left behind "a social structure and a labor routine," that is, a slave-based economy.[44]

The basic analysis of slave versus free labor is well known. Contractual labor represents a symmetrical relationship that involves a coordination of individuals' values, efforts, abilities, and resources. Slave labor is an asymmetrical relationship of domination and subordination. Slave labor can possibly be efficient for the slave owner, but cannot be viewed as such for the slave or for society as a whole.[45]

[41]Sowell (1980, p. 317), emphasis added. Also see Ransom (1989, p. 41), for a very similar statement.

[42]Jordan (1962, p. 22).

[43]Ibid., pp. 18–29 and Sirmans (1962). There were of course free blacks in the Colonies due to manumission and escape.

[44]Rosengarten (1986, pp. 48–49).

[45]I can agree with Fenoaltea (1981, pp. 307–8), that the term "relative productivity" should replace efficiency with respect to slavery but not that the academic combatants should just drop the whole matter and say that "a good time was had by all." The reputation of economic theory and laissez-faire market capitalism was caught in the crossfire of this debate and has yet to be vindicated.

In a market economy, all market participants perform economic calculations, but in the slave economy only the slave owners are allowed to perform such calculations. We therefore expect less calculation and entrepreneurship in the slave economy. Slave labor within a market economy does however have a special advantage over the socialist economy. Slaves in a market economy are viewed as a capital asset and typically put to their highest valued market use. Therefore, the slave is protected against depreciation and often targeted for appreciation. Slaves in a socialist economy, where there is no ownership, are typically viewed as a consumption item to be depreciated. The free-market orientation of the antebellum economy is a necessary prerequisite for the success of antebellum slavery and appreciation in the slave population and slave standards of living.[46]

The productivity of slaves is less than that of free labor because in slavery productivity is dissociated from economic reward. The competitive disadvantages of slave labor are revealed when the requirements of labor begin to exceed those of draft animals. One common means of improving productivity, especially popular among governments which own slaves, is the infliction of punishment for unsatisfactory results. This method has the disadvantage of increasing the costs of operations and the depreciation of the slaves, both in terms of productivity and market value.[47] According to Ludwig von Mises:

> experience has shown that these methods of unbridled brutalization render very unsatisfactory results. Even the crudest and dullest people achieve more when working of their own accord than under the fear of the whip.[48]

In order to stimulate "working of their own accord," owners must offer incentives for productivity and loosen the bonds of slavery. The more productive and capital-using applications of labor require even greater incentives and freedoms if the master is to expect effective decision making and care of his physical capital from the slave. The self-interest of the master therefore can reduce the degree of slavery,

[46]I am grateful to Hans Hoppe for bringing this important point to my attention.

[47]Scars from whippings would indicate that a slave for sale was a past and potential runaway and thereby reduce the value of the slave. Canarella and Tomaske (1975, pp. 628–29) demonstrate that the market will minimize "the dual inefficiencies of sadism and paternalism by driving the high cost firms out of the industry." Unfortunately, they find that "capitalist slavery places the slave in a tragic position." Due to the limitations of their model they can find "no mechanism which as a result of market forces or the profit motive necessarily ameliorates the condition of the slave."

[48]Mises (1949, p. 629).

resulting in a relationship that resembles family or friendship rather than a Nazi work camp.[49]

The market not only reduces the degree and burden of slavery, it can eliminate slavery altogether through manumission. There are three basic categories of manumission.

> PURCHASE: A slave may accumulate wages and bonuses to purchase freedom. A free person, such as a friend or relative, may purchase the slave into freedom. This is more likely as free labor encroaches into slave labor regions and was often facilitated by low asking prices of slaveholders.
>
> WILL: A slaveholder may grant freedom to a slave in a last will and testament as a reward for years of faithful service or as religious penance.
>
> SPECIAL: A slaveholder may grant freedom to a slave for an extraordinary act, such as saving the owner's life. Slaveholders may grant freedom to commemorate special events such as a marriage or birth. Owners and government may grant freedom to slaves serving in defense of the country or for informing on riot or assassination attempts.

The rate of manumission could be expected to increase as competition from free labor reduced the expected returns from slavery. In other words, every manumission not only reduces slavery by one soul, it provides a further catalyst for the ultimate destruction of slavery: proximate free labor competition.

The issue of the viability or survivability of antebellum Southern slavery must take several special factors into account. First, free labor was relatively scarce in the cotton belt and generally served as a complement to slave labor instead of a competitive factor. Second, the weather and isolation of the cotton belt reduced the supply of free labor and made comparisons with more temperate and metropolitan regions difficult.[50]

Third, cotton as a product was simple to produce. As quality and complexity of production increases, slave labor becomes less

[49]Ibid. Mises notes that the "master becomes intent upon rousing the slave's zeal and loyalty through reasonable treatment. There develop between lord and drudge familiar relations which can properly be called friendship." This type of relationship is infamous in the antebellum period. See for example England (1943, p. 42) as one example of the development of this type of relationship.

[50]A high percentage of the free labor of the slave states was located in the more temperate areas such as the mountainous and hilly regions and in the cities on the sea coast (away from the slave economy).

competitive with free labor. Fourth, the extensive availability of fertile land associated with the opening of the old American Southwest was an added factor in slavery's relative success. Slaves have to be fed and clothed year round so that when they could not be easily kept productive (such as building and maintaining roads, chopping fire wood, lumber, and clearing forest land), free labor would tend to dominate.[51]

The complex issues involved in the choice between slavery and free labor have been unfortunately simplified to the single issue of profit. Profit is a theoretical concept that explains the reallocation of resources in the market economy. The profitability-of-slavery thesis provides various calculations of estimated accounting profits of antebellum cotton plantations that employed both free and slave labor during the Industrial Revolution. We would certainly expect to see profitable firms during this tumultuous period. However, the important question is what factors account for this profitability. Was it the rapid increase in the demand for cotton, cheap fertile land, entrepreneurial management, slavery, or some combination of these factors? While this is a difficult issue to resolve precisely, the case for slave labor can be easily dismissed.[52]

A prime reason for the belief in the viability of slavery is that prices of slaves were higher at the end of the antebellum period than at the beginning. In fact, prices were higher than ever in the year before the Civil War, but these high prices were clearly the result of factors other than the inherent nature of slave labor. In fact, higher slave prices can be used to address one aspect of *Time on the Cross* that has apparently gone unchallenged, the authors' alleged disproof of the "natural limits thesis." This thesis claims that slavery would have disappeared under the pressure of scarce fertile land and urban expansion.[53]

[51]The availability of low-cost fertile land was necessary not only for the reasons described by the "natural limits thesis," but because of the limitations on year-round productive activities for slave labor versus their year-round requirements. In a sense, slave labor was able to exploit fertile land by trading their off-peak time for fertilized land. See Phillips (1918), Domar (1970), and Earle (1978) for an elaboration of this point.

[52]See for example David and Temin (1979) and Schaefer and Schmitz (1979). Despite the strong case against the profitability of slavery, it should not be forgotten that "profit" is based on the subjective evaluations of the individual and that an individual or group may "profit" from an activity that is otherwise debilitating socially or in the crude economic sense. This is particularly true of the culture that developed in Colonial Virginia based on the (now largely foreign) idea of hegemonic liberty (Fischer 1989). Indeed, Cairnes (1862, p. 87) found that "the real strength of slavery" was the desire on the part of the "mean whites" for political power and social status.

[53]Cairnes (1862) and Ramsdell (1929).

Fogel and Engerman argue that slavery would not have disappeared without the Civil War. In fact, their estimates indicate that slave prices would have increased by more than 50 percent by 1890. While there are certainly many easily recognizable technical problems involved in such estimates, the most significant problem is that their estimate plays directly into the hands of the economic theory of slavery and the natural limits theorists. Higher slave prices would only serve to signal the market to discover substitutes for slave labor. Specifically, if the price of slaves did continue to rise, the market would have responded with substitutes such as free labor and labor saving equipment, such as mechanical agricultural devices to pick cotton.[54]

Slavery and the Political Process in the Antebellum South

Despite all the supposed natural advantages of slave labor in the Southern antebellum economy, slavery was fleeing from both the competition of free labor and urbanization towards the isolated virgin lands of the Southwest. More importantly, the character of antebellum slavery had changed to reflect the "loosening of bonds." Slaves were given increasing responsibility, receiving professional training, and beginning to possess a good deal of independence and property within the plantation. Indeed, the slave was moving off the plantation, becoming in effect, free labor for hire. As Clement Eaton described:

> Behind the facade of increasing values of slave property there had been ceaselessly at work for at least two decades a slow and subtle erosion of the base of the institution. The disintegrating forces were strongest and most noticeable in the Upper South and in the towns and cities, where the growing practice of obtaining the service of slave labor by hire instead of by purchase was invisibly loosening the bonds of an archaic system.[55]

Despite the change in the character of slavery and the material economic improvement in antebellum slave life relative to other slave economies, very little progress had been made towards slavery's legal abolition. Although they were discussed, no emancipation or compensation schemes were seriously considered before the Civil War.[56] Things also appeared bleak in terms of market-based emancipation. As Fogel and Engerman noted, the percentage of the free black population in

[54]Genovese (1961, pp. 58–59).
[55]Eaton (1960, p. 663).
[56]Goldin (1973).

the South actually fell from 1830 to 1860. Kenneth Stampp also concluded that "[T]here was no evidence in 1860 that bondage was a 'decrepit institution tottering towards a decline'" and that there was no "reason to assume that masters would have found it economically desirable to emancipate their slaves in the foreseeable future."[57]

"[T]he failure of voluntary emancipation" represents a divergence between economic theory and our understanding of the market economy on the one hand and real world results on the other.[58] In order to explain such puzzles, economists normally look at institutional rigidities, changes in relative scarcity, and most especially to government interventions in the economy.[59] The positive contribution of this paper is to *introduce* such an explanation: the role that certain slave codes played in the profitability and survival of slavery in the antebellum South. Despite the almost obvious implications of the slave codes, this form of government intervention has been ignored as an economic factor in the profitability and perpetuation of slavery.[60] While the direction of this approach could have been derived from the work of Genovese,[61] and while Stampp certainly discussed the subject at length, it seems that Ludwig von Mises made the clearest statement of the connection between government intervention and the inability of markets to bring down antebellum slavery:

> The abolition of slavery and serfdom could not be effected by the free play of the market system, as political institutions had withdrawn the estates of the nobility and the plantations from the supremacy of the market.[62]

The political institutions that had withdrawn the plantation from the supremacy of the market were slave code statutes. While all the statutes had some impact, the statutes that required slave patrols and the laws that prohibited the manumission of slaves are of primary importance.

[57]Stampp (1956, pp. 417–18). Like many others, Stampp bases his conclusions on evidence of high slave prices in the 1850s, dismissing any notion that the bubble would ever pop or that free labor "under any circumstances can be employed more cheaply than slave."

[58]Stampp (1956, p. 235).

[59]Fogel and Engerman base their revision of the record on "technical mathematical points."

[60]Historians have raised the issues with respect to the status of the slave, as an aspect of the legal system and as a factor in modern racial problems. See for example, John Hope Franklin (1956), John Anthony Scott (1984), and Mark Tushnet (1981).

[61]Genovese (1961).

[62]Mises (1949, p. 632).

The patrol statutes required all white males to participate in slave patrol duty. The state required counties to establish regular patrols, and the counties in turn placed responsibility for organizing patrols on local judges and constables. These officials appointed a series of rotating patrol leaders who would be responsible for organizing and reporting on the activities of their patrols. Failure to participate in the patrols or to carry out organizing responsibilities would result in a series of escalating fines.

In order to prevent slaves from escaping, the patrol was responsible for patrolling the roads at night, monitoring the movement of blacks by checking their passes, and inspecting slave residences.[63] The compensation the patrollers received for being drafted into service was the violence they inflicted upon slaves and the money they received for capturing and selling unclaimed runaway slaves. Both sources of compensation served to increase the effectiveness of the patrols.[64]

Statutes were also established in the slave states that restricted or prohibited the right of an owner to manumit slaves. Restrictions precluded slaves from buying their freedom, owners from granting freedom, and owners from manumitting their slaves in a last will and testament. Sometimes these prohibitions were outright and binding while at other times the restrictions only served to complicate and frustrate the owners attempts to free slaves. Near the end of the antebellum period, an owner would have to transport slaves to free states, before manumission, in order to ensure the freedom of their slaves.

While these statutes date back to the mid-eighteenth century, a significant relaxation occurred after the American Revolution. During this time, a large number of slaves were freed both in slave states as well as in states that had newly prohibited slavery. However, a growing free black population, an increased threat of slave revolts, and an increasingly vocal abolitionist movement led the Southern states to reenact severe slave code statutes relating to manumission and slave patrols.[65]

The obvious implications of these statutes was a reduced growth rate in the free black population. If owners could not manumit their

[63]All of these duties were carried out on a random basis so as to confuse and terrorize slaves and increase the effectiveness of the system.

[64]It might seem that the violence towards slaves would be viewed as counterproductive by the slaveowners. However, it did serve the purpose of instilling fear in the entire slave population and therefore it achieved its primary goal of reducing the number of escape attempts.

[65]See for example, Turtle (1991).

slaves then the free black population could not grow as it otherwise might have. Slave patrols reduced the possibility of successful escape as well as the number of escape attempts.[66] The patrols therefore also contained the free black population by reducing escape attempts and the percentage of successful escapes.

Another obvious impact of the patrol statutes was the shift of the cost of guarding slaves and escape prevention from the slave owner onto the general population, as white males who owned no slaves were required to participate in the patrols. This socialization of police costs improved the profitability of slave ownership and reduced the supply of free labor by acting as a tax on it.[67]

The interaction effect of the two codes also affected the costs and profitability of slavery. If slaves could not be manumitted, then most blacks were slaves, thereby making the task of the slave patrols easier. The ability to detect and identify possible runaways was further strengthened by statutes that required all manumitted slaves to emigrate the state or county, prohibited the immigration of free blacks into a state, and placed fines or prohibited the existence of any free black in residence. Reduced likelihood of escape also increased the slaves' capital value.

The literature on the emancipation of American slaves pays little attention to the use of private manumission. There are several reasons for this neglect. First, in the decade prior to the Civil War only 20,000 slaves were officially manumitted out of a slave population of several million.[68] Second, it is rejected as a viable option for those who feel it is ethically preposterous that slaves and non-slaveholders should pay to break the bonds of involuntary servitude. There is also the question of time. Given the population growth of slaves, even an aggressive rate of private manumissions might never eliminate slavery entirely.

[66]Slaves were not only aware of the slave patrols, they were afraid of them. Slave patrols were largely unrestrained by law and would often beat, torture, and kill slaves even when the slaves had passes or were in their homes.

[67]The patrollers were fined for failure to carry out their assigned tasks. The draftee might be compensated for his efforts in some cases (i.e., selling unclaimed slaves) and some draftees were economic beneficiaries of the slave economy even when they did not own any slaves. It has also been noted by many authors that the poor whites had been duped (or threatened) into accepting the slave owners' racist ideology and therefore might have been more accepting of the system. Their low opportunity cost may also help explain their apparent willingness to go along with the patrol requirements. Cairnes, in fact, described the poor whites as near-savages who relied largely on hunting and gathering and were prone to irregular violence. Based on these attributes, the poor whites were ideally suited to patrol duty. See Yanochik (1993) for more detailed information on the slave patrols.

[68]Rogers (1918, p. 54).

Other alternatives seem equally problematic. Support for general manumission at the state level was highly unlikely in states with large slave populations. Slaveholders were not only economically powerful, they were politically powerful in their legislatures in southern states. The market value of the entire slave population prior to the Civil War has been estimated at $2.7 billion, and plantation owners were convinced that slave labor was the only basis for large scale plantation agriculture in the semi-tropical south. While some have suggested that such a scheme would have been less costly than the Civil War, there was apparently no viable political mechanism to undertake such a massive transfer. Radical abolitionist sentiment was probably never more than a small minority of the population. The inability to solve the problem of slavery is generally attributed to the growth of sectionalism, party system breakdown, secession, and at least indirectly, the Civil War.

The low rate of private manumissions was not due to a lack of interest, but rather to prohibitions and restrictions on manumission in the slave states. In the absence of these government interventions, a higher rate of manumission could have dramatically increased the size of the free black population and decreased the size of the slave population. An increased free black population would have also undermined the effectiveness of slave hunters and slave patrols. The free black as free worker would have put increased pressure (geographically) on slavery. A decreased slave population and lower slave prices would have increased the likelihood of the enactment of general manumission, especially in the border states.

What we do know is that by 1830 most slave states had enacted extremely stringent laws to maintain slavery.[69] Most slaves were effectively confined on the plantation, most owners were prohibited from legally freeing their slaves, and life for the free black in the slave states was tenuous at best, illegal at worst. The complexity of the slave codes and slave economy makes it extremely difficult to determine what would have happened in the absence of these state codes. However, if slaveowners had really had the "absolute power and authority over his negro slaves" and their own lives, history would have been radically different.[70]

Free black population in the slave states increased throughout

[68]Rogers (1918, p. 54).

[69]See Hurd (1862), and Cobb (1858).

[70]From John Locke's *Fundamental Constitutions of Carolina* as quoted in Sirmans (1962, p. 463). In other words, if slaveowners had had more personal control over their property, more slaves would have been freed and the character of slavery would have been much different.

the antebellum period, with the greatest growth in the early decades and in the Upper South. As state statutes were enacted in the early 1800s against manumission and immigration of free blacks, the rate of increase in the free black population slowed rapidly. In the final decades of the antebellum period the rate of increase in the free black population fell below the rate of increase of the slave population. These population figures clearly indicate the effect of laws against manumission.

Between the 1790 and 1800 census, the free black population of America increased by over 82 percent and in the South Atlantic states by over 97 percent. Between 1800 and 1810 the free black population in the South Atlantic states increased by over 61 percent. The total free population increased from 8.5 percent to almost 16 percent of the total black population between 1790 and 1810.[71] As states enacted statutes against manumission and immigration, and requiring slave patrols, the growth of the free black population decreased, fell below the rate of growth in the slave population, and was reduced to a trickle in the decade prior to the Civil War.[72]

If the free black population in the South Atlantic states had grown at the same rate between 1800 and 1860 as it did between 1790 and 1800, every slave in the South Atlantic states would have been freed twice by 1860, the equivalent of virtually every slave in the country.73 Using the slower growth rate between 1790 and 1810 (88 percent), every slave in the region would have been freed 1.5 times. While this is clearly a hypothetical calculation, it does indicate that in the absence of slave codes the slave population would have been a small fraction of its actual size and in a range where general emancipations would have been possible.[74]

While economists (as economists) will no doubt appreciate the apparent cost-effectiveness of this approach, the notion of a gradual market-based emancipation will no doubt be morally objectionable to extreme abolitionists.[75] However, it must be remembered that historical

[71]This growth in part may be due to the window of opportunity between periods when it was illegal to manumit slaves.

[72]Rogers (1918, pp. 53–57). Only 1,467 slaves manumitted in 1850 and approximately 3,000 in 1860, with about 20,000 manumissions taking place during the decade.

[73]South Atlantic states here do not include Alabama, Mississippi, Tennessee, Louisana, Arkansas, and Texas.

[74]The South Atlantic states include Delaware, Maryland, Virginia, North and South Carolina, and Georgia the only states with consistent data for the entire period.

[75]I denote extreme abolitionists as those who would go to any extreme (including war) to emancipate slaves in other nations. The term radical abolitionist is reserved for those abolitionists who detest slavery in its less obvious forms such as conscription, confiscation, eminent domain, and taxation.

experience of government-style emancipations, such as the Civil War, indicates that they are very costly, and in most cases, hardly effective in uplifting the former slaves. It was just this historical experience that led John Cairnes to suggest that gradual abolition of slavery was the most effective in promoting the interests of the slaves.[76]

Summary and Conclusion

This paper maintains that slavery is always and everywhere a political rather than a market institution. The historical record of slavery is examined for the suggested exceptions to this rule. This study only confirms the logical necessity of government's role in slavery.

The profitability-of-slavery thesis is incorrect where relevant and irrelevant where correct. John Cairnes, who identified the problem in *The Slave Power*, found that antebellum slavery survived under "a democracy, an uncontrolled despotism, wielded by a compact oligarchy." The historical record strongly suggests that the state statutes that prohibited the private manumission of slaves and mandated slave patrols are the reasons why slavery survived as long as it did in the American South.

It could be argued that these codes were part of the "peculiar institution" and were unlikely to be repealed. However, failing properly to identify the causes of slavery's survival would be like complaining that "business" is doing little to alleviate high teenage unemployment without mentioning the minimum wage law. Not only is the "free market" exonerated from the evil of slavery, but the full blame for slavery and even the Civil War is placed back on government.

[76]When speaking of the American case, Cairnes (1862, p. 170) suggested that the Union merely invade and eliminate slavery west of the Mississippi and leave slavery in the remaining states to strangle itself.

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How is Fiat Money Possible? — or, The Devolution of Money and Credit

Hans-Hermann Hoppe

Fiat money is the term for a medium of exchange which is neither a commercial commodity, a consumer, or a producer good, nor title to any such commodity: i.e., irredeemable paper money. In contrast, *commodity* money refers to a medium of exchange which is either a commercial commodity or a title thereto.

There is no doubt that fiat money is *possible*. Its theoretical possibility was recognized long ago, and since 1971, when the last remnants of a former international gold (commodity) standard were abolished, all monies, everywhere, have in fact been nothing but irredeemable pieces of paper.

The question to be addressed in this paper is rather *how* is a fiat money possible? More specifically, can fiat money arise as the natural outcome of the interactions between self-interested individuals; or, is it possible to introduce it without violating either principles of justice or economic efficiency?

It will be argued that the answer to the latter question must be negative, and that no fiat money can ever arise "innocently" or "immaculately." The arguments advancing this thesis will be largely constructive and systematic. However, given the fact that the thesis has frequently been disputed, along the way various prominent counterarguments will be criticized. Specifically, the arguments of the *monetarists*, especially Irving Fisher and Milton Friedman, and of some *Austrian* "free bankers," especially Lawrence White and George Selgin, in ethical and/or economic support of either a total or a fractional fiat money will be refuted.

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The Origin of Money

Man participates in an exchange economy (instead of remaining in self-sufficient isolation) insofar as he prefers more goods over less and is capable of recognizing the higher productivity of a system of division of labor. The same narrow intelligence and self-interest is sufficient to explain the emergence of a—and ultimately only one—commodity money and a—and ultimately only one, world-wide—monetary economy.[1] Finding their markets as buyers and sellers of goods restricted to instances of double coincidence of wants (A wants what B has *and* B wants what A has), each person may still expand his own market and thus profit more fully from the advantages of extended division of labor if he is willing to accept not only directly useful goods in exchange, but also goods with a higher degree of marketability than those surrendered. For even if they have no direct use-value to an actor, the ownership of relatively more marketable goods implies by definition that such goods may in turn be more easily resold for other, directly useful goods in later exchanges, and hence that their owner has come closer to reaching an ultimate goal unattainable through direct exchange.

Motivated only by self-interest and based on the observation that directly traded goods possess different degrees of marketability, some individuals begin to demand specific goods not for their own sake but for the sake of employing them as a medium of exchange. By adding a new component to the pre-existing (barter) demand for these goods, their marketability is still further enhanced. Based on their perception of this fact, other market participants increasingly choose the same goods for their inventory of exchange media, as it is in their own interest to select such commodities as media of exchange that are *already* employed by others for the same purpose. Initially, a variety of goods may be in demand as common media of exchange. However, since a good is demanded as a medium of exchange—rather than for consumption or production purposes—in order to facilitate future purchases of directly serviceable goods (i.e., to help one buy more cheaply) and simultaneously widen one's market as a seller of directly useful goods and services (i.e., help one sell more dearly), the more widely a commodity is used as a medium of exchange, the better it will perform its function. Because each market participant naturally

[1]See on the following, in particular Carl Menger, *Principles of Economics* (New York: New York University Press, 1981); idem, *Geld*, in Carl Menger, *Gesammelte Werke*, vol. 4, F. A. Hayek, ed. (Tübingen: Mohr, 1970); Ludwig von Mises, *Theory of Money and Credit* (Irvington-on-Hudson, N.Y.: Foundation for Economic Education, 1971); idem, *Human Action: A Treatise on Economics* (Chicago: Regnery, 1966).

prefers the acquisition of a more marketable and, in the end, universally marketable medium of exchange to that of a less or non-universally marketable one, "there would be an inevitable tendency for the less marketable of the series of goods used as media of exchange to be one by one rejected until at last only a single commodity remained, which was universally employed as a medium of exchange; in a word, money."[2]

With this, and historically with the establishment of the international gold standard in the course of the nineteenth century (until 1914), the end desired through any one market participant's demand for media of exchange is fully accomplished. With the prices of all consumer and capital goods expressed in terms of a single commodity, demand and supply can take effect on a world-wide scale, unrestricted by absences of double coincidence of wants. Because of its universal acceptability, accounting in terms of such money contains the most complete and accurate expression of any producer's opportunity costs. At the same time, with only one universal money in use—rather than several ones of limited acceptability—the market participants' expenditures (of directly serviceable goods) on holdings of only indirectly useful media of exchange are optimally economized; and with expenditures on indirectly useful goods so economized, real wealth, i.e., wealth in the form of stocks of producer and consumer goods, is optimized as well.

According to a long—Spanish-French-Austrian-American—tradition of monetary theory,[3] money's originary function —arising out of the existence of uncertainty—is that of a *medium of exchange*. Money *must* emerge as a *commodity* money because something can be demanded as a medium of exchange only if it has a pre-existing barter demand (indeed, it must have been a highly marketable barter commodity), and the competition between monies *qua* media of exchange inevitably leads to a tendency of converging toward a *single* money—as the most easily resold and readily accepted commodity.

In light of this, several popular notions of monetary theory are immediately revealed as misguided or fallacious.

What about the idea of a commodity reserve currency? Can bundles (baskets) of goods or titles thereto be money?[4] No, because

[2]Mises, *Theory of Money and Credit*, pp. 32–33.

[3]See Murray N. Rothbard, "New Light on the Prehistory of the Austrian School," in *The Foundations of Modern Austrian Economics*, E. G. Dolan, ed. (Kansas City: Sheed and Ward, 1976); Joseph T. Salerno, "Two Traditions in Modern Monetary Theory," *Journal des Economistes et des Etudes Humaines* 2, no. 2/3 (1991).

[4]On commodity reserve proposals see B. Graham, *Storage and Stability* (New York: McGraw Hill, 1937); F. D. Graham, *Social Goals and Economic Institutions* (Princeton:

bundles of different goods are by definition less easily saleable than the most easily saleable of its various components, and hence commodity baskets are uniquely *unsuited* to perform the function of a medium of exchange (and it thus is no mere accident that no historical examples for such money exist).

What about the—Friedmanite—idea of freely fluctuating "national monies" or of "optimal currency areas?"[5] It must be regarded as absurd, except as an intermediate step in the development of an inter-national money. Strictly speaking, a monetary system with rival monies of freely fluctuating exchange rates is still a system of partial barter, riddled with the problem of requiring double coincidence of wants in order for exchanges to take place. The lasting existence of such a system is dysfunctional of the very purpose of money: of facilitating exchange (instead of making it more difficult) and of expanding one's market (rather than restricting it). There are no more "optimal"—local, regional, national or multi-national—monies or currency areas than there are "optimal trading areas." Instead, as long as more wealth is preferred to less and under conditions of uncertainty, just as the only "optimal" trading area is the whole world market, so the only "optimal" money is *one* money and the only "optimal" currency area the entire globe.

What about the idea, central to monetarist thought since Irving Fisher, that money is a "measure of value" and of the notion of monetary "stabilization?"[6] It represents a tangle of confusion and falsehood. First and foremost, while there exists a motive, a purpose for actors wanting to own media of exchange, no motive, purpose or need can be discovered for wanting to possess a measure of value. Action and exchange are expressive of *preferences*: each person values what he acquires more highly than what he surrenders—*not* of identity or equivalency. No one ever needs to *measure* value. It is easily explained why actors would want to use cardinal numbers—to count—and construct measurement instruments—to measure space,

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Princeton University Press, 1942); also F. A. Hayek, "A Commodity Reserve Currency," *Economic Journal* 210 (1943); Milton Friedman, "Commodity-Reserve Currency," *Journal of Political Economy* (1951).

[5]See Milton Friedman, "The Case for Flexible Exchange Rates" in Friedman, *Essays in Positive Economics* (Chicago: University of Chicago Press, 1953); idem, *A Program for Monetary Stability* (New York: Fordham University Press, 1959); also *Policy Implications of Trade and Currency Zones: A Symposium* (Kansas City: Federal Reserve Bank of Kansas City, 1991).

[6]See Irving Fisher, *The Purchasing Power of Money* (New York: Augustus Kelley, 1963); idem, *Stabilizing the Dollar* (New York: Macmillan, 1920); idem, *The Money Illusion* (New York: Adelphi, 1929); Milton Friedman, "A Monetary and Fiscal Framework for Economic Stability," *American Economic Review* (1948).

weight, mass and time: In a world of quantitative determinateness, i.e., in a world of scarcity, where things can render strictly limited effects only, counting and measuring are the prerequisite for successful action. But what imaginable technical or economic need could there possibly be for a measure of *value*?

Second, setting these difficulties aside for a moment and assuming that money indeed measures value (such that the money price paid for a good represents a cardinal measure of this good's value) in the same way as a ruler measures space, another insurmountable problem results. Then the question arises "what is the value of this measure of value?" Surely it must have value just as a ruler must have value, otherwise no one would want to own either one. Yet it would obviously be absurd to answer that the value of a unit of money—one dollar—is one. One what? Such a reply would be as nonsensical as answering a question concerning the value of a yardstick by saying "one yard." The value of a cardinal measure cannot be expressed in terms of this measure itself. Rather, *its* value must be expressed in ordinal terms: It is better to have cardinal numbers and measures of length or weight than merely to have ordinal measures at one's disposal. Likewise it is better if, because of the existence of a medium of exchange, one is able to resort to cardinal numbers in one's cost-accounting, rather than having to rely solely on ordinal accounting procedures, as would be the case in a barter economy. But it is impossible to express in cardinal terms *how much* more valuable the former techniques are as compared with the latter. Only ordinal judgments are possible. It is precisely in this sense, then, that ordinal numbers—ranking, preferring—must be regarded as more fundamental than cardinal ones and value be considered an irreducibly subjective, non-quantifiable magnitude.

Moreover, if it were indeed the function of money to serve as a measure of value, one must wonder why the demand for such a thing should ever systematically exceed one per person. The demand for rulers, scales, and clocks, for instance, exceeds one per person only because of differences in location (handiness) or the possibility of their breaking or failing. Apart from this, at any given point in time and space, no one would want to hold more than one measurement instrument of homogeneous quality, because a *single* measurement instrument can render *all* possible measurement services. A second instrument of its kind would be useless.

Third, in any case, whatever the *characteristicum specificum* of money may be, money is a *good*. Yet if it is a good, then it falls under the law of marginal utility, and this law *contradicts* any notion of a stable- or constant-valued good. The law follows from the proposition

that every actor, at any given point in time, acts in accordance with his subjective preference scale and chooses to do what he expects—rightly or wrongly—to satisfy him more rather than less, and that in so doing he must invariably employ quantitatively definite—limited—units of qualitatively distinct goods as means and thus, by implication, must be capable of recognizing unit-additions and -subtractions to and from his supply of means. From this incontestably true proposition it follows (1), that an actor always prefers a larger supply of a good over a smaller one, i.e., he ranks the marginal utility of a larger sized unit of a good higher than that of a smaller sized unit of the same good; and (2), that any increment to the supply of a good by an additional unit—of any unit-size that an actor considers and distinguishes as relevant—will be ranked lower (valued less) than any same-sized unit of this good *already* in one's possession, as it can only be employed as a means for the removal of an uneasiness deemed less urgent than the least urgent one *up-to-now* satisfied by the same sized unit of this good, i.e., the marginal utility of a given-sized unit of a good decreases (increases) as the supply of such units increases (decreases). Each change in the supply of a good, then, leads to a change in this good's marginal utility. Any change in the supply of a good A, as perceived by an actor X, leads to X's *re*-evaluation of A. X attaches a *different* value-rank to A now. Hence, the search for a stable or constant-valued good is obviously illusory from the outset, on a par with wanting to square the circle, for every action involves exchange, and every exchange alters the supply of some good. It either results in a diminution of the supply of a good (as in pure consumption), or it leads to a diminution of one and an incrementation of another (as in production or interpersonal exchange). In either case, as supplies are changed in the course of any action, so are the values of the goods involved. To act is to purposefully *alter* the value of goods. Hence, a stable-valued good—money or anything else—must be considered a constructive or praxeological impossibility.

Finally, as regards the idea of a money—a dollar—of constant purchasing power, there is first the fundamental problem that the purchasing power of money *cannot be measured* and that the construction of price indices—any index—is scientifically arbitrary, i.e., as good or bad as any other. (What goods are to be included? What relative weight should be attached to each of them? What about the problem that individual actors value the same things differently and are concerned about different commodity baskets, or that the same individual evaluates the same basket differently at different times? What is one to do with changes in the quality of goods or with entirely

new products?).[7] Moreover, what is so great about "stable" purchasing power anyway (however that term may be arbitrarily defined)? To be sure, it is obviously preferable to have a "stable" money rather than an "inflationary" one. Yet surely a money whose purchasing power per unit *increased*—"deflationary" money—would be preferable to a "stable" one.

What about the thesis that in the absence of any legal restrictions money—non-interest bearing cash—would be completely replaced by interest bearing securities?[8] Such displacement is conceivable only in equilibrium, where there is no uncertainty and hence no one could gain any satisfaction from being prepared for future contingencies as these are per assumption ruled out of existence. Under the omnipresent human condition of uncertainty, however, even if all legal restrictions on free entry were removed, a demand for non-interest bearing cash—as distinct from a demand for equity or debt claims (stocks, bonds or mutual fund shares)—would necessarily remain in effect. For whatever the specific nature of these claims may be, they represent titles to *producer* goods, otherwise they *cannot* yield interest. Yet even the most easily convertible production factor must be less saleable than the most saleable one of its final products, and hence, even the most liquid security can never perform the same service of preparing its owner for future contingencies as can be provided by the most marketable *final* non-interest bearing product: money. All of this could be different only if it were assumed—as Wallace in accordance with the Chicago school's egalitarian predispositions tacitly does—that all goods are equally marketable. Then, by definition there is no difference between the salability of cash and securities. However, then all goods must be assumed to be identical to each other, and if this were the case neither division of labor nor markets would exist.

From Commodity Money to Fiat Money: The Devolution of Money

If money must arise as a commodity money, how can it become fiat money? Via the development of money substitutes (paper titles to commodity money)—but only fraudulently and only at the price of economic inefficiencies.

[7]Mises, *Theory of Money and Credit*, pp. 187–94; idem, *Human Action*, pp. 219–23.

[8]See N. Wallace, "A Legal Restrictions Theory of the Demand for 'Money'," Federal Reserve Bank of Minneapolis *Quarterly Review* (1983); E. Fama, "Financial Intermediation and Price Level Control," *Journal of Monetary Economics* (1983); for a critique see Lawrence White, "Accounting for Non-Interest-Bearing Currency," *Journal of Money, Credit, and Banking* (1987).

Under a commodity money standard such as the gold standard until 1914, money "circulated" on the one hand in the form of standardized bars of bullion and gold coins of various denominations trading against each other at essentially fixed ratios according to their weight and fineness. On the other hand, to economize on the cost of storing (safekeeping) and transacting (clearing) money, in a development similar to that of transferable property titles—including stock and bond certificates—as means of facilitating the spatial and temporal exchange of *non*-money goods, side by side with money proper also gold certificates—property titles (claims) to specified amounts of gold deposited at specified institutions (banks)—served as a medium of exchange. This coexistence of money proper (gold) and money substitutes (claims to money) affects neither the total supply of money—for any certificate put into circulation an equivalent amount of gold is taken out of circulation (deposited)—nor the interpersonal income and wealth distribution. Yet without a doubt the coexistence of money *and* money substitutes and the possibility of holding money in either form and in variable combinations of such forms constitutes an added convenience to individual market participants. This is how intrinsically worthless pieces of paper can acquire purchasing power. If and insofar as they represent an unconditional claim to money and if and insofar as no doubt exists that they are valid and may indeed be redeemed at any time, paper tickets are bought and sold *as if* they were genuine money—they are traded against money at par. Once they have thus acquired purchasing power and are *then* deprived of their character as claims to money (by somehow suspending redeemability), they may *continue* functioning as money. As Mises writes: "Before an economic good begins to function as money it must already possess exchange-value based on some other cause than its monetary function. But money that already functions as such may remain valuable even when the original source of its exchange-value has ceased to exist."[9]

However, would self-interested individuals *want* to deprive paper tickets of their character as titles to money? Would they *want* to suspend redeemability and adopt intrinsically worthless pieces of paper as money? Paper money champions like Milton Friedman claim this to be the case, and they typically cite a savings-motive as the reason for the substitution of fiat for commodity money: A gold standard involves social waste in requiring the mining and minting of gold. Considerable resources have to be devoted to the production

[9]Mises, *Theory of Money and Credit*, p. 111.

of money.[10] With essentially costless paper money instead of gold, such waste would disappear, and resources would be freed up for the production of directly useful producer or consumer goods. It is thus a fiat money's higher economic efficiency which explains the present world's universal abandonment of commodity money! But is it so? Is the triumph of fiat money indeed the outcome of some innocuous saving? Is it even conceivable that it could be? Can self-interested individuals really *want* to save as fiat money champions assume that they do?

Somewhat closer scrutiny reveals that this is impossible, and that the institution of fiat money requires the assumption of a very different—not innocuous but sinister—motive: Assume a monetary economy with (at least) one bank and money proper ("outside money" in modern jargon) as well as money substitutes ("inside money") in circulation. If market participants indeed wanted to save on the resource costs of a commodity money (with the ultimate goal of demonetizing gold and monetizing paper), one would expect that first—as an approximation to this goal—they would want to give up using any outside money (gold). All transactions would have to be carried out with inside money (paper), and all outside money would have to be deposited in a bank and thus taken out of circulation entirely. (Otherwise, as long as genuine money was still in circulation, those individuals making use of gold coins would demonstrate unmistakably—through their very actions—that they did *not* want to save on the associated resource costs.)

But is it possible that money substitutes can thus outcompete—and displace—genuine money as a medium of exchange? No; even many hard money theoreticians have been too quick to admit such a possibility. The reason is that money substitutes are *substitutes* and have one permanent and decisive disadvantage as compared to money proper. Paper notes (claims to money) are redeemable at par only to the extent that a deposit fee has been paid to the depositing institution. Providing safeguarding and clearing services is a costly business, and a deposit fee is the price paid for guarded money. If paper notes are presented for redemption after the date up to which safeguarding fees were paid by the original or previous depositor, the depositing institution would have to impose a redemption charge and such notes would then trade at a discount against genuine money. The disadvantage of money substitutes is that they must be

[10]See Friedman, "Essays in Positive Economics, p. 210; idem, *A Program for Monetary Stability*, pp. 4–8; idem, *Capitalism and Freedom* (Chicago: University of Chicago Press, 1962), p. 40.

continuously re-deposited and re-issued in order to maintain their character as money—their salability at par—and thus that they function as money only temporarily and discontinuously. Only money proper (gold coins) is permanently suited to perform the function as a medium of exchange. Accordingly, far from inside money ever displacing outside money, the use of money substitutes should be expected to be forever severely limited—restricted essentially to the transaction of very large sums of money and the dealings between regular commercial traders—while the overwhelming bulk of the population would employ money proper for most of their purchases or sales, thus demonstrating their preference for *not* wanting to save in the way fancied by Friedman.[11]

Moreover, even if one assumed for the sake of argument that only inside money is in circulation while all genuine money is stored in a bank, the difficulties for fiat money proponents do not end here. To be sure, in their view matters appear simple enough: All commodity money sits idle in the bank. Wouldn't it be more efficient if all of this idle gold were used instead for purposes of consumption or production—for dentistry or jewelry—while the function of a medium of exchange were assumed by a less expensive—indeed, practically costless—fiat money? Not at all.

First, the envisioned demonetization of gold certainly cannot mean that a bank thereby assumes ownership of the entire money stock, while the public gets to keep the notes. No one except the bankowner would agree to that! No one would want *such* savings. In fact, this would not be savings at all but an expropriation of the public by and to the sole advantage of the bank. No one could possibly *want* to be expropriated by somebody else. (Yet the expropriation of privately owned commodity money through governments and their central banks is the only method by which commodity money has ever

[11] Indeed, historically this has been the case: Traditionally, notes have always been widely distrusted, and their acceptability—as compared to that of genuine money such as gold or silver coins—was severely limited.

In order to increase the popularity of money substitutes two complementary measures were actually required: First, the note-issuing depositing institution had to overvalue deposit notes against genuine money by either charging no depositing fee or by even paying interest on deposits. Secondly, because the guarding of money is actually *not* costless and deposited money *cannot* possibly generate an interest return, the bank, in order to cover its otherwise unavoidable losses, had to engage in fractional reserve banking, i.e., it had to issue and bring into circulation new, additional deposit tickets that, while physically indistinguishable from any other notes, were actually not covered by genuine money.

On the ethical and economic status of the practice of fractional-reserve banking see the section, "From Deposit and Loan Banking to Fractional-Reserve Banking: The Devolution of Credit," below.

been replaced by fiat money.) Instead, each depositor would want to retain ownership of his deposits and get his gold back.

Then, however, an insurmountable problem arises: Regardless who—the bank or the public—now owns the notes, they represent nothing but irredeemable paper. Formerly, the cost associated with the production of such paper was by no means only that of printing paper tickets, but more importantly that of attracting gold depositors through the provision of safeguarding and clearing services. Now, with irredeemable paper, there is nothing worth guarding anymore. The cost of money production falls close to zero, to mere printing costs. Previously, with paper representing claims to gold, the notes had acquired purchasing power. But how can the bank or the public sell them, i.e., get anyone to accept them, now? Would they be bought and sold for non-money goods at the formerly established exchange ratios? Obviously not. At least not as long as no legal barriers to entry into the note-production business existed; for under competitive conditions, of free entry, if the (non-money) price paid for paper notes exceeded their production costs, the production of notes would immediately be expanded to the point at which the price of money approached its cost of production. The result would be hyperinflation. No one would accept paper money anymore, and a flight into *real values* would set in. The monetary economy would break down completely and society would revert back to a primitive, highly inefficient barter economy. Out of barter then, once again a new (most likely a gold) commodity money would emerge (and the note producers once again, so as to gain acceptability for their notes, would begin backing them by this money). What a way of achieving savings!

If one is to succeed in replacing commodity money by fiat money, then, an additional requirement must be fulfilled: Free entry into the note-production business must be restricted, and a money *monopoly* must be established. A single paper money producer is also capable of causing hyperinflation and a monetary breakdown. However, insofar as he is legally shielded from competition, a monopolist can safely and knowingly restrict the production of his notes and thus assure that they retain their purchasing power. He then presumably would assume the task of *redeeming* old notes at par for new ones, as well as that of again providing safeguarding and clearing services in accepting note deposits in exchange for his issuance of substitutes of notes—demand deposit accounts and checkbook money—against a depositing fee.

Regarding this scenario, several related questions arise. Formerly, with commodity money every person was permitted to enter the gold mining and coining business freely—in accordance with the

assumption of self-interested, wealth-maximizing actors. In contrast, in order for Friedman's "fiat money dividend" to come into existence, competition in the field of money production would have to be outlawed and a monopoly erected. Yet how can the existence of a legal monopoly be reconciled with the assumption of self-interest? Is it conceivable that self-interested actors could agree on establishing a fiat money monopoly in the same way as they can naturally agree on participating in the division of labor and on using one and the same commodity as a medium of exchange? If not, does this not demonstrate that the cost associated with such a monopoly must be considered higher than all attending resource cost savings?

To raise these questions is to answer them. Monopoly and the pursuit of self-interest are incompatible. To be sure, a motive why someone might want to become the money monopolist exists. After all, by not having to store, guard and redeem a precious commodity, the production costs are dramatically reduced and the monopolist could thus reap an extra profit; by being legally protected from all future competition, this monopoly profit would immediately become "capitalized," i.e., reflected permanently in an upward valuation of his assets, and on top of his inflated asset values he then would be guaranteed a normal rate of (interest) return. Yet to say that such an arrangement would be advantageous to the monopolist is not to say that it would be advantageous to anybody else, and hence that it could arise naturally. In fact, there is no motive for anyone wanting *anyone but himself* to be this monopolist, and accordingly no agreement on the selection of any particular monopolist would be possible. The position of a monopolist can only be arrogated—enforced against the will of all excluded non-monopolists. By definition, a monopoly creates a distinction between two classes of individuals of different legal quality: between those—privileged—individuals who are permitted to produce money, and those—subordinate—ones who, to the exclusive advantage of the former, are prohibited from doing the same. Such an institution *cannot* be supported in the same voluntary way as the institutions of the division of labor and a commodity money. It is *not*, as they are, the "natural"result of mutually advantageous interactions, but that of an unilaterally advantageous act of expropriation (abrogation). Accordingly, instead of relying for its continued existence on voluntary support and cooperation, a monopoly requires the threat of physical violence.[12]

[12]It might be argued that a monopoly agreement would be possible (conceivable), if the monopolistic bank of issue were owned by—and its profits distributed to—everyone. Wouldn't everyone, then, not just the monopolist, profit from the savings of substituting paper for gold?

Moreover, the incompatibility of self-interest and monopoly does not end once the monopoly has been established but continues as long as the monopoly remains in operation. It cannot but operate inefficiently and at the expense of the excluded non-monopolists. First, under a regime of free competition (free entry), every single producer is under constant pressure to produce whatever he produces at minimum costs, for if he does *not* do so, he invites the risk of being outcompeted by new entrants who produce the product in question at lower costs. In contrast, a monopolist, shielded from competition, is under no such pressure. In fact, since the cost of money production includes the monopolist's own salary as well as all of his non-monetary rewards, a monopolist's "natural" interest is to *raise* his costs. Hence, it should be expected that the cost of a monopolistically provided paper money would very soon, if not from the very outset, *exceed* those associated with a competitively provided commodity money.

Furthermore, it can be predicted that the price of monopolistically provided paper money will steadily increase, i.e., the purchasing power per unit money, and hence its quality will continuously fall. Protected from new entrants, every monopolist is always tempted to raise price and lower quality. Yet this is particularly true of a money monopolist. While other monopolists must consider the possibility that price increases (or quality decreases) due to an elastic demand for their product may actually lead to reduced revenues, a

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In fact, such an agreement is illusionary. Joint ownership of the monopoly bank would imply that tradeable stock certificates must be issued and distributed. But who should get how much stock? Bank clients, according to their deposit size? Yet all private holders of notes help save on gold and would want to be included among the bank owners according to the size of their note holdings. And what about the owners and sellers of non-money goods? In showing themselves willing to accept paper instead of gold, they, too, play their part in the resource cost savings. But how in the world is one to determine how many shares to award *them*, when their contribution consists, as it does, of various quantities of heterogeneous consumer and producer goods? Here, at the very latest, it would become impossible to reach agreement.

Moreover, why would any new market participant—any later deposit, note and/or non-money good owner *not* initially endowed with bank stock—want to consent to and support this arrangement? Why should he *pay* for banking stock, while it was distributed to the initial wealth owners free of charge, even though he is now involved in resource cost savings just as much as they were then? Such an arrangement would involve a systematic redistribution of income and wealth in favor of all initial wealth owners and at the expense of all later ones. Yet if new, additional bank stock were issued for each new deposit, note or non-money good owner, such stock would be worthless from the outset and any bank offering it would be a non-starter.

In addition, as will be explained below, regardless of how the ownership problem is resolved, the very operation of the bank will—indeed *must*—have effects on—is not neutral to—the interpersonal income and wealth distribution.

money monopolist can rest assured that the demand for his particular product—the common medium of exchange—will be highly inelastic. Indeed, short of a hyperinflation, when the demand for money disappears entirely, a money monopolist is practically always in a position in which he may assume that his revenue from the sale of money will increase even as he raises the price of money (reduces its purchasing power). Equipped with the exclusive right to produce money and under the assumption of self-interest, the monopoly bank should be expected to engage in a steady increase of the money supply, for while an increased supply of paper money does not add anything to social wealth—the amount of directly useful consumer and producer goods in existence—but merely causes inflation (lowers the purchasing power of money), with each additional note brought into circulation the monopolist can increase *his* real income (at the expense of lowering that of the non-monopolistic public). He can print notes at practically zero cost and then turn around and purchase *real* assets (consumer or producer goods) or use them for the repayment of *real* debts. The real wealth of the non-bank public will be reduced—they own less goods and more money of lower purchasing power. However, the monopolist's real wealth will increase—he owns more non-money goods (and he always has as much money as he wants). Who, in this situation, except angels, would *not* engage in a steady expansion of the money supply and hence in a continuous depreciation of the currency?

It may be instructive to contrast the theory of fiat money as outlined above to the views of Milton Friedman, as the outstanding modern champion of fiat money.

While the younger Friedman paid no systematic attention to the question of the origin of money, the older Friedman recognizes that, as a matter of historical fact, all monies originated as commodity monies (and all money substitutes as warehouse claims to commodity money), and he is—justly—skeptical of the older Friedrich A. Hayek's proposal of competitively issued fiat currencies.[13] However, misled by his positivist methodology, Friedman fails to grasp that money (and money substitutes) *cannot* originate in any other way, and accordingly, that Hayek's proposal *must* fail.

In contrast to the views developed here, throughout his entire work Friedman maintains that a commodity money in turn would be "naturally" replaced by a—more efficient, resource cost saving—fiat

[13]See Milton Friedman and Anna Schwartz, "Has Government Any Role in Money?" *Journal of Monetary Economics* (1986); for Hayek's proposal see his *Denationalization of Money* (London: Institute of Economic Affairs, 1976).

money regime. Amazingly, however, he offers no argumentative support for this thesis, evades all theoretical problems, and whatever argument or empirical observation he does offer *contradicts* his very claim. There is, first off, no indication that Friedman is aware of the fundamental limitations of replacing outside money by inside money. Yet if outside money cannot disappear from circulation, how, except through an act of expropriation, can the link between paper and a money commodity be severed? The continued use of outside money in circulation demonstrates that it is *not* regarded as an inferior money; and the fact that expropriation is needed for the decommoditization of money would demonstrate that fiat money is *not* a natural phenomenon!

Interestingly, after evading the problem of explaining how the suspension of redeemability can possibly be considered natural or efficient, Friedman explicitly recognizes—quite correctly—that fiat money cannot, for the reasons given above, be provided competitively but requires a monopoly. From there he proceeds to assert that "the production of fiat currency is, as it were, a natural monopoly."[14] However, from the fact that fiat money requires a monopoly, it does not follow that there is anything "natural" about such a monopoly, and Friedman provides no argument whatsoever as to how any monopoly can possibly be considered the natural outcome of the interactions of self-interested individuals. Moreover, the younger Friedman in particular appears to be almost completely ignorant of classical political economy and its anti-monopolistic arguments: the axiom that if you give someone a privilege he will make use of it, and hence the conclusion that every monopolistic producer will be inefficient (in terms of costs as well as of price and quality). In light of these arguments it has to be regarded as breathtakingly naive on Friedman's part first to advocate the establishment of a governmental money monopoly, and then to expect this monopolist *not* to use its power, but to operate at the lowest possible costs and to inflate the money supply only gently (at a rate of 3–5% per year). This would assume that, along with becoming a monopolist, a fundamental transformation in the self-interested nature of mankind would take place.

It is not surprising that the older Friedman, having had extensive experience with his own ideal of a world of pure fiat currencies as it came into existence after 1971, and looking back on his own central—resource cost savings—argument for a monopolistically provided fiat

[14]See Friedman, *Essays in Positive Economics*, p. 216; also Friedman and Schwartz, "Has Government Any Role in Money?"

money of nearly four decades earlier, cannot but acknowledge that his predictions turned out patently false.[15] Since abolishing the last remnants of the gold commodity money standard, he realizes, inflationary tendencies have dramatically increased on a world-wide scale; the predictability of future price movements has sharply decreased; the market for long-term bonds (such as consols) has been largely wiped out; the number of investment and "hard money" advisors and the resources bound up in such businesses have drastically increased; money market funds and currency futures markets have developed and absorbed significant amounts of real resources which otherwise—without the increased inflation and unpredictability—would not have come into existence at all or at least would never have assumed the same importance that they now have; and finally, it appears that even the direct resource costs devoted to the production of gold accumulated in private hoards as a hedge against inflation have increased.[16] But what conclusion does Friedman draw from this empirical evidence? In accordance with his own positivist methodology according to which science is prediction and false predictions falsify one's theory, one should expect that Friedman would finally discard his theory as hopelessly wrong and advocate a return to commodity money. Not so. Rather, in a remarkable display of continued ignorance (or arrogance), he emphatically concludes that none of this evidence should be interpreted as "a plea for a return to a gold standard. . . . On the contrary, I regard a return to a gold standard as neither desirable nor feasible."[17] Now as then he holds onto the view that the appeal of the gold standard is merely "nonrational, emotional," and that only a fiat money is "technically efficient."[18] According to Friedman, what needs to be done to overcome the obvious shortcomings of the current fiat money regime is find "some anchor to provide long-term price predictability, some substitute for convertibility into a commodity, or, alternatively, some device that would make predictability unnecessary. Many possible anchors and devices have been suggested, from monetary growth rules to tabular standards to the separation of the medium of exchange from

[15]See Milton Friedman, "The Resource Cost of Irredeemable Paper Money," *Journal of Political Economy* (1986).

[16]Monetarists had predicted that, as the result of the demonetization of gold and the transition to a pure fiat money system, the price of gold would *fall*—from the then official rate of $35 per ounce to an estimated non-monetary value of gold of around $6. In fact, the price of gold *rose*. At one point it reached $850 per ounce, and for most of the time it has lingered between $300 and $400. As of this writing the price is $375.

[17]Friedman, "The Resource Cost of Irredeemable Paper Money," p. 646.

[18]Friedman, *Essays in Positive Economics*, p. 250.

the unit of account. As yet, no consensus has been reached among them."[19]

From Deposit and Loan Banking to Fractional-Reserve Banking: The Devolution of Credit

Banks perform two strictly separate tasks, only one of which has been considered so far.[20] On the one hand, they serve as depositing institutions, offering safekeeping and clearing services. They accept deposits of (commodity) money and issue claims to money (warehouse receipts; money substitutes) to their depositors, redeemable at par and on demand. For every claim to money issued by them they hold an equivalent amount of genuine money on hand, ready for redemption (100 percent reserve banking). No interest is paid on deposits. Rather, depositors pay a fee to the bank for providing safekeeping and

[19]Friedman, "The Resource Cost of Irredeemable Paper Money," p. 646; also idem, *Money Mischief: Episodes in Monetary History* (New York: Harcourt Brace Jovanovich, 1992), chap. 10.

Among the suggestions for an alternative fiat money "anchor" recently considered by Friedman, the "frozen monetary base rule" deserves a brief comment (see Friedman, "Monetary Policy for the 1980s," in *To Promote Prosperity*, J. H. Moore, ed. [Stanford: Hoover Institution, 1984]). In one respect this rule represents an advance over his earlier 3 to 5 percent monetary growth rule. His advocacy of the latter rule was based essentially on the erroneous—proto-Keynesian—notion that money constitutes part of social capital, such that an economy cannot grow by 3 to 5 percent unless it is accommodated to do so by a proportional increase in the money supply. In contrast, the frozen monetary base rule indicates a recognition of the old—Humean—insight that any supply of money is equally optimal or, in Friedman's own words, that money's "usefulness to the community as a whole does not depend on how much money there is" [Friedman, *Money Mischief*, p. 28). Yet otherwise the proposal represents no advance at all. For how in the world can a monopolist be expected to follow a frozen monetary base rule any more than a less stringent 3 to 5 percent growth rule?

Moreover, even if this problem were solved miraculously, this would still not alter the monopoly's character as an instrument of unilateral expropriation and income and wealth redistribution. For the monopolist, apart from offering depositing and clearing services (for which his customers would pay him a fee), would also have to perform the function, to customers and non-customers alike, of replacing old, worn-out notes—one-to-one and free of charge—with new, identical ones (otherwise, who would want to replace a permanent commodity money by a perishable fiat money?). Yet while the costs associated with this task may be low, they are definitely not zero. Accordingly, in order to avoid losses and recoup his expenses, the monopolist cannot but *increase* the monetary base—and hence one would essentially be back at the older monetary growth rule.

[20]On the following see in particular Murray N. Rothbard, *The Mystery of Banking* (New York: Richardson and Synder, 1983); idem, *The Case for A 100 Percent Gold Dollar* (Auburn, Ala.: Ludwig von Mises Institute, 1991); Mises, *Theory of Money and Credit;* idem, *Human Action*; also Walter Block, "Fractional Reserve Banking: An Interdisciplinary Perspective," in *Man, Economy, and Liberty: Essays in Honor of Murray N. Rothbard*, Walter Block and Llewellyn H. Rockwell, Jr., eds. (Auburn, Ala.: Ludwig von Mises Institute, 1988); J. Koch, *Fractional Reserve Banking: A Practical Critique* (Master's thesis, University of Nevada, Las Vegas, 1992).

clearing services. Under conditions of free competition—free entry into the banking industry—the deposit fee, which constitutes a bank's revenue and possible source of profit, tends to be a minimum fee; and the profits—or rather. The interest returns—earned in banking tend to be the same as in any other, non-banking industry.

On the other hand, originally entirely separate institutionally from deposit institutions, banks also serve as intermediaries between savers and investors—as loan banks. In this function they first offer and enter into time-contracts with savers. Savers loan money to the bank for a specified—shorter or longer—period of time in exchange for the banks' contractual obligation of future repayment plus some additional interest return. From the point of view of savers, they exchange present money for a promise of future money: the interest return constituting their reward for performing the function of waiting. Having thus acquired temporary ownership of savings from savers, the bank then reloans the same money to investors (including itself) in exchange for the latters' obligation of future repayment and interest. The interest differential—the difference between the interest paid to savers and that charged to borrowers—represents the price for intermediating between savers and investors and constitutes the loan bank's income. As for deposit banking and deposit fees, under competitive conditions the costs of intermediation also tend to be minimum costs, and the profits from loan banking likewise tend to be the same as those that can be earned elsewhere.

Neither deposit banking nor loan banking as characterized here involve an increase in the money supply or a unilateral income or wealth redistribution. For every newly issued deposit note an equivalent amount of money is taken out of circulation (only the *form* of money changes, not its quantity), and in the course of loan banking the same sum of money simply changes hands repeatedly. All exchanges—between depositors and depositing institution as well as between savers, the intermediating bank and investors—are mutually advantageous.

In contrast, fractional reserve banking involves a deliberate confusion between the deposit and the loan function. It implies an increase in the money supply, and it leads to a unilateral income redistribution in the bank's favor as well as to economic inefficiencies in the form of boom-bust business cycles.

The confusion of both banking functions comes to light in the fact that under fractional reserve banking, either depositors are being paid interest (rather than having to pay a fee), and/or savers are granted the right of instant withdrawal (rather than having to wait

with their request for redemption until a specified future date). Technically, the possibility of a bank's engaging in such practices arises out of the fact that the holders of demand deposits (claims to money redeemable on demand, instantly, at par) typically do *not* exercise their right simultaneously, such that all of them approach the bank with the request for redemption at the same time. Accordingly, a deposit bank will typically hold an amount of reserves (of money proper) in excess of actual daily withdrawals. It becomes thus feasible for the bank to loan these "excess" reserves to borrowers, thus earning the bank an interest return (which the bank then may partially pass on to its depositors in the form of interest paying deposit accounts).

Proponents of fractional reserve banking usually claim that this practice of holding less than 100 percent reserves represents merely an innocuous money "economizing," and they are fond of pointing out that not only the bank, but depositors (receiving interest) and savers (receiving instant withdrawal rights) profit from the practice as well. In fact, fractional reserve banking suffers from two interrelated fatal flaws and is anything but innocuous and all-around beneficial. First off, it should be noted that anything less than 100 percent reserve deposit banking involves what one might call a legal impossibility. For in employing its excess reserves for the granting of credit, the bank actually transfers temporary ownership of them to some borrower, while the depositors, entitled as they are to instant redemption, retain their ownership over the same funds. But it is impossible that for some time depositor *and* borrower are entitled to exclusive control over the same resources. Two individuals *cannot* be the exclusive owner of one and the same thing at the same time. Accordingly, any bank pretending otherwise—in assuming demand liabilities in excess of actual reserves—must be considered as acting fraudulently. Its contractual obligations *cannot* be fulfilled. From the outset, the bank must be regarded as inherently bankrupt—as revealed by the fact that it could not, contrary to its own presumption, withstand a possible bank run.

Second, in lending its excess reserves to borrowers, the bank increases the money supply, regardless whether the borrowers receive these reserves in the form of money proper or in that of demand deposits (checking accounts). If the loan takes the form of genuine money, then the amount of money proper in circulation is increased without withdrawing an equivalent amount of money substitutes from circulation; and if it takes the form of a checking account, then the amount of money substitutes is increased without taking a corresponding amount of genuine money out of circulation. In either

case, there will be more money in existence now than before, leading to a reduction in the purchasing power of money (inflation) and, in its course, to a systematic redistribution of real income in favor of the bank and its borrower clients and at the expense of the non-bank public and all other bank clients. The bank receives additional interest income while it makes no additional contribution whatsoever to the real wealth of the non-bank public (as would be the case if the interest return were the result of reduced bank spending, i.e., savings); and the borrowers acquire real, non-monetary assets with their funds, thereby reducing the real wealth of the rest of the public by the same amount.

Moreover, insofar as the bank does not simply spend the excess reserves on its own consumption but instead loans them out against interest charges, invariably a business cycle is set in motion.[21] The quantity of credit offered is larger than before. As a consequence, the price of credit—the interest charged for loans—will fall below what it otherwise would have been. At a lower price, more credit is taken. Since money cannot breed more money, the borrowers, in order to be able to earn an interest return—and a pure profit on top of it—will have to convert their borrowed funds into investments, i.e., they will have to purchase or rent factors of production—land, labor, and possibly capital goods (produced factors of production)—capable of producing a future output of goods whose value (price) exceeds that of the input. Accordingly, with an expanded volume of credit, more presently available resources will be bound up in the production of *future* goods (instead of being used for present consumption) than otherwise would have been; and in order to complete all investment projects now under way, more time will be needed than that required to complete only those that would have been begun without the credit expansion. All the future goods which would have been created without the expansion plus those that are newly added on account of the credit expansion must be produced.

However, in distinct contrast to the situation where the interest rate falls due to a fall in the rate of time preference, i.e., the degree to which present goods are preferred over future goods, and hence where the public has in fact saved more so as to make a larger fund of present goods available to investors in exchange for their promise of a return of future goods, no such change in time preference and

[21]On the theory of the business cycle see in particular Ludwig von Mises, *Geldwertstabilisierung und Konjunkturpolitik* (Jena: Gustav Fischer, 1928); idem, *Human Action*, chap. 20; F. A. Hayek, *Prices and Production* (London: Routledge & Kegan Paul, 1931); Murray N. Rothbard, *America's Great Depression* (Kansas City: Sheed & Ward, 1975).

savings has taken place in the case under consideration. The public has *not* saved more, and accordingly, the additional amount of credit granted by the bank does not represent *commodity credit* (credit covered by non-money goods which the public has abstained from consuming), but it is *fiduciary* or *circulation credit* (credit that has been literally created out of thin air—without any corresponding sacrifice, in the form of non-consumed non-money goods, on the part of the creditor).[22] Had the additional credit been commodity credit, an expanded volume of investment activities would have been warranted. There would have been a sufficiently large supply of present goods that could be devoted to the production of future goods such that all—the old as well as the newly begun—investment projects could be successfully completed and a higher level of future consumption attained. If the credit expansion is due to the granting of circulation credit, however, the ensuing volume of investment must actually prove over-ambitious. Misled by a lower interest rate, investors act *as if* savings had increased. They withdraw more of the presently available resources for investment projects, to be converted into future capital goods, than is warranted in light of actual savings. Consequently, capital goods prices will increase initially relative to consumer goods prices, but once the public's underlying time preference rate begins to reassert itself, a systematic shortage of consumer goods will arise. Accordingly, the interest rate will adjust upward, and it is now consumer goods prices which rise relative to capital goods prices, requiring the liquidation of part of the investment as unsustainable malinvestment. The earlier boom will turn bust, reducing the future standard of living below the level that otherwise could have been reached.

Among recent proponents of fractional reserve banking the cases of Lawrence White and George Selgin[23] deserve a few critical comments, if for no other reason than that both are critics of Friedmanite monetarism and they hark back, instead, to the tradition of Austrian and in particular Misesian monetary theory.[24] Their monetary ideal is a universal commodity money such as an international gold

[22]On the fundamental distinction between commodity credit and circulation credit, see Mises, *Theory of Money and Credit*, pp. 263 ff.

[23]See Lawrence White, *Competition and Currency* (New York: New York University Press, 1989); George Selgin, *The Theory of Free Banking* (Totowa, N.J.: Rowman & Littlefield, 1988).

[24]For a critique of White and Selgin as misinterpreting the fundamental thrust of Mises's theory of money and banking see Joseph Salerno, "The Concept of Coordination in Austrian Macroeconomics," in *Austrian Economics: Perspectives on the Past and Prospects for the Future*, Richard Ebeling, ed. (Hillsdale, Mich.: Hillsdale College Press, 1991); idem, "Mises and Hayek Dehomogenized," *Review of Austrian Economics* 6, no. 2 (1993): 113–46.

standard and, based on this, a system of competitive banking which, they claim, would—and should be permitted to do so for reasons of economic efficiency as well as justice—engage in fractional reserve banking and the granting of fiduciary credit.

As to the question of justice, White and Selgin offer but one argument destined to show the allegedly non-fraudulent character of fractional reserves: that outlawing such a practice would involve a violation of the principle of freedom of contract by preventing "banks and their customers from making whatever sorts of contractual arrangements are mutually agreeable."[25] Yet this is surely a silly argument. First off, as a matter of historical fact fractional reserve banks never informed their depositors that some or all of their deposits would actually be loaned out and hence could not possibly be ready for redemption at any time. (Even if the bank were to pay interest on deposit accounts, and hence it *should* have been clear that the bank *must* loan out deposits, this does not imply that any of the depositors actually understand this fact. Indeed, it is safe to say that few if any do, even among those who are not economic illiterates.) Nor did fractional reserve banks inform their borrowers that some or all of the credit granted to them had been created out of thin air and was subject to being recalled at any time. How, then, can their practice be called anything but fraud and embezzlement!

Second, and more decisive, to believe that fractional reserve banking should be regarded as falling under and protected by the principle of freedom of contract involves a complete misunderstanding of the very meaning of this principle. Freedom of contract does not imply that *every* mutually advantageous contract should be permitted. Clearly, if A and B contractually agree to rob C, this would *not* be in accordance with the principle. Freedom of contract means instead that A and B should be allowed to make any contract whatsoever *regarding their own properties*, yet fractional reserve banking involves the making of contracts regarding the property of third parties. Whenever the bank loans its "excess" reserves to a borrower, such a bilateral contract affects the property of third parties in a threefold way. First, by thereby increasing the money supply, the purchasing power of all other money owners is reduced; second, all depositors are harmed because the likelihood of their successfully recovering their own possessions is lowered; and third, all other borrowers—borrowers of commodity credit—are harmed because the

[25]White, *Competition and Currency*, p. 156, also pp. 55–56; George Selgin, "Short-Changed in Chile: The Truth about the Free-Banking Episode," *Austrian Economics Newsletter* (Winter/Spring, 1990): 5.

injection of fiduciary credit impairs the safety of the entire credit structure and increases the risk of a business failure for every investor of commodity credit.

In order to overcome these objections to the claim that fractional reserve banking accords with the principle of freedom of contract, White and Selgin then, as their last line of defense, withdraw to the position that banks may attach an "option clause" to their notes, informing depositors that the bank may at any time suspend or defer redemption, and letting borrowers know that their loans may be instantly recalled.[26] While such a practice would indeed dispose of the charge of fraud, it is subject to another fundamental criticism, for such notes would no longer be *money* but a peculiar form of *lottery tickets*.[27] It is the function of money to serve as the most easily resalable and most widely acceptable good, so as to prepare its owner for instant purchases of directly or indirectly serviceable consumer or producer goods at not yet known future dates; hence, whatever may serve as money, so as to be instantly resalable at any future point in time, it must be something that bestows an *absolute* and *un*conditional property right on its owner. In sharp contrast, the owner of a note to which an option clause is attached does *not* possess an unconditional property title. Rather, similar to the holder of a "fractional reserve parking ticket" (where more tickets are sold than there are parking places on hand, and lots are allocated according to a "first-come-first-served" rule), he is merely entitled to participate in the drawing of certain prizes, consisting of ownership- or time-rental services to specified goods according to specified rules. But as drawing rights—instead of unconditional ownership titles—they only possess *temporally conditional* value, i.e., *until* the drawings, and become worthless as soon as the prizes have been allocated to the ticket holders; thus, they would be uniquely *un*suited to serve as a medium of exchange.

As regards the second contention: that fractional reserve banking is economically efficient, it is noteworthy to point out that White, although he is undoubtably familiar with the Austrian-Misesian claim that *any* injection of fiduciary credit must result in a boom-bust cycle, nowhere even mentions the problem of business cycles. Only Selgin addresses the problem. In his attempt to show that fractional reserve banking does *not* cause business cycles, however, Selgin then falls headlong into the fundamental Keynesian error of confusing the

[26]White, *Currency and Competition*, p. 157; Selgin, *The Theory of Free Banking*, p. 137.

[27]See Block, "Fractional Reserve Banking: An Interdisciplinary Perspective," p. 30.

demand for money (determined by the utility of money) and savings (determined by time preference).[28]

According to Selgin, "to hold inside money is to engage in voluntary saving"; and accordingly, "an increase in the demand for money warrants an increase in bank loans and investments." For, "whenever a bank expands its liabilities in the process of making new loans and investments, it is the holders of the liabilities who are the ultimate lenders of credit, and what they lend are the real resources they could acquire if, instead of holding money, they spent it."[29] And based on this view of the holding of money as representing saving and an increased demand for money as being the same thing as increased saving, then, Selgin goes on to criticize Mises's claim that *any* issuance of fiduciary media, in lowering the interest rate below its "natural" level, must cause a business cycle as "confused." "No ill consequences result from the issue of fiduciary media in response to a greater demand for balances of inside money."[30]

Yet the confusion is all Selgin's. First off, it is plainly false to say that the holding of money, i.e., the act of not spending it, is equivalent to saving. One might as well say—and this would be equally wrong—that the not-spending of money is equivalent to *not* saving. In fact, saving is not-consuming, and the demand for money has nothing to do with saving *or* not-saving. The demand for money is the unwillingness to buy or rent non-money goods—and these include consumer goods (present goods) *and* capital goods (future goods). Not-spending money is to purchase *neither* consumer goods *nor* investment goods. Contrary to Selgin, then, matters are as follows: Individuals may employ their monetary assets in one of three ways. They can spend them on consumer goods; they can spend them on investment; or they can keep them in the form of cash. There are no other alternatives. While a person must at all times make decisions regarding three margins at once, invariably the outcome is determined by two distinct and praxeologically unrelated factors. The consumption/investment proportion, i.e., the decision of how much of one's money to spend on consumption and how much on investment, is determined by a person's time preference, i.e., the degree to which he prefers present consumption over future consumption. On the other hand, the source of his demand for cash is the utility attached to money, i.e., the

[28]For a critique of this error see Rothbard, *America's Great Depression*, pp. 39–43; Hans-Hermann Hoppe, "Theory of Employment, Money, Interest, and the Capitalist Process: The Misesian Case Against Keynes," in *The Economics and Ethics of Private Property*, Hoppe, ed. (Boston: Kluwer, 1993), pp. 119–20, 137–38.

[29]Selgin, *The Theory of Free Banking*, p. 54–55.

[30]Ibid., pp. 61–62.

personal satisfaction derived from money in allowing him immediate purchases of directly or indirectly serviceable consumer or producer goods at uncertain future dates.

Accordingly, if the demand for money increases while the social stock of money is given, this additional demand can only be satisfied by bidding down the money prices of non-money goods. The purchasing power of money will increase, the *real* value of individual cash balances will be raised, and at a higher purchasing power per unit money, the demand for and the supply of money will once again be equilibrated. The relative price of money versus non-money will have changed. But *unless* time preference is assumed to have changed at the same time, *real* consumption and *real* investment will remain the same as before: the additional money demand is satisfied by reducing nominal consumption *and* investment spending in accordance with the same pre-existing consumption/investment proportion, driving the money prices of both consumer as well as producer goods down and leaving real consumption and investment at precisely their old levels. If time preference is assumed to change concomitantly with an increased demand for money, however, then everything is possible. Indeed, if spending were reduced exclusively on investment goods, an increased demand for money could even go hand in hand with an increase in the rate of interest and reduced saving and investment. Yet this, or the equally possible opposite outcome, would not be due to a change in the demand for money but exclusively to a change (a rise, or a fall) in the time preference schedule. In any case, if the banking system were to follow Selgin's advice and *accommodate* an increased demand for cash by issuing fiduciary credit, the social rate of time preference would be falsified, excessive investment would result, and a boom-bust cycle would be set in motion, rendering the practice of fractional reserve banking fraudulent *as well as* economically inefficient.

White's and Selgin's proposal of a commodity money based system of competitive fractional reserve banking—of partial fiat money—is neither just (and hence the term "free banking" is inappropriate), nor does it produce economic stability. It is no fundamental improvement as compared to the monetarist reality of monopolistically issued pure fiat currencies. Indeed, in one respect Friedman's pure fiat money proposal contains a more realistic and correct analysis than White's and Selgin's because Friedman recognizes "what used to be called 'the inherent instability' of fractional reserve banking," and he understands that this inherent instability of competitive fractional reserve banking will sooner or later collapse in a "liquidity crisis" and

then lead to his favored regime—a governmentally provided pure fiat currency—anyway.[31]

Only a system of universal commodity money (gold), competitive banks, *and* 100 percent reserve deposit banking with a strict functional separation of loan and deposit banking is in accordance with justice, can assure economic stability and represents a genuine answer to the current monetarist fiasco.

[31]See Friedman and Schwartz, "Has Government Any Role in Money?"

The Consumption Tax: A Critique

Murray N. Rothbard

The Alleged Superiority of the Income Tax

Orthodox neoclassical economics has long maintained that, from the point of view of the taxed themselves, an income tax is "better than" an excise tax on a particular form of consumption, since, in addition to the total revenue extracted, which is assumed to be the same in both cases, the excise tax weights the levy heavily against a particular consumer good. In addition to the total amount levied, therefore, an excise tax skews and distorts spending and resources away from the consumers' preferred consumption patterns. Indifference curves are trotted out with a flourish to lend the scientific patina of geometry to this demonstration.

As in many other cases when economists rush to judge various courses of action as "good," "superior" or "optimal," however, the *ceteris paribus* assumptions underlying such judgments—in this case, for example, that total revenue remains the same—do not always hold up in real life. Thus, it is certainly possible, for political or other reasons, that one particular form of tax is *not likely* to result in the same total revenue as another. The nature of a particular tax might lead to less or more revenue than another tax. Suppose, for example, that all present taxes are abolished and that the same total is to be raised from a new capitation, or head, tax, which requires that every inhabitant of the United States pay an equal amount to the support of federal, state, and local government. This would mean that the existing total government revenue of the United States, which we estimate at 1 trillion, 380 million dollars—and here exact figures are not important—would have to be divided between an

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approximate total of 243 million people. Which would mean that every man, woman, and child in America would be required to pay to government each and every year, $5680. Somehow, I don't believe that anything like this large a sum could be collectible by the authorities, no matter how many enforcement powers are granted the IRS. A clear example where the *ceteris paribus* assumption flagrantly breaks down.

But a more important, if less dramatic, example is nearer at hand. Before World War II, Internal Revenue collected the full amount, in one lump sum, from every taxpayer, on March 15 of each year. (A month's extension was later granted to the long-suffering taxpayers.) During World War II, in order to permit an easier and far smoother collection of the far higher tax rates for financing the war effort, the federal government instituted a plan conceived by the ubiquitous Beardsley Ruml of R.H. Macy & Co., and technically implemented by a bright young economist at the Treasury Department, Milton Friedman. This plan, as all of us know only too well, coerced every employer into the unpaid labor of withholding the tax each month from the employee's paycheck and delivering it to the Treasury. As a result, there was no longer a need for the taxpayer to cough up the total amount in a lump sum each year. We were assured by one and all, at the time, that this new *withholding tax* was strictly limited to the wartime emergency, and would disappear at the arrival of peace. The rest, alas, is history. But the point is that no one can seriously maintain that an income tax deprived of withholding power, could be collected at its present high levels.

One reason, therefore, that an economist cannot claim that the income tax, or any other tax, is better from the point of view of the taxed person, is that total revenue collected is often a function of the type of tax imposed. And it would seem, that from the point of view of the taxed person, the less extracted from him the better. Even indifference curve analysis would have to confirm that conclusion. If someone wishes to claim that a taxed person is disappointed at how *little* tax he is asked to pay, that person is always free to make up the alleged deficiency by making a voluntary gift to the bewildered but happy taxing authorities.[1]

[1]In 1619, Father Pedro Fernandez Navarrete, "Canonist Chaplain and Secretary of his High Majesty," published a book of advice to the Spanish monarch. Sternly advising a drastic cut in taxation and government spending, Father Navarrete recommended that, in the case of sudden emergencies, the king rely soley on soliciting voluntary donations. Alejandro Antonio Chafuen, *Christians for Freedom: Late Scholastic Economics* (San Francisco: Ignatius Press, 1986), p. 68.

A second insuperable problem with an economist's recommending any form of tax from the alleged point of view of the taxee, is that the taxpayer may well have particular subjective evaluations of the form of tax, apart from the total amount levied. Even if the total revenue extracted from him is the same for tax A and tax B, he may have very different subjective evaluations of the two taxing processes. Let us return, for example, to our case of the income as compared to an excise tax. Income taxes are collected in the course of a coercive and even brutal examination of virtually every aspect of every taxpayer's life by the all-seeing, all-powerful Internal Revenue Service. Each taxpayer, furthermore, is obliged by law to keep accurate records of his income and deductions, and then, painstakingly and truthfully, to fill out and submit the very forms that will tend to incriminate him into tax liability. An excise tax, say on whiskey or on movie admissions, will intrude directly on no one's life and income, but only into the sales of the movie theater or liquor store. I venture to judge that, in evaluating the "superiority" or "inferiority" of different modes of taxation, even the most determined imbiber or moviegoer would cheerfully pay far higher prices for whiskey or movies than neoclassical economists contemplate, in order to avoid the long arm of the IRS.[2]

The Forms of Consumption Tax

In recent years, the old idea of a consumption tax in contrast to an income tax has been put forward by many economists, particularly by allegedly pro-free market conservatives. Before turning to a critique of the consumption tax as a substitute for the income tax, it should be noted that current proposals for a consumption tax would deprive taxpayers of the psychic joy of eradicating the IRS. For while the discussion is often couched in either-or terms, the various proposals really amount to *adding* a new consumption tax on top of the current massive armamentarium of taxing power. In short, seeing that income tax levels may have reached their political limits for the time being, our tax consultants and theoreticians are suggesting a shining new tax weapon for the government to wield. Or, in the immortal words of that exemplary economic czar and servant of absolutism, Jean-Baptiste Colbert, the task of the taxing authorities is to "so pluck the goose as to obtain the largest amount of feathers

[2]It is particulary poignant, on or near any April 15, to contemplate the dictum of Father Navarrete, that "the only agreeable country is the one where no one is afraid of tax collectors," Chafuen, *Christians for Freedom*, p. 73. Also see Murray N. Rothbard, "Review of A. Chafuen, *Christians for Freedom: Late Scholastic Economics*," *International Philosophical Quarterly* 28 (March 1988): 112–14.

with the least amount of hissing." We the taxpayers, of course, are the geese.

But let us put the best face on the consumption tax proposal, and deal with it as a complete replacement of the income tax by a consumption tax, with total revenue remaining the same. Our first point is that one venerable form of consumption tax not only retains existing IRS despotism, but makes it even worse. This is the consumption tax first prominently proposed by Irving Fisher.[3] The Fisher tax would retain the IRS, as well as the requirement that everyone keep detailed and faithful records and truthfully estimate his own taxes. But it would add something else. *In addition* to reporting one's income and deductions, everyone would be required to report his additions to or subtractions from capital assets (including cash) over the year. Then, everyone would pay the designated tax rate on his income minus his addition to capital assets, or net consumption. Or, contrarily, if he spent more than he earned over the year, he would pay a tax on his income plus his reduction of capital assets, again equalling his net consumption. Whatever the other merits or demerits of the Fisherine tax, it would *add* to IRS power over every individual, since the state of his capital assets, including his stock of cash, would now be examined with the same care as his income.

A second proposed consumption tax, the VAT, or value-added tax, imposes a curious hierarchical tax on the "value added" by each firm and business. Here, instead of every individual, every business firm would be subjected to intense bureaucratic scrutiny, for each firm would be obliged to report its income and its expenditures, paying a designated tax on the net income. This would tend to distort the structure of business. For one thing, there would be an incentive for uneconomic vertical integration, since the fewer the number of times a sale takes place, the fewer the imposed taxes. Also, as has been happening in European countries with experience of the VAT, a flourishing industry may arise in issuing phony vouchers, so that businesses can overinflate their alleged expenditures, and reduce their reported value added. Surely a sales tax, other things being equal, is manifestly both simpler, less distorting of resources, and enormously less bureaucratic and despotic than the VAT. Indeed the VAT seems to have no clear advantage over the sales tax, except of course, if multiplying bureaucracy and bureaucratic power is considered a *benefit*.

[3]See, for example, Irving and Herbert N. Fisher, *Constructive Income Taxation* (New York: Harper, 1942).

The third type of consumption tax is the familiar percentage tax on retail sales. Of the various forms of consumption tax, the sales tax surely has the great advantage, for most of us, of eliminating the despotic power of the government over the life of every individual, as in the income tax, or over each business firm, as in the VAT. It would not distort the production structure as would the VAT, and it would not skew individual preferences as would specific excise taxes.

Let us now consider the merits or demerits of a consumption as against an income tax, setting aside the question of bureaucratic power. It should first be noted that the consumption tax and the income tax each carry distinct philosophical implications. The income tax rests necessarily on the ability-to-pay principle, namely the principle that if a goose has more feathers it is more ripe for the plucking. The ability-to-pay principle is precisely the creed of the highwayman, of taking where the taking is good, of extracting as much as the victims can bear. The ability-to-pay principle is the philosophical embodiment of the memorable answer of Willie Sutton when he was asked, perhaps by a psychological social worker, why he robbed banks. "Because," answered Willie, "that's where the money is."

The consumption tax, on the other hand, can only be regarded as a payment for permission-to-live. It implies that a man will not be allowed to advance or even sustain his own life, unless he pays, off the top, a fee to the State for permission to do so. The consumption tax does not strike me, in its philosophical implications, as one whit more noble, or less presumptuous, than the income tax.

Proportionality And Progressivity: Who? Whom?

One of the suggested virtues of the consumption tax advanced by conservatives is that, while the income tax can be and generally is progressive, the consumption tax is virtually automatically proportional. It is also claimed that progressive taxation is tantamount to theft, with the poor robbing the rich, whereas proportionality is the fair and ideal tax. In the first place, however, the Fisher-type consumption tax could well be every bit as progressive as the income tax. Even the sales tax is scarcely free from progressivity. For most sales taxes in practice exempt such products as food, exemptions that distort individual market preferences and also introduce progressivity of taxation.

But is progressivity really the problem? Let us take two individuals, one who makes $10,000 a year and another who makes $100,000. Let us posit two alternative tax systems: one proportional, the other

steeply progressive. In the progressive tax system, income tax rates range from 1 percent for the $10,000 a year man, to 15 percent for the man with the higher income. In the succeeding proportional system, let us assume, everyone, regardless of income, pays the same 30 percent of his income. In the progressive system, the low-income man pays $100 a year in taxes, and the wealthier pays $15,000, whereas in the allegedly fairer proportional system, the poorer man pays $3000 instead of $100, while the wealthier pays $30,000 instead of $15,000. It is, however, small consolation to the higher-income person that the poorer man is paying the same percentage of income in tax as he, for the wealthier person is being mulcted far more than before. It is unconvincing, therefore, to the richer man to be told that he is now no longer being "robbed" by the poor, since he is losing far more than before. If it is objected that the *total level* of taxation is far higher under our posited proportional than progressive system, we reply that that is precisely the point. For what the higher income person is *really* objecting to is not the mythical robbery inflicted upon him by "the poor;" his problem is the very real amount being extracted from him by the *State*. The wealthier man's real complaint, then, is not how badly he is being treated relative to someone else, but how much money is being extracted from his own hard-earned assets. We submit that *progressivity* of taxes is a red herring; that the real problem and proper focus should be on the *amount* that any given individual is obliged to surrender to the State.[4]

The State, of course, spends the money it receives on various groups, and those who claim that progressive taxation mulcts the rich on behalf of the poor argue by comparing the income status of the taxpayers with those on the receiving end of the State's largess. Similarly, the Chicago school claims that the tax system is a process by which the middle class exploits both the rich and the poor, while the New Left insists that taxes are a process by which the rich exploit the poor. All of these attempts misfire by unjustifiably bracketing as one class the payers to, and recipients from, the State. Those who pay taxes to the State, be they wealthy, middle class or poor, are certainly on net, a *different set* of people than those wealthy, middle-class, or poor, who receive money from State coffers, which notably includes politicians and bureaucrats as well as those who receive favors from these members of the State apparatus. It makes no sense to lump these groups together. It makes far more sense to realize that the

[4]For a fuller treatment, and a discussion of who is being robbed by *whom*, see Murray N. Rothbard, *Power and Market: Government and the Economy*, 2nd ed. (Kansas City: Sheed Andrews & McMeel, 1977), pp. 120–21.

process of tax-and-expenditures creates *two* and only two separate, distinct, antagonistic social classes, what Calhoun brilliantly identified as the (net) taxpayers and the (net) tax-consumers, those who pay taxes and those who live off them. I submit that, looked at in this perspective, it also becomes particularly important to minimize the burdens which the State and its privileged tax-consumers place on the productivity of the taxpayers.[5]

The Problem of Taxing Savings

The major argument for replacing an income by a consumption tax is that savings would no longer be taxed. A consumption tax, its advocates assert, would tax consumption and not savings. The fact that this argument is generally advanced by free-market economists, in our day mainly by the supply-siders, strikes one immediately as rather peculiar. For individuals on the free market, after all, each decide their own allocation of income to consumption or to savings. This proportion of consumption to savings, as Austrian economics teaches us, is determined by each individual's rate of time preference, the degree by which he prefers present to future goods. For each person is continually allocating his income between consumption now, as against saving to invest in goods that will bring an income in the future. And each person decides the allocation on the basis of his time preference. To say, therefore, that only consumption should be taxed and not savings, is to challenge the voluntary preferences and choices of individuals on the free market, and to say that they are saving far too little and consuming too much, and therefore that taxes on savings should be removed and all the burdens placed on present as compared to future consumption. But to do that is to challenge free-market expressions of time preference, and to advocate government coercion to forcibly alter the expression of those preferences, so as to coerce a higher saving to consumption ratio than desired by free individuals.

We must, then, ask: by what standards do the supply-siders and other advocates of consumption taxes decide why and to what extent savings are too low and consumption too high? What are their criteria of "too low" or "too much," on which they base their proposed coercion over individual choice? And what is more, by what right do they call themselves advocates of the "free-market" when they propose to dictate choices in such a vital realm as the proportion between present and future consumption?

[5]See Murray N. Rothbard, *Man, Economy, and State: A Treatise on Economic Principles*, 2nd ed. (Los Angeles: Nash, 1970), 2, pp. 791–92; idem, *Power and Market*, pp. 84–88, 14–16. Cf. John C. Calhoun, *A Disquisition on Government* (New York: Liberals Arts Press, 1953), pp. 16–18.

Supply-siders consider themselves heirs of Adam Smith, and in one sense they are right. For Smith, too, driven in his case by a deep-seated Calvinist hostility to luxurious consumption, sought to use government to raise the social proportion of investment to consumption beyond the desires of the free market. One method he advocated was high taxes on luxurious consumption; another was usury laws, to drive interest rates below the free market level, and thereby coercively channel or ration savings and credit into the hands of sober, industrious prime business borrowers, and out of the hands of "projectors" and "prodigal" consumers who would be willing to pay high interest charges. Indeed, through the device of the ghostly Impartial Spectator, who, in contrast to real human beings, is indifferent to the time at which he will receive goods, Smith virtually held a zero rate of time preference to be the ideal.[6]

The only coherent argument offered by advocates of consumption against income taxation is that of Irving Fisher, based on suggestions in John Stuart Mill.[7] Fisher argued that, since the goal of all production is consumption, and since all capital goods are only way-stations on the way to consumption, the only *genuine* income is consumption spending. The conclusion is quickly drawn that therefore only consumption income, not what is generally called "income," should be subject to tax.

More specifically, savings and consumption, it is alleged, are not really symmetrical. All saving is directed toward enjoying more consumption in the future. Potential present consumption is foregone in return for an expected increase in future consumption. The argument concludes that therefore any return on investment can only be considered a "double-counting" of income, in the same way that a repeated counting of the gross sales of, say, a case of Wheaties from manufacturer to jobber to wholesaler to retailer as part of net income or product would be a multiple counting of the same good.

This reasoning is correct as far as it goes in explaining the consumption-savings process, and is quite helpful in leveling a critique of conventional national income or product statistics. For these statistics carefully leave out all double or multiple counting in order to arrive at total net product, yet they arbitrarily include in total net income, investment in all capital goods *lasting longer than one year*—a clear example itself of double counting. Thus, the current practice absurdly excludes from net income a merchant's investment

[6]See the illiminating article by Roger W. Garrision, "West's 'Cantillon and Adam Smith': A Comment," *Journal of Libertarian Studies* 7 (Fall 1985): 291–92.

[7]See Rothbard, *Power and Market*, pp. 98–100.

in inventory lasting eleven months before sale, but *includes* in net income investment in inventory lasting for thirteen months. The cogent conclusion is that an estimate of social or national income should include only consumer spending.[8]

Despite the many virtues of the Fisher analysis, however, it is impermissible to leap to the conclusion that only consumption should be taxed rather than income. It is true that savings leads to a greater supply of consumer goods in the future. But this fact is known to all persons; that is precisely *why* people save. The market, in short, knows all about the productive power of savings for the future, and allocates its expenditures accordingly. Yet even though people know that savings will yield them more future consumption, why don't they save *all* their current income? Clearly, because of their time preferences for present as against future consumption. These time preferences govern people's allocation between present and future. Every individual, given his money "income"—defined in conventional terms—and his value scales, will allocate that income in the most desired proportion between consumption and investment. Any *other* allocation of such income, any different proportions, would therefore satisfy his wants and desires to a lesser extent and lower his position on his value scale. It is therefore incorrect to say that an income tax levies an extra burden on savings and investment; it penalizes an individual's *entire* standard of living, present and future. An income tax does not penalize saving *per se* any more than it penalizes consumption.

Hence, the Fisher analysis, for all its sophistication, simply shares the other consumption tax advocates' prejudices against the voluntary free-market allocations between consumption and investment. The argument places greater weight on savings and investment than the market does. A consumption tax is just as disruptive of voluntary time preferences and market allocations as is a tax on savings. In most or all other areas of the market, free market economists understand that allocations on the market tend always to be optimal with respect to satisfying consumers' desires. Why then do they all too often make an exception of consumption-savings allocations, refusing to respect time-preference rates on the market?

Perhaps the answer is that economists are subject to the same temptations as anyone else. One of these temptations is to call loudly

[8]We omit here the fascinating question of how *government's* activities should be treated in national income statistics. See Rothbard, *Man, Economy, and State*, 2, pp. 815–20; idem, *Power and Market*, pp. 199–201; idem, *America's Great Depression*, 4th ed. (New York: Richardson & Snyder, 1983), pp. 296–304; Robert Batemarco, "GNP, PPR, and the Standard of Living," *Review of Austrian Economics* 1 (1987): 181–86.

for you, him, and the other guy to work harder, and save and invest more, thereby increasing one's own present and future standards of living. A follow-up temptation is to call for the gendarmes to enforce that desire. Whatever we may call this temptation, economic science has nothing to do with it.

The Impossibility of Taxing Only Consumption

Having challenged the merits of the goal of taxing only consumption and freeing savings from taxation, we now proceed to deny the very *possibility* of achieving that goal, i.e., we maintain that a consumption tax will devolve, willy-nilly, into a tax on income and therefore on savings as well. In short, that even if, for the sake of argument, we should *want* to tax only consumption and not income, we should not be able to do so.

Let us take, first, the Fisher plan, which, seemingly straightforward, would exempt saving and tax only consumption. Let us take Mr. Jones, who earns an annual income of $100,000. His time preferences lead him to spend 90 percent of his income on consumption, and save-and-invest the other 10 percent. On this assumption, he will spend $90,000 a year on consumption, and save-and-invest the other $10,000. Let us assume now that the government levies a 20 percent tax on Jones's income, and that his time-preference schedule remains the same. The ratio of his consumption to savings will still be 90:10, and so, after-tax income now being $80,000, his consumption spending will be $72,000 and his saving-investment $8,000 per year.[9]

Suppose now that instead of an income tax, the government follows the Irving Fisher scheme, and levies a 20 percent annual tax on Jones's *consumption*. Fisher maintained that such a tax would fall only on consumption, and not on Jones's savings. But this claim is incorrect, since Jones's entire savings-investment is based solely on the possibility of his *future* consumption, which will be taxed equally. Since future consumption will be taxed, we assume, at the same rate as consumption at present, we cannot conclude that savings in the long run receives any tax exemption or special encouragement. There will therefore be no shift by Jones in favor of savings-and-investment due to a consumption tax.[10] In sum, any payment of

[9]We set aside the fact that, at the lower amount of money assets left to him, Jones's time preference *rate*, given his time preference schedule, will be higher, so that his consumption will be higher, and his savings lower, than we have assumed.

[10]In fact, per note 9, *supra*, there will be a shift *in favor of* consumption because a diminished amount of money will shift the taxpayer's time preference rate in the direction of consumption. Hence, paradoxically, a pure tax on consumption will and up taxing savings *more* than consumption! See Rothbard, *Power and Market*, pp. 108–11.

taxes to the government, whether they be consumption or income, necessarily reduces Jones's net income. Since his time preference schedule remains the same, Jones will therefore reduce his consumption *and* his savings proportionately. The consumption tax will be shifted by Jones until it becomes equivalent to a lower rate of tax on his own income. If Jones still spends 90 percent of his net income on consumption, and 10 percent on savings-investment, his net income will be reduced by $15,000, instead of $20,000, and his consumption will now total $76,000, and his savings-investment $9,000. In other words, Jones's 20 percent consumption tax will become equivalent to a 15 percent tax on his income, and he will arrange his consumption-savings proportions accordingly.[11]

We saw at the beginning of this paper that an excise tax skewing resources away from more desirable goods does not necessarily mean we can recommend an alternative, such as an income tax. But how about a general sales tax, assuming that one can be levied politically with no exemptions of goods or services? Wouldn't such a tax burden be only on consumption and not income?

In the first place, a sales tax would be subject to the same problems as the Fisher consumption tax. Since future and present consumption would be taxed equally, there would again be shifting by each individual so that future as well as present consumption would be reduced. But, furthermore, the sales tax is subject to an extra complication: the general assumption that a sales tax can be readily shifted forward to the consumer is totally fallacious. In fact, the sales tax cannot be shifted forward at all!

Consider: all prices are determined by the interaction of supply, the stock of goods available to be sold, and by the demand schedule for that good. If the government levies a general 20 percent tax on all retail sales, it is true that retailers will now incur an additional 20 percent cost on all sales. But how can they raise prices to cover these costs? Prices, at all times, tend to be set at the maximum net revenue

[11]If net income is defined as gross income minus amount paid in taxes, and for Jones, consumption is 90 percent of net income, a 20 percent consumption tax on $100,000 income will be tantamount to a 15 percent tax on this income. Rothbard, *Power and Market*, pp. 108–11. The basic formula is that *net income*,

$$N = \frac{G}{1 + tc}$$

where G = gross income, t = the tax rate on consumption, and c, consumption as percent of net income, are givens of the problem, and N = G - T by definition, where T is the amount paid in consumption tax.

point for each seller. If the sellers can simply pass the 20 percent increase in costs onto the consumers, why did they have to wait until a sales tax to raise prices? Prices are *already* at highest net income levels for each firm. Any increase in cost, therefore, will have to be absorbed by the firm; it cannot be passed forward to the consumers. Put another way: the levy of a sales tax has not changed the stock already available to the consumers; that stock has *already* been produced. Demand curves have not changed, and there is no reason for them to do so. Since supply and demand have not changed, neither will price. Or, looking at the situation from the point of the demand and supply of money, which help determine general price levels, the supply of money has remained as given, and there is also no reason to assume a change in the demand for cash balances either. Hence, prices will remain the same.

It might be objected that, even though shifting forward to higher prices cannot occur immediately, it can do so in the longer run, when factor and resources owners will have a chance to lower their supply at a later point in time. It is true that a partial excise can be shifted forward in this way, in the long run, by resources leaving, let us say, the liquor industry and shifting into other untaxed industries. After a while, then, the price of liquor can be raised by a liquor tax, but *only* by reducing the future supply, the stock of liquor available for sale at a future date. But such "shifting" is not a painless and prompt passing on of a higher price to consumers; it can only be accomplished in a longer run by a reduction in the supply of a good.

The burden of a *sales* tax cannot be shifted forward in the same way, however. For resources cannot escape a sales tax as they can an excise tax: by leaving the liquor industry and moving to another. We are assuming that the sales tax is general and uniform; it cannot therefore, be escaped by resources except by fleeing into idleness. Hence, we cannot maintain that the sales tax will be shifted forward in the long run by *all* supplies of goods falling by something like 20 percent (depending on elasticities). General supplies of goods will fall, and hence prices rise, only to the relatively modest extent that labor, seeing a rise in the opportunity cost of leisure because of a drop in wage incomes, will leave the labor force and become voluntarily idle (or more generally will lower the number of hours worked).[12]

In the long run, of course, and that run is not *very* long, the retail

[12]Rothbard, *Power and Market*, pp. 88–93. Also see the notable article by Harry Gunnison Brown, "The Incidence of a General Sales Tax," in *Readings in the Economics of Taxation*, R. Musgrave and C. Shoup, eds. (Homewood, Ill: Irwin, 1959), pp. 330–39.

firms will not be able to absorb a sales tax; they are not unlimited pools of wealth ready to be confiscated. As the retail firms suffer losses, their demand curves for all intermediate goods, and then for all factors of production, will shift sharply downward, and these declines in demand schedules will be rapidly transmitted to all the ultimate factors of production: labor, land, and interest income. And since all firms tend to earn a uniform interest return determined by social time preference, the incidence of the fall in demand curves will rest rather quickly on the two ultimate factors of production: land and labor.

Hence, the seemingly common-sense view that a retail sales tax will readily be shifted forward to the consumer is totally incorrect. In contrast, the initial impact of the tax will be on the net incomes of retail firms. Their severe losses will lead to a rapid downward shift in demand curves, *backward* to land and labor, i.e., to wage rates and ground rents. Hence, instead of the retail sales tax being quickly and painlessly shifted forward, it will, in a longer-run, be painfully shifted backward to the incomes of labor and landowners. Once again, an alleged tax on *consumption*, has been transmuted by the processes of the market into a tax on *incomes*.

The general stress on forward shifting, and neglect of backward-shifting, in economics, is due to the disregard of the Austrian theory of value, and its insight that market price is determined *only* by the interaction of an already produced stock, with the subjective utilities and demand schedules of consumers for that stock. The market supply curve, therefore, should be vertical in the usual supply-demand diagram. The standard Marshallian forward-sloping supply curve illegitimately incorporates a time dimension within it, and it therefore cannot interact with an instantaneous, or freeze-frame, market demand curve. The Marshallian curve sustains the illusion that higher cost can directly raise prices, and not only indirectly by reducing supply. And while we may arrive at the same conclusion as Marshallian supply-curve analysis for a particular excise tax, where partial equilibrium can be used, this standard method breaks down for general sales taxation.

Conclusion: The Amount vs. the Form of Taxation

We conclude with the observation that there has been far too much concentration on the *form*, the type of taxation, and not enough on its total amount. The result has been endless tinkering with *kinds* of taxes, coupled with neglect of a far more critical question: *how much* of the social product should be siphoned away from the producers?

Or, how much income should be retained by the producers and how much income and resources coercively diverted for the benefit of non-producers?

It is particularly odd that economists who proudly refer to themselves as advocates of the free market have in recent years led the way in this mistaken path. It was allegedly free market economists for example, who pioneered in and propagandized for, the alleged Tax Reform Act of 1986. This massive change was supposed to bring us "simplification" of our income taxes. The result, of course, was so simple that even the IRS, let alone the fleet of tax lawyers and tax accountants, has had great difficulty in understanding the new dispensation. Peculiarly, moreover, in all the maneuverings that led to the Tax Reform Act, the standard held up by these economists, a standard apparently so self-evident as to need no justification, was that the sum of tax changes be "revenue neutral." But they never told us what is so great about revenue neutrality. And of course, by cleaving to such a standard, the crucial question of total revenue was deliberately precluded from the discussion.

Even more egregious was an early doctrine of another group of supposed free-market advocates, the supply-siders. In their original Laffer-curve manifestation, now happily consigned to the dustbin of history, the supply-siders maintained that the tax rate that maximizes tax revenue is the "voluntary" rate, and a rate that should be diligently pursued. It was never pointed out in what sense such a tax rate is "voluntary," or what in the world the concept of "voluntary" has to do with taxation in the first place. Much less did the supply-siders in their Lafferite form ever instruct us why we must all uphold maximizing government revenue as our beau ideal. Surely, for free-market proponents, one might think that *minimizing* government depredation of the private product would be a bit more appealing.

It is with relief that one turns for a realistic as well as a genuine free-market approach to Jean-Baptiste Say, who contributed considerably more to economics than Say's Law. Say was under no illusion that taxation is voluntary nor that government spending contributes productive services to the economy. Say pointed out that, in taxation, "The government exacts from a taxpayer the payment of a given tax in the shape of money. To meet this demand, the taxpayer exchanges part of the products at his disposal for coin, which he pays to the tax-gatherers." Eventually, the government spends the money on its own needs, so that "in the end . . . this value is consumed; and then the portion of wealth, which passes from the hands of the taxpayer into those of the tax-gatherer, is destroyed and annihilated." Note,

that as in the case of the later Calhoun, Say sees that taxation creates two conflicting classes, the taxpayers and the tax-gatherers. Were it not for taxes, the taxpayer would have spent his money on his own consumption. As it is, "The state...enjoys the satisfaction resulting from that consumption."

Say proceeds to denounce the "prevalent notion, that the values, paid by the community for the public service, return it again. . . ; that what government and its agents receive, is refunded again by their expenditures." Say angrily comments that this "gross fallacy . . . has been productive of infinite mischief, inasmuch as it has been the pretext for a great deal of shameless waste and dilapidation." On the contrary, Say declares, "the value paid to government by the taxpayer is given without equivalent or return; it is expended by the government in the purchase of personal service, of objects of consumption."

Say goes on to denounce the "false and dangerous conclusion" of economic writers that government consumption increases wealth. Say noted bitterly that "if such principles were to be found only in books, and had never crept into practice one might suffer them without care or regret to swell the monstrous heap of printed absurdity." But unfortunately, he noted, these notions have been put into "practice by the agents of public authority, who can enforce error and absurdity at the point of a bayonet or mouth of the cannon."[13] Taxation, then, for Say is

> the transfer of a portion of the national products from the hands of individuals to those of the government, for the purpose of meeting the public consumption of expenditure . . . It is virtually a burthen imposed upon individuals, either in a separate or corporate character, by the ruling power . . . for the purpose of supplying the consumption it may think proper to make at their expense.[14]

But taxation, for Say, is not merely a zero-sum game. By levying a burden on the producers, he points out, taxes, over time, cripple production itself. Writes Say:

> Taxation deprives the producer of a product, which he would otherwise have the option of deriving a personal gratification from, if consumed . . . or of turning to profit, if he preferred to devote it to an

[13]Jean-Baptiste Say, *A Treatise on Political Economy*, 6th ed. (Philadelphia: Claxton, Remsen & Heffelfinger, 1880), pp. 412–15. Also see Murray N. Rothbard, "The Myth of Neutral Taxation," *Cato Journal* 1 (Fall 1981): 551–54.

[14]Say, *Treatise*, p. 446.

> useful employment . . . [T]herefore, the subtraction of a product must needs diminish, instead of augmenting, productive power.

J. B. Say's policy recommendation was crystal clear and consistent with his analysis and that of the present paper. "The best scheme of [public] finance is, to spend as little as possible; and the best tax is always the lightest."[15] What conclusion can be more fitting for April 15?

[15]Ibid., p. 449.

Notes and Replies

Mises and Hayek on Calculation and Knowledge

Leland B. Yeager

Calculation versus Knowledge

Several Austrian economists have recently introduced an emphatic distinction between calculation problems and knowledge problems besetting socialism. F. A. Hayek, they suggest, has shoved aside or perverted the analysis that Ludwig von Mises got straight in the first place. Especially now that experience in Eastern Europe bears out the arguments of Mises and Hayek, it is important to face the issue of the supposed tension between their positions.

"While Mises saw calculation as *the* problem of socialism," says Jeffrey Herbener (1991, p. 43), "Hayek views it as a knowledge problem." "Mises demonstrated that even with *perfect* information, the central planners in socialism cannot rationally calculate how to combine resources to render efficient production."

According to Joseph Salerno, "Mises unswervingly identified the unique and insoluble problem of socialism as the impossibility of calculation—not, as in the case of F. A. Hayek, as an absence of an efficient mechanism for conveying knowledge to the planners" (Postscript 1990, p. 59, in a section entitled "Mises vs. the Hayekians"). The "Hayekian position criticizing the relative inefficiency of nonmarket mechanisms for discovery, communication, and use of knowledge in the allocation of productive resources" is "categorically different" from the Misesian critique (Ibid., p. 64).

"For Hayek, the major problem for the socialist planning board is its lack of *knowledge*," says Murray Rothbard. Hayek's "argument for the free economy and against statism rests on an argument from ignorance." For Mises, however, the central problem is not

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"knowledge." Even if the planners had perfect knowledge of consumers' value priorities, of resources, and of technologies, "they *still* would not be able to calculate, for lack of a price system of the means of production. The problem is not knowledge, then, but calculability." The "role of the *appraising entrepreneur*, driven by the quest for profits and the avoidance of losses, . . . cannot be fulfilled by the socialist planning board, for lack of a market in the means of production. Without such a market, there are no genuine money prices and therefore no means for the entrepreneur to calculate and appraise in cardinal monetary terms" (Rothbard 1991 in a section on "Fallacies of Hayek and Kirzner," pp. 65–68).

An Untenable Distinction

I question the supposed distinction between calculation and knowledge problems. Mises's own writings, writings of several other interpreters, and my own long acquaintance with the ideas of both Mises and Hayek warrant this question. Beyond citing actual words, I appeal to a heuristic principle of textual interpretation. A writer should be accorded the presumption—defeasible, to be sure—that his arguments cohere in their main lines and are not downright preposterous.

Hayek studied under Mises, though only informally. He once worked for him in a temporary Austrian government office and later was a member of Mises's private seminar. He testifies to the great impact that Mises's *Socialism* had on his own thinking (Foreword to Mises 1981). Hayek's essays on socialist calculation and on the use of knowledge in society (several of them collected in his books of 1935 and 1949) develop and elaborate on insights that were at least implicit in Mises's formulations.

Most briefly, for Mises "[t]he problem of socialist economic calculation is precisely this: that in the absence of market prices for the factors of production, a computation of profit or loss is not feasible" (Mises 1963, p. 705).

But what is the problem that genuine prices help solve? In large part, on my reading of both Mises and Hayek, it is lack of the information (as well as of the incentives) that prices would convey. I cannot believe Mises was merely saying that *if* the socialist planners possessed in some remarkable way all the information normally conveyed by genuine market prices, they still would be stymied by inability to perform *calculations* in the narrow arithmetical sense, an inability that advances in supercomputers might conceivably overcome. Such a reading of Mises's arguments would caricature and trivialize them.

Economic Calculation

Let us review what economic calculation means and what functions prices perform. (To remind readers briefly of familiar points, I omit elaborations and qualifications that might be necessary to forestall objections; see Yeager and Tuerck 1966, chap. 2.)

Ultimately, additional units of any product cost foregoing other products or benefits that might have been chosen instead. Technology and the scarcity of resources pose the need to choose among alternative patterns of production as rival and practically unlimited desires compete for those resources. The other side of the same coin is choosing how to allocate scarce resources among different lines of production.

How might a definite plot of city land be used most advantageously—as a wheat field, a parking lot, a site for a swimming pool or hotel or office or apartment building, or what? By the logic of the price system, this resource goes under the control of whoever will pay the most. In bidding for its use, business firms estimate how much it can contribute, however indirectly, to producing goods and services that consumers want and will pay for. How much value it can contribute depends not only on physical facts of production but also on the selling price of each of the possible final products, and this price depends in turn partly on opportunities to produce the product in other ways. Wheat grown on cheaper land elsewhere would keep anyone who wanted to use city land to grow wheat from affording to bid highest for it. Not only natural resources but also capital, labor, and entrepreneurial ability thus move into lines of production where they contribute most to satisfying consumer needs and wants, satisfactions being measured by what consumers will pay for them.

Another example concerns public transporation in a particular city. (Compare Mises's example of building a railroad; 1990, pp. 24–25). Should it be supplied by buses burning gasoline, by electric streetcars, in some different way, or not at all? The economically efficient answer depends on more than technology and the physical availability of inputs. It depends also on substitutabilities and complementarities among inputs, on alternative uses of those inputs, and on consumers' subjective appraisals of various amounts of the various outputs of those alternative uses, as well as on appraisals of various amounts of various kinds of public and private transportation. The economically efficient answer even to the relatively simply question of local transportation depends, in short, on unimaginably wide ranges of information conveyed, in abbreviated form, by prices.

Ideally, in a competitive economy, the price of each product measures not only how consumers appraise it at the margin but also what the total is of the prices of the additional resources necessary to supply an additional unit of it. These prices, in turn, measure what those resources contribute at the margin to values of output in their various uses (as ultimately appraised by consumers) and so measure the values other outputs sacrificed by not using the resources for them instead. Prices therefore tell the consumer how much worth of other things must be forgone to supply him with each particular product. With necessary alternatives brought to his attention in this way, each consumer ideally leaves no opportunity unexploited to increase his expected total satisfaction by diverting any dollar from one purchase to another. In this sense consumers choose the pattern of production and resource-use that they prefer. Ideally, their bidding sees to it that no unit of a resource goes to satisfy a less intense effective demand to the denial of a more intense one.

Mises asks whether central planners, in the absence of and replacing a genuine market, could achieve such a result. This result goes beyond physical meshing of activities as portrayed by a self-consistent input-output table. Even mere physical consistency is itself almost impossible to achieve in the absence of genuine markets and prices, as Soviet experience illustrates (tractors idle for lack of spare parts, food rotting for lack of transport, and so forth). But correct economic calculation is a still more demanding task.

This distinction is close to the surface throughout Mises's discussions of economic calculation. It is evident in his distinction between "technical rationality" and "economic rationality" and in his remark that "technical calculation" is not enough to achieve "general and technological expediency" (1920/1990, p. 48). (Georg Halm says more about economic versus mere technical considerations in Hayek 1935, pp. 173, 187. Compare Hoff 1981, p. 295: "The question . . . is not whether factories can be built and efficiently conducted, but whether the factors of production could have been put to a more advantageous use by employing them elsewhere.")

Economic calculation takes physical relations into account, and far more besides. It takes into account the available quantities of various resources and possibilities of expanding them, the technology of input-output relations, and the physical complimentarities and substitutabilities of various resources in various lines of production. But it also takes into account the subjectively perceived unpleasantnesses and amenities of different kinds of work, changes in the perceived disutilities of work and in the utilities of goods and services as their amounts increase, and complementarities

and substitutabilities of various goods and services perceived by consumers. Ideally, the result of successful economic calculation—which, to repeat, takes all sorts of subjective as well as physical considerations into account—is a state of affairs in which no further rearrangement of patterns of production and resource use could achieve an increase of value to consumers from any particular good at the mere cost of a lesser sacrifice of value from some other good. (A fuller discussion would introduce the concept of Pareto optimality at this point and explain why some distributional principle is also necessary to narrow a multiplicity of optima down to one. The leading distributional principle in a free-market economy, much modified, is that persons receive the values that the services of themselves and their property command on the market.)

What Mises Meant

Mises's central message, as it comes across to me, is an explanation of why a central planning authority could not accomplish its task and why it must be accomplished, if at all, on a decentralized basis. Mises explains the indispensable role of genuine prices established on genuine markets where traders exchange privately owned goods and services, including capital goods and other productive resources.

Was Mises conceding that information might conceivably somehow be made available to a central planning board in complete and utter detail, including the quantities and supply functions of all productive resources at all locations, all production functions in actual or even potential use, and all utility functions of all persons? Was he supposing, furthermore, that all the mathematical forms and all the parameters of all these functions are precisely known, so that these quantities and functions already imply the marginal productivities of all factors, the marginal technical rates of substitution among all factors and all products, and the marginal utilities of and marginal subjective rates of substitution between all goods and services for all productive units and all persons at each of all conceivable quantitatively specific patterns of production and resource allocation? Was Mises conceding that the planners might conceivably assemble all of this unimaginably detailed information? Was he balking only at the next step, denying that they could use all of it to calculate a pattern of production and resource allocation that would in some sense be optimal? Was Mises conceding everything about the centralized availability of information and then balking only at the possibility of dumping it all into a computer and performing a vast exercise in programming? Does his whole argument boil down to a contention about arithmetic?

No, of course not. Mises would have thought it preposterous that the planners could even arrive at the threshold of the massive exercise in arithmetic. He was referring to *economic* calculation. The whole sweep of his writings about socialism shows that he was concerned to illuminate the immensity of the problem of achieving an economically rational pattern of production and resource allocation, a problem that market processes do tend to solve. He understood why central planners could not adequately replace them.

Statics or Dynamics?

A subsidiary question concerns whether Mises saw the problem of economic calculation as besetting only a dynamic world, one in which the functions of entrepreneurship must be performed (or botched) somehow or other, or as a problem that, although still more complicated in a dynamic world, would be hugely complicated enough even in a static world. Mises did like to emphasize that changes of all sorts are continually occurring and that the prices to be taken into consideration are not merely "current" prices (which are data of very recent economic history) but also future prices, as best they can be conjectured by entrepreneurial insight. He understood the role of speculation in the broadest sense, including the function undertaken by capitalists and entrepreneurs who speculate not only on prices but also on innovations in markets, products, and production methods and who, instead of merely playing games, are staking their own careers and fortunes. He knew that business firms, far from just being given (as they typically are just postulated in the textbooks), are continually appearing, disappearing, merging, and splitting; these reorganizations are essential features of a dynamic economy.

On the second suggested interpretation, Mises perceived the calculation problem *even* for a static world, a problem that initial discussion in a static context would shed light on. Apparent support for each interpretation occurs in writings of Mises himself and of commentators such as Rothbard and Salerno.

A passage in *Socialism* suggests how to resolve or dissolve the issue:

> [U]nder stationary conditions the problem of economic calculation does not really arise.... all the factors of production are already used in such a way as, under the given conditions, to provide the maximum of the things which are demanded by consumers. That is to say, under stationary conditions there no longer exists a problem for economic calculation to solve. The essential function of economic calculation has *by hypothesis* already been performed. There is no need for an

> apparatus of calculation. . . . the problem of economic calculation is of economic dynamics: it is no problem of economic statics. (1922/1981, p. 120 ; compare Mises 1920/1990, p. 25)

Mises evidently means this: In a static economy, *by definition*, everything rotates around in the same old ruts. No need or scope exists for recalculating those ruts; breaking out of them would violate the assumption of a static state. But a static state does presuppose that economic calculation has already been performed. (It would have had to take account of the vast changes entailed by the very shift from capitalism to socialism.) Even from a background of unchanging "wants, resources, and technology," calculation is necessary to arrive at the pattern of production and resource allocation that thereafter, by the very definition of "static economy," need not and cannot be *re*calculated.

In short, a dynamic world immensely complicates the task of economic calculation that would be hugely complicated even in—meaning even to arrive at—a static state.

Mises's Words Supporting My Interpretation

Many passages in Mises's writings recognize the knowledge aspect of the calculation problem. Already in 1920 (1920/1990, pp. 17–18) he wrote that "administrative control over economic goods . . . entails a kind of intellectual division of labor, which would not be possible without some system of calculating production and without economy." Well, intellectual labor involves knowledge, and division of labor means leaving at least some knowledge, and action on it, decentralized. It is noteworthy that Hayek draws explicit attention to the original German version of this passage (in a talk of 1936 reprinted in Hayek 1949, p. 50 and footnote).

Again in 1920 Mises mentioned the task of gaining a "complete picture" of economic complexities. Technical calculation is not enough to

> guide us in those judgments which are demanded by the economic complex as a whole. Only because of the fact that technical considerations can be based on profitability can we overcome the difficulty arising from the complexity of the relations between the mighty system of present-day production on the one hand and demand and the efficiency of enterprises and economic units on the other; and can we gain the complete picture of the situation in its totality, which rational economic activity requires. (1920/1990, pp. 48–49)

An intellectual grasp of the whole would be possible in a small household economy, Mises recognizes, but not in a large and complex social economy. Deciding how "to place the means at the service of the end . . . can only be done with some kind of economic calculation. The human mind cannot orientate itself properly among the bewildering mass of intermediate products and potentialities of production without such aid. It would simply stand perplexed before the problems of management and location" (1920/1990, p. 19). As these words suggest, "economic calculation" means something more than an arithmetical exercise, however massive.

Human Action tells us that "knowledge provided by the natural sciences," "the mere information conveyed by technology," is insufficient for "the economic problem: to employ the available means in such a way that no want more urgently felt should remain unsatisfied because the means for its attainment were employed—wasted—for the attainment of a want less urgently felt. . . . What acting man wants to know is how he must employ the available means for the best possible—the most economic—removal of felt uneasiness" (1963, pp. 206–7). Again, Mises indicates that knowledge of wants, resources, and technology must be available to decisionmakers.

Another passage in *Human Action* (1963, p. 696, partly quoted in Salerno 1990, pp. 45–46) seems at first to resist my interpretation. Mises supposes that the director of the socialist economy has already made up his mind about ultimate ends or priorities. Somehow, miraculously, everyone agrees. The director has complete and perfect information about technology and available manpower and material resources. Many experts and specialists stand ready to answer all his questions correctly. "Their voluminous reports accumulate in huge piles on his desk." Now he must choose among an infinite variety of projects in such a way that no more urgent want remains unsatisfied because the necessary means have been diverted to satisfying less urgent wants. Yet despite the vast knowledge available to him, he is unequal to the task.

It might seem, then, that the director's frustration traces to a calculation problem, not a knowledge problem. Yet does the distinction hold? The director cannot even reach the threshold of a comprehensive calculation because he cannot assimilate, all together, all the information that is available to him, in a restricted sense of the word, "in huge piles on his desk." Nor could any committee acting as a single body comprehensively assimilate it all.

If the information is to be used, it must be used in *decentralized* decisions, with prices conveying information to each decisionmaker about parts of the economy beyond his immediate purview. This, it

seems to me, explains Mises's repeated insistence on genuine market prices, including prices of capital and intermediate goods. He repeatedly returned to thinking of *decentralized* decisionmaking and of the indispensable functions (including the informative function) of prices in that context. Except in a most abstract way, he could not keep on conceiving—nor can I—of a central planner or planning board having obtained all the necessary information and having *assimilated* it into a form ready for feeding into a computer for a vast programming exercise.

Nevertheless, if all relevant knowledge *could* be gathered and assimilated and all other preparations made and if the vast comprehensive calculation *could* be performed, then the immense list of results spewed from the computer would not only prescribe all input and output quantities in detail but also indicate shadow prices of all the inputs and outputs. (A modest acquaintance with linear programming makes this point about shadow prices clear.) It would not be necessary to know the prices in advance (and the calculated prices, unlike the calculated quantities, would be of mere academic interest to the planners).

One might object that the shadow prices emerging from such a calculation would not be identical with genuine prices determined in genuine markets (nor would the associated quantities be identical with market results). This is true, but three possible replies are worth noting. First, the vast information fed into the computer might in principle include psychological data on the persons who would otherwise have been entrepreneurs and other participants in genuine markets. This data would bear on how they would have behaved in response to the opportunities and incentives confronting them in real markets. (On the other hand, it is really only a fiction convenient for economic theorists that people have preexisting and fully developed preference functions or "indifference maps" even before experience in actual markets activates them.) Second, socialists presumably do not desire results identical to those of a market economy anyway. Third, the very objection points to some of the advantages of keeping decisionmaking and the use of knowledge decentralized. It shows further recognition that the problem facing socialism would not be one of mere arithmetic.

The necessary preparations for the vast central calculation, let alone the calculation itself, could *not* be accomplished; they are, to use Mises's word, "impossible." It seems perverse, then, to interpret Mises as nevertheless conceding the possibility of all those preparations and of balking only at the possibility of the calculation itself. He was denying the possibility of *economic* calculation, not merely of

arithmetical calculation. (Parenthetically, even if we imagine successful mobilization of the data and accomplishment of the arithmetical exercise, vast problems would remain of implementing the results and monitoring everyone's obedience to instructions. Even if the information-conveying function of genuine market prices could somehow be replaced, the incentive function would remain to be somehow performed.)

I submit, then, that even Mises's passage most amenable to the Herbener-Salerno-Rothbard interpretation does not bear out that interpretation on closer examination.

Still, one might ask, if the knowledge aspect was always implicit in his formulation, why didn't Mises make it fully explicit? But how can one know what facts and logical implications, though obvious and as good as explicit to oneself, have escaped other thinkers? One can hardly foresee all of others' misconceptions before they become evident in debate. As Hayek says,

> Mises's arguments were not always easily apprehended. Sometimes personal contact and discussion were required to understand them fully. Though written in a pellucid and deceptively simple prose, they tacitly presuppose an understanding of economic processes—an understanding not shared by all his readers. . . . When one reads Mises's opponents, one gains the impression that they did not really see why [economic] calculation was necessary. . . . As a result [of the discussion], Mises became increasingly aware that what separated him from his critics was his wholly different intellectual approach to social and economic problems, rather than mere differences of interpretation of particular facts. (1922/1981, p. xxii)

Even so, Mises did make himself clear to quite a few readers, as I shall illustrate.

Support from Readers

Perhaps testimony from my own past self is permissible.[1] I have long had an enthusiastic interest in Mises's arguments about socialist calculation and in the ensuing debates. I first happened onto his *Omnipotent Government* and *Bureaucracy* in 1946 or 1947. I eagerly awaited *Human Action* in 1949 (having already had access to its not readily available German precursor for a couple of hours). I gave a paper on the calculation debate at a faculty seminar at Texas A & M

[1]I thank—or blame—Roger Garrison for persuading me to shift this personal testimony from the end to the beginning of this section.

College (now University) in November 1949. For some time, before finally choosing a different topic, I considered writing my Columbia Ph.D. dissertation on a related problem of socialism. During several years of teaching a course in general-equilibrium theory at the University of Virginia, I used Mises's argument and the whole socialist-calculation debate to illuminate general interdependence and the various tasks to be accomplished somehow or other in any economic system. The conventional wisdom about Oskar Lange's having refuted Mises's argument never deceived me.

And I never understood that argument to be about calculation in the narrow arithmetical sense. I always understood Mises to be referring to the informational and other functions of prices that do get performed in a genuine market economy and that could not be performed or adequately replaced in a socialist economy. I always understood Hayek to be elaborating on ideas that were clearly implicit if not always totally explicit in Mises's work; I never dreamed that the issue might arise of a clash between their positions.

Hayek has long recognized Mises's concern with the use of knowledge—"of all the relevant facts." Mises, he says, provided

> the detailed demonstration that an economic use of the available resources was only possible if . . . pricing was applied not only to the final product but also to all the intermediate products and factors of production, and that no other process was conceivable which would take in the same way account of all the relevant facts as did the pricing process of the competitive market. (Hayek 1935, p. 33)

Georg Halm stated Mises's argument as follows: The socialist authority would know various things, "*but it would not know how scarce capital was*. For the scarcity of means of production must always be related to the demand for them, whose fluctuations give rise to variations in the value of the good in question" (1935, pp. 162–63, also quoted in Rothbard 1991, p. 62).

Oskar Lange, whom Mises's arguments prodded to invent a sketch of "market socialism," interpreted Mises as having traced the impossibility of rational socialist planning largely to inaccessibility of necessary "data." Lange countered that "The administrators of a socialist economy will have exactly the same knowledge, or lack of knowledge, of the production functions as the capitalist entrepreneurs have" (1938, pp. 60–61).

Lange thought he had refuted Mises by showing that an artificial market would render calculation possible, says Jacek Kochanowicz (introduction to Mises 1990, pp. xi–xii). Presumably following Mises

on what calculation meant, then, Lange did not interpret it as merely accomplishing a task in arithmetic.

Incidentally, Lange (1938, p. 61) accused Mises of confusing two senses of the term "prices," "the exchange ratios of commodities on a market" and the wider sense of "terms on which alternatives are offered." Not so: Mises did not need the distinction. He did not believe it possible to obtain meaningful prices of either kind except through genuine market processes.

Solomon Fabricant recognizes the role of knowledge in Mises's argument. "[I]n a free society, as was pointed out above all by Mises and Hayek, individuals have the authority and the incentives to use the particular knowledge which they—and only them—possess to adapt most economically to the incessant changes that go on in a dynamic world. This stock of knowledge includes detailed information that no central authority could ever hope to gather, digest and apply in formulating its plans and making its decisions" (1976, pp. 30–31; one footnote is not quoted here).

Trygve Hoff mentions knowledge in interpreting Mises's argument: Without prices for the means of production, "the central authority will lack the necessary data to determine how and in what combination the various means of production can be put to the optimum use. . . . Without prices for means of production the central authority will have no data for determining whether the contribution and the sacrifice are greater or smaller than the result" (Hoff 1938/1981, pp. 202–3; further remarks about "data" occur on pp. 223 and 288).

Karen Vaughn attributes to Mises the "vehement assertion that the information necessary for economic calculation could be obtained only through market-determined prices." In 1935, Hayek "expanded upon Mises's original contention that economic calculation is impossible without market prices to provide relevant information." "Following Hayek and Mises, Hoff notes that . . . [a] central planning board necessarily lacks . . . vital market information" indicated by prices (Vaughn, introduction to Hoff 1938/1981, pp. xi, xvi, xxx).

Don Lavoie, writing before Rothbard, Salerno, and Herbener had tried to distinguish between the positions of Mises and Hayek, repeatedly says that they were expounding the same position. Hayek elaborated on some of Mises's points, especially ones about knowledge and on the necessity of genuine rivalrous markets for capital goods and other factors of production so that the factor prices established there could convey essential information. Contrary to the standard account of the socialist-calculation debate, Mises and Hayek did not shift their ground. They did change their emphasis to respond to

suggestions for market socialism after the socialists, or some of them, had shifted *their* ground.

It would be tedious to quote all the passages in which Lavoie recognizes the essential identity of Mises's and Hayek's positions. I refer the reader, in particular, to pages 15 n., 21, 24, 26, chapter 3 (entitled "Mises's Challenge: the Informational Function of Rivalry"), pages 87, 89, 91–92, 102, 114–15, 123, 145, 160–61, 173 n., 177–78, and 180. Consider, however, these two passages: "The entrepreneurial market process . . . generates the continuously changing structure of knowledge about the more effective ways of combining the factors of production. This knowledge is created in decentralized form and dispersed through the price system to coordinate the market's diverse and independent decisionmakers. There is no way, Mises claimed, in which this knowledge can be generated without rivalry" (Lavoie 1985, p. 24). Hayek's improvements of Mises's argument "should be understood as essentially an elaboration of the meaning that Mises originally attached to his own words" (Lavoie 1985, p. 26).

Lavoie makes a useful distinction between economic *calculation*, the problem that Mises addressed, and mere *computation*, the arithmetical aspect (1985, pp. 91, 119, 122, 128, 133, 144, 160, 168 n., 182, and passim).

Yuri Maltsev hails Mises's demonstration of 1922 that

> Socialist planning . . . is *logically impossible* because the system cannot provide the knowledge required to determine which production projects are desirable and feasible and which are not. Only the market, with what Mises called its "intellectual division of labor," can generate that knowledge and put it in a usable form. (Foreword to Boettke 1990, pp. xii–xiii)

Peter Boettke repeatedly notices the role of knowledge in Mises's argument; for example:

> Implicit in Mises's logical chain of reasoning is the recognition that no one mind or group of minds could possess the necessary knowledge to plan the economic system. . . . Mises states this knowledge problem in his original challenge. . . . [A]s Mises notes, market exchange and production within a monetary economy provide for the discovery and dissemination of the knowledge necessary [for coordinating computations]. (Boettke 1990, p. 23, and compare pp. 24, 26, 28, 123, 170–71, 195)

Joseph Persky (1991, p. 229) reads Mises as "emphasiz[ing] that a collectivist state would have great difficulty in gathering and

acting on relevant information; therefore, under socialism, even well-intentioned bureaucrats would lack a meaningful system of values on which to calculate."

Robert L. Heilbroner, who had long expressed sympathy for socialism, has recently acknowledged that Mises was right all along. The few economists who early predicted disaster from central planning were led, Heilbroner says, by "Ludwig von Mises and Friedrich Hayek. . . . Their diagnosis was based on the inability of a planned system to generate the *information* needed to bring into being, or to maintain in being, a properly interlocking economic system. This information is automatically generated by a market mechanism that every day 'informs' its individual participants whether their activities are wanted by other participants or not, but no substitute for this information network, or for the motivation to put the information to work, exists in a system in which a cumbersome bureaucracy tries to play the role of a competitive marketplace" (Heilbroner 1991, p. 114, emphasis in original).

Perhaps surprisingly, Murray Rothbard also lends support to my interpretation. "The fact that in a changeless world of perfect knowledge and general equilibrium a Social Planning Board could 'solve' equations of prices and production was for Mises a worse than useless demonstration. Clearly, as Hayek would later develop at length, if complete knowledge of economic reality is assumed to be 'given' to all, including a Planning Board, there is no problem of calculation or, indeed, any economic problem at all, whatever the economic system. The Mises demonstration of the impossibility of economic calculation under socialism and of the superiority of private markets in the means of production applied only to the real world of uncertainty, continuing change, and scattered knowledge" (Rothbard 1976, p. 68).

Rothbard cites Mises's refutation of Oskar Lange's idea (1938) that a socialist planning board could arrive at correct prices, even of capital goods, through trial and error. He mentions "signals," clearly implying they convey information: "the process of trial and error works on the market because the emergence of profit and loss conveys vital signals to the entrepreneur, whereas such apprehensions of genuine profit and loss could not be made in the absence of a real market for the factors of production" (Rothbard 1976, p. 71).

Admittedly, Rothbard seems to have changed his mind later. Yet as recently as in his 1991 article (p. 52, emphasis supplied here), he paraphrases Mises as asking the following about the socialist planners:

> How would they *know* what products to order their eager slaves to produce, at what stage of production, how much of the product at each stage, what techniques or raw materials to use in that production and how much of each, and where specifically to locate all this production? How would they *know* their costs, or what process of production is or is not efficient?"

Rothbard continues recognizing the knowledge aspect of the problem:

> Mises points out that while the government may be able to know what ends it is trying to achieve, and what goods are most urgently needed, it will have no way of knowing the other crucial element required for rational economic calculation: valuation of the various means of production, which the capitalist market can achieve by the determination of money prices for all products and their factors. (1991, p. 63)

Even a perfectly knowledgeable person, says Salerno (1990, Postscript, p. 53) "would be unable to even achieve a full intellectual 'survey' of the [planning] problem in all its complexity." But doesn't this mean: unable to pull together all the scattered relevant knowledge? Salerno notes, approvingly, that Mises recognized the necessity of an "intellectual division of labor" (Ibid., p. 54). This is another allusion to the impossibility of centralizing all the scattered relevant knowledge.

Even if the planners had various other knowledge, the central planners would be unable "to ever know or guess the 'opportunity cost' of any social production process" (Ibid., p. 55).

Conclusion

Just what was Mises's position? Salerno briefly but correctly restates it: "without private ownership of the means of production, and catallactic competition for them, there cannot exist economic calculation and rational allocation of resources under conditions of the social division of labor. In short, socialist economy and society are impossible" (Ibid., p. 66). This formulation leaves room to be amplified. It does *not* focus merely on immense arithmetic difficulties at the stage of calculation in the strictest sense of the term, conceding that the planners might accomplish their task right up to that stage. I challenge readers who insist on distinguishing between calculation and knowledge problems to find passages in which Mises can reasonably be interpreted as making that distinction and expressing concern only with calculation but not with knowledge.

To deny that Hayek was elaborating on what Mises said about economic calculation and to maintain that Hayek was saying something distinct and even incompatible is to truncate and misrepresent what Mises did say. To cut away all aspects of his message on which Hayek elaborated is to trivialize his message, quite inaccurately, into a proposition about arithmetical exercises.

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Reply to Leland B. Yeager on "Mises and Hayek on Calculation and Knowledge"

Joseph T. Salerno

In this article on "Mises and Hayek on Calculation and Knowledge," Leland Yeager argues against the view recently propounded by Murray Rothbard, Jeffrey Herbener, and myself that calculation and knowledge constitute separate and distinct problems of economic organization and that Ludwig von Mises attributed the impossibility of socialism exclusively to its inability to solve the former problem. In rebuttal, Yeager alleges that calculation, as this term is used by Salerno, Rothbard, and Herbener (henceforward, SRH) refers narrowly to a trivial arithmetic operation and that it is, therefore, preposterous and a violation of a putative principle of hermeneutics, i.e., "a heuristic principle of textual interpretation," to identify, as SRH do, calculation in this sense as the crux of Mises's critique of socialist central planning.

Yeager seeks to buttress his hermeneutical case by arguing that if the knowledge problem is solved, i.e., if the central planners are miraculously endowed with knowledge of all previously discovered production functions currently used or potentially useful, in addition to exhaustive and minutely detailed information regarding the quantities, qualities, and locations of existing resources and the global set of consumer value scales (comprehensively defined to include leisure and time preferences as well as preferences for the various types of labor), then all that remains to be done to effect a rational or "Pareto optimal" allocation of resources is to address a relatively tractable problem in linear programming that can be

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solved using a supercomputer. Yeager thus claims to be logically confirmed in his conclusion that, in dismissing the knowledge problem from consideration, SRH are construing the calculation problem in a limited and trifling sense that "trivializes and caricatures" Mises's critique of socialism.

There is not much to say about Yeager's main allegation, except that it is wholly beside the point, because it rests on a gross misinterpretation of the meaning explicitly attached to the term "calculation problem" by SRH. It is true that as SRH use the term "economic calculation" it encompasses and culminates in arithmetic computations undertaken to identify the most valuable employments of scarce resources in an economy characterized by specialization and division of labor, e.g., the profit calculations of entrepreneurs operating in a market economy. However, it does not follow that, for SRH, *the* calculation problem as Mises conceived it refers narrowly to the mathematical techniques employed for manipulating the given quantitative data; it refers, instead, to the origination and meaningfulness of the data themselves. It is, in short, a problem of "appraisement" and not of "arithmetic."

As SRH have repeatedly emphasized, the Misesian demonstration of the logical impossibility of socialism is not predicated on the central planners' incapacity to perform tasks that can conceivably be carried out by individual human minds (e.g., discovery of factual and technical knowledge, mathematical computations, managerial monitoring, and prevention of labor shirking, etc.). Rather, it is concerned with the lack of a genuinely competitive and social market process in which each and every kind of scarce resource receives an objective and quantitative price appraisement in terms of a common denominator reflecting its relative importance in serving (anticipated) consumer preferences. This social appraisement process of the market transforms the substantially qualitative knowledge about economic conditions acquired individually and independently by competing entrepreneurs, including their estimates of the incommensurable subjective valuations of individual consumers for the whole array of final goods, into an integrated system of objective exchange ratios for the myriads of original and intermediate factors of production. It is the elements of this coordinated structure of monetary price appraisements for resources in conjunction with appraised future prices of consumer goods which serve as the data in the entrepreneurial profit computations that must underlie a rational allocation of resources.

That appraisement and not arithmetic constitutes the essence of the calculation problem is clearly indicated in numerous passages from the works of Salerno and Rothbard cited by Yeager.

Unfortunately, Yeager ignores these key passages. For example,in one of my articles (Salerno 1990a, pp. 54–56) quoted by Yeager, I identify the crucial bearing of entrepreneurial competition in resource markets on the problem of economic calculation:

> In this competitive process, each and every type of productive service is objectively appraised in monetary terms according to its ultimate contribution to the production of consumer goods. There thus comes into being the market's monetary price structure, a genuinely "social" phenomenon in which every unit of exchangeable goods and services is assigned a socially significant cardinal number and which has its roots in the minds of every single member of society yet must forever transcend the contribution of the individual human mind.
>
> Since the social price structure is continually being destroyed and recreated at every moment of time by the competitive appraisement process operating in the face of ceaseless change of the economic data, there is always available to entrepreneurs the means of estimating the costs and revenues and calculating the profitability of any thinkable process of production.
>
> Once private property in the nonhuman means of production is abolished, however, as it is under socialism, the appraisement process must grind to a halt. . . . In the absence of competitive bidding for productive resources by entrepreneurs, there is no possibility of assigning economic meaning to the amalgam of potential physical productivities embodied in each of the myriad of natural resources and capital goods in the hands of the socialist central planners. . . .
>
> A society without monetary calculation, that is, a socialist society, is therefore quite literally a society without an economy.

Later in the same work (Salerno 1990a, pp. 62–63), I portray the Misesian case against market socialism in similar terms:

> From the Misesian point of view . . . the shortcomings of the prices of market socialism do not stem from the fact that such prices are supposed to be treated as "parametric" by the managers. . . . The problem is precisely that such prices are *not* genuinely parametric from the point of view of all members of the social body. The prices which emerge on the free market are meaningful for economic calculation because and to the extent that they are determined by a social appraisement process, which, though it is the inevitable outcome of the mental operations of all consumers and producers, yet enters as an unalterable fact in the buying and selling plans of every individual actor.

It is obvious from the foregoing passages that I conceive appraisement as neither knowledge nor arithmetic, but as something new

under the sun, introduced into the world only when the institutional prerequisites of a market economy are fulfilled. The social process of appraising thus transcends the purely individual operations of knowing and computing at the same time that it complements them in creating the indispensable conditions for rational choosing by entrepreneurs and resource owners cooperating in the division of labor. In fact, in another work cited by Yeager, I specifically refer to Mises's distinction between "cardinal numbers and their arithmetic properties [which] are 'eternal and immutable categories of the human mind'" and "economic calculation [which] is 'only a category inherent in acting under special conditions'" (Salerno 1990b, p. 45).

In explicating what I take to be Mises's view, then, I clearly do not contend that the advent of socialism suddenly and mysteriously renders men unable to perform arithmetic operations. Rather, it is and always has been my contention that socialism abolishes the *quantitative appraisement* of means without which man's computational skills and his knowledge of particular facts and general technical rules would be completely useless in guiding production within the framework of the social division of labor. As I conclude in the latter article "It is because socialism lacks the means to calculate, therefore, that Mises emphatically denies that men 'are free to adopt socialism without abandoning economy in the means of production'. . . . In fact Mises conceived *the* social advantage of the price system to be that it made practicable human society itself by providing the cardinal numbers for computing the costs and benefits of purposive action undertaken within the social division of labor" (Salerno 1990b, p. 48).

I also indicate that Mises's concept of "the intellectual division of labor" refers to the necessity of the existence of independent intellects and wills—of capitalist-entrepreneurs, laborers, landowners, and consumers—for the quantitative appraisement of the means of social action (Salerno 1990b, pp. 41–42). In contrast, Yeager construes Mises's concept as an embryonic version of Hayek's "division of knowledge." Thus, Yeager (p. 97) draws the wrong conclusion from his important insight that "intellectual labor involves knowledge, and division of labor means leaving at least some knowledge, and action on it, decentralized." A price system is not required because useful knowledge is dispersed, as Yeager infers from this insight; rather, knowledge must be decentralized (among competing entrepreneurial forecasters and appraisers) in order for a system of prices to come into being which meaningfully indicates the relative scarcities of useful resources. Or, to put it more starkly, dispersed knowledge is not a bane but a boon to the human race; without it, there would be no scope for the intellectual division of labor, and social cooperation

under division of labor would, consequently, prove impossible. Thus, a world exactly like our own but ruled by a perfectly beneficent and "empathic" overlord, who, in Star Trekian fashion, could, fully and instantaneously, mentally assimilate his subjects' subjective valuations and knowledge, would be unable to develop a sophisticated structure of capital and production for lack of a means of appraisement.

Rothbard, also, in his articles referred to by Yeager, is pellucidly clear that the calculation problem identified by Mises goes far beyond a piddling arithmetic problem. As well, it involves far more than the difficulty of acquiring qualitative information about previously prevailing market conditions. As Rothbard (1991, p. 66) writes:

> The problem is not knowledge . . . but calculability. [T]he *knowledge* conveyed by present—or immediate "past"—prices is consumer valuations, technologies, supplies, etc. of the immediate or recent past. But what acting man is interested in, in committing resources into production and sale, is *future* prices, and the present committing of resources is accomplished by the entrepreneur, whose function is to *appraise*—to anticipate—future prices, and to allocate resources accordingly. It is precisely this central and vital role of the *appraising entrepreneur*, driven by the quest for profits and the avoidance of losses, that cannot be fulfilled by the socialist planning board, for lack of a market in the means of production. Without such a market, there are no genuine money prices and therefore no means for the entrepreneur to calculate and appraise in cardinal monetary terms.

In a second article quoted from by Yeager, Rothbard (1992, p. 20) nicely epitomizes the SRH interpretation of economic calculation: "the prices provided by the market, especially the prices of means of production, are a *social* process, available to all participants, by which the entrepreneur is able to appraise and estimate future costs and prices. In the market economy, *qualitative* knowledge can be transmuted, by the free price system, into rational economic calculation of *quantitative* prices and costs, thus enabling entrepreneurial action on the market."

Given the weighty textual evidence I have adduced above to counter his claim that SRH construe the calculation problem as one of arithmetic, Yeager appears to be transgressing against his own hermeneutical principle of refraining from attributing preposterous and incoherent positions to one's opponents without having fully and sympathetically engaged their arguments. Nevertheless, I do not believe that it would be fair or accurate to ascribe Yeager's palpable

misreading of SRH's position to unrestrained eagerness to seize a polemical advantage or to shoddy scholarship. Rather, I believe that the source of Yeager's erroneous characterization of our position lies in his static view of the function of prices and economic calculation. This view is revealed in the logical argument he advances to deny any but the most trivial distinction between knowledge and calculation, an argument intended to bolster his textually unsupported claim that SRH equate calculation and arithmetic.

In the section on "Economic Calculation," which precedes and introduces his own rendering of "What Mises Meant," Yeager (pp. 92–95) delineates his view of the functions performed by prices. Proceeding in a Hayekian vein, Yeager characterizes market prices as a substitute for the perfect knowledge that is assumed by neoclassical theorists to be possessed by all market participants. However, as I have argued elsewhere (Salerno 1993, pp. 126–29), for prices to perform such a knowledge-disseminating function, it is necessary for the economy to already subsist in a quasi-static state or what I have dubbed "proximal equilibrium" (PE), wherein genuine uncertainty and the need for entrepreneurial appraisement are absent and current prices are an approximately correct guide to future prices. Indeed, this is the view taken by Hayek (1978, p. 82) himself, who writes that "the function of prices is precisely to communicate, as rapidly as possible, signals of changes of which the individual cannot know but to which his plans must be adjusted. This system works because on the whole current prices are fairly reliable indications of what future prices will probably be." Elsewhere, Hayek (1940, pp. 27–28) argues that "real conditions . . . do to some extent so approximate [towards a state of equilibrium], and . . . the functioning of the existing economic system will depend on the degree to which it approaches such a condition."

Yeager does not shrink from the PE implications of the Hayekian description of the function of prices. Indeed, he embraces them wholeheartedly, arguing that economic calculation employing knowledge-laden prices functions "ideally" to maintain the economic system in competitive long-run equilibrium characterized by a Pareto-optimal allocation of resources. Yeager's argument is encapsulated in the following four statements extracted from his section on "Economic Calculation" (Yeager, pp. 92–95):

> "*Ideally*, in a competitive economy, the price of each product measures not only how consumers appraise it at the margin but also what the total is of the prices of the additional resources necessary to supply an additional unit of it [i.e., $P_i=MC_i$]."

> "Each consumer *ideally* leaves no opportunity unexploited to increase his expected total satisfaction by diverting any dollar from one purchase to another [i.e., $MU_1/P_1=MU_2/P_2= \ldots =MU_n/P_n$, implying perfect arbitrage of individual commodity prices and the overall purchasing power of money]."
>
> "*Ideally*, [consumers'] bidding sees to it that no unit of a resource goes to satisfy a less intense effective demand to the denial of a more intense one [i.e., $P^F_j=MVP_j$]."
>
> "*Ideally*, the result of successful economic calculation . . . is a state of affairs in which no further rearrangement of patterns of production and resource use could achieve an increase of value to consumers from any particular good at the mere cost of a lesser sacrifice of value from some other good [i.e., $P_i=AC_i$]. (A fuller discussion would introduce the concept of Pareto optimality at this point.)"[1]

Yeager's repetition of the term "ideally" in this context, which I have emphasized, is apparently intended to connote that the outcome of the "real" economic process only approximates the "ideal" of Pareto optimality.[2] Yeager goes on to impute this static conception of the function of economic calculation to Mises, despite his recognition that "Mises did like to emphasize that changes of all sorts are continually occurring and that the prices to be taken into consideration are not merely 'current' prices (which are the data of very recent economic history) but also future prices, as they best can be understood by entrepreneurial conjecture" (Yeager, p. 96). After this

[1]The meaning of the symbols in my interpolations in this citation are as follows:

P = price of product
MC = marginal cost
MU = marginal utility
P^F = price of factor of production
MVP = marginal value product
AC = average cost
i = ith product where i = 1, . . ., n and n = total number of products
j = *j*th factor where j = 1, . . ., m and m = total number of factors

[2]For a fuller treatment of the function of the price system, Yeager refers the reader to a discussion in another one of his works. There, Yeager (1966, pp. 13–30) cites the usual static neoclassical reasons involving externalities and monopoly for the failure of the market to achieve the ideal allocation of resources, but he tends to downplay their practical significance. However, he does not even hint at the dynamic considerations that prevent actual, moment-to-moment market prices from ever coming close to fulfilling their PE role as "signals of opportunity cost," which are supposed to accurately guide market participants to a Pareto-optimal pattern of resource use.

grudging admission, however, Yeager (p. 97) proceeds to relegate such dynamic considerations, in the fashion of classical economics, to the status of "frictions" or "disturbing causes" that "immensely complicate" but do not alter the main task of economic calculation, which is to point the way to the ideal resource allocation of the static state.

We can now explain why Yeager refuses to distinguish between calculation and knowledge and why he misses the significance of the distinction drawn by SRH. With the economy always in PE and current prices therefore conveying to producers virtually complete knowledge about relevant economic conditions in the present and the future, the only function that remains for entrepreneurs is to robotically compute revenue and cost functions and allocate resources so as to equate MR and MC. Since the acquisition and use of knowledge is thus presented as the essence of economic calculation, should the central planners somehow or other get hold of the same knowledge in the absence of a price system, the entrepreneurial computation problem could be easily solved by the methods of linear programming, which would yield the identical (Pareto-optimal) allocation of resources. This is the implication of Hayek's statement that the price system "brings about the solution which (it is just conceptually possible) might have been arrived at by one single mind possessing all the information which is in fact dispersed among all the people involved in the process" (Hayek 1972, p. 86).

For Yeager, Hayek, and equilibrium theorists of all stripes, then, an appraisement process is not necessary because, in the words of general equilibrium (GE) theorist J. R. Hicks (quoted in Walsh and Gram 1980, pp. 241, 179),

> the price mechanism is something that is inherent. It did not have to be . . . brought in from outside. . . . It has been made apparent [by linear programming theorists], not only that a price system is inherent in the problem of maximizing production from given resources but also that something like a price system is inherent in any problem of maximizing production against restraints. The imputation of prices (or "scarcities") to the factors of production is nothing else but a measurement of the intensities of the restraints; such intensities are always implicit—the special property of a competitive [price] system is that it brings them out and makes them visible. . . . If we take the famous definition, given so many years ago by Lord Robbins—'the relationship between ends and scarce means that have alternative uses'—economics, in that sense, is well covered by linear theory.

This reasoning, of course, also underlies the position taken by neoclassically-trained market socialists such as Oskar Lange. In a posthumously published reflection on his contribution to the socialist calculation debate, Lange (1974, p. 137) wrote:

> The market process with its cumbersome *tatonnements* appears old-fashioned. Indeed, it may be considered as a computing device of the pre-electronic era.
>
> The market mechanism and trial and error procedure proposed in my [original] essay really played the role of a computing device for solving a system of simultaneous equations. The solution was found by a process of iteration which was assumed to be convergent. . . .
>
> The same process can be implemented by an electronic analogue machine which simulates the iteration process implied in the *tatonnements* of the market mechanism. Such an electronic analogue (servo-mechanism) simulates the working of the market. This statement, however, may be reversed: the market simulates the electronic analogue computer. In other words, the market may be considered as a computer *sui generis* which serves to solve a system of simultaneous equations.

Thus market-oriented PC theorists, such as Hayek and Yeager, and neoclassical/socialist GE theorists are brothers under the skin. The former, who according to Yeager include Mises, ultimately do not gainsay the claim of the latter that the price system is "in" the data and that the market performs essentially the same function as an equation-solving computer. All of Hayek's subtle argumentation in his classic triad of articles on knowledge (Hayek 1972a; Hayek 1972b; Hayek 1972c) amounts only to the denial that all the relevant data could ever be assembled in one place and, to use Yeager's term, "assimilated" by one mind preparatory to being fed into the computer.[3] Thus is Yeager (p. 99) led to conclude, in agreement with Hicks

[3]In his article on "Economics and Knowledge," Hayek (1972a, pp. 41–42 n. 6) sought, among other objectives, to "dynamize" the concept of equilibrium and give it empirical applicability by dissolving the link between equilibrium conceived as a coinciding of subjective expectations held by diverse individuals and the concept of the "stationary state" based on the constancy of the underlying objective data. It is now generally known that Hayek's article was intended in part as a critique of Mises, whose praxeological approach to economic theory included a (strictly subsidiary) role for the mental construct of a stationary state or "evenly rotating economy." This is of great doctrinal significance in light of the fact that Hicks's attempted dynamic recasting of GE theory in *Value and Capital*, which, Hicks (1968, p. vi) has revealed, was largely based on ideas "conceived at the London School of Economics during the years 1930–35," was prompted by precisely the same considerations. In fact, Hicks (1968, p. 117) specifically criticized "the method of the Austrians" for its "concentration on the case of a Stationary State." Moreover both Hicks (1968, pp. 119–21) and Hayek (1972a,

and Lange, that "if all relevant knowledge *could* be gathered and assimilated and all other preparations made and if the vast comprehensive calculation *could* be performed, then the immense list of results spewed from the computer would not only prescribe all input and output quantities in detail but also indicate shadow prices of all inputs and outputs."

It is because of his PE mindset, then, that Yeager is unable to perceive what is to SRH the very pith of Mises's calculation argument: first, that the market creates a social appraisement process which is *not* implicit in the informational parameters of the equation system and which depends crucially on an intellectual division of labor featuring the qualitative *understanding* of competing entrepreneurs; and, second, that this process is indispensable for converting the multidimensional knowledge of the economic data, regardless of who possesses this knowledge or where it is located, into a unitary structure of meaningful resource and product prices.

That Yeager's attempt to portray Mises as a PE theorist is untenable and that SRH's view of Mises as a dynamic appraisement theorist is indeed the correct one is compellingly evinced by Mises's definitive response in *Human Action* to the proposed mathematical solution to socialist calculation. Here Mises (1966, pp. 710–15) makes it crystal clear that the static prices mathematically imputed from perfect knowledge of the economic data would not lead to a dynamically efficient allocation of resources. The latter can only be achieved by the entrepreneurially appraised prices that are generated by the historical market process.

In arriving at this conclusion Mises first considers a situation in which the central planner is endowed with perfect knowledge of the existing economic data. Mises points out, however, that such data would include a stock of intermediate or capital goods, which, in a world of unrelenting change and uncertainty and of consequent entrepreneurial error, is necessarily maladapted to the primary data of wants, technology, and "original" resources, i.e., permanent and/or nonreproducible labor and land. Nonetheless, the existing inventories of nonpermanent, reproducible items that constitute this disequilibrium capital stock are cast as "parameters" in the system of simultaneous equations. Solving this system would therefore yield a static or Pareto-optimal allocation of resources and a related shadow

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p. 41 n. 6) credit Alfred Marshall with pointing the way to the proper use of the equilibrium technique. Thus Hayekian PE and modern GE theory have common roots. For an illuminating discussion of the seminal influence of Hayek's work on Hicks's initial endeavors in GE theory, see E. Roy Weintraub (1991, pp. 30–31).

price system. But this static solution cannot possibly elucidate the series of steps that must be initiated today to progressively and efficiently transform the structure of capital goods through a sequence of further disequilibrium states towards its (presently unknown) equilibrium configuration.

Indeed, thirty years after Mises elaborated this argument, dissident GE theorists were just beginning to catch a glimpse of its significance. Thus, as Vivian Walsh and Harvey Gram (1980, pp. 182–83) frankly and perceptively noted at the time:

> The intended interpretation of neoclassical allocation theory depends fundamentally on the meaning attached to the parameters that enter into its structural relationships. . . . In a model of neoclassical allocation theory it is of no importance to distinguish inputs on the basis of the process by which they came into being. . . . Indeed, the *only* historical fact that has any bearing on the analysis is that a given quantity of resources has come into existence and is now available at a point in time to be used in ways that may or may not have been anticipated when these resources were produced. . . . Thus the categories land, labor, and "capital" are only descriptive; they have *no analytical significance* in static allocation models. . . . [N]eoclassical theory does not deny the reproducibility of the means of production. It simply takes no account of this reproducibility in its analysis of prices and quantities. . . . Thus, the flow of services of a diesel engine may enter as a factor input into certain technical processes, but it is immaterial to the theory's treatment of production that the engine itself is the result of a previous investment of resources as opposed to a free gift of nature dropping, as it were, from Heaven![4]

[4]Hicks's earlier theory of the "Traverse" was an abortive attempt by a GE theorist to come to terms with, or escape from, a similar insight. Wrote Hicks (1972, pp. 183–84): "[I]n the real world changes in technology are incessant; there is no time for an economy to get into equilibrium (if it was able to do so) with respect to January's technology, before that of February is upon it. It follows that at any actual moment, the existing capital cannot be that which is appropriate to the existing technology. . . . Every actual situation differs from an equilibrium situation by reason of the inappropriateness of its capital stock." Despite this recognition, however, Hicks apparently found it would be "very inconvenient" to abandon GE theory in order to "analyze the transition from one out-of-equilibrium position to another, so Hicks's Traverse is a traverse from one growth equilibrium to another" (Collard 1993, p. 343). Needless to say, Hicks's theory of the adjustment path, worked out on the assumption of a "fixprice" policy and a change in technology that does not influence relative prices, is unable to illuminate how monetary calculation guides entrepreneurs in choosing the most valuable uses (from the point of view of their current forecasts of future market conditions) for the perennially inappropriate capital stock. For a polite but devastating critique of Hicks, see Lachmann (1977).

Now, Mises's calculation argument focuses on a situation characterized by the absence of competitive appraisement of current resource prices based on entrepreneurial forecasting of the successive changes in the data that occur during the extended transition to the final equilibrium. In these circumstances, there is absolutely no possibility of determining whether and to what extent current productive services should be devoted to, e.g., maintaining existing railroad diesel engines, initiating a highway expansion project, constructing a new truck assembly factory, converting military cargo planes to civilian uses, etc. The shadow prices generated by the Lange-Hicks-Yeager linear programming "solution" are therefore incapable of providing the guiding light of economic calculation. And it is this alone which can save human actors from blindly toppling over into the abyss of irrationality and arrant wastefulness when choosing among social (i.e., nonautarkic) production processes.

Let us even grant further, as Mises (1966, pp. 713–14) does, that the central planner is miraculously inspired with an exact image of the final equilibrium state that is perfectly adjusted to the primary data of the problem. Without recourse to a social appraisement process, the planner would still be unable to calculate a transition plan that economically utilizes the services of the current capital stock. Of course, dynamic appraisement is even more important in the real world. Here, exogenous changes in the data continually deflect the economy from any temporal progression toward a given equilibrium. Thus, all entrepreneurial actions and innovations are guided by anticipated future prices reflecting, according to Mises (1966, p. 711), "only the first steps of a transformation" of market conditions in the direction of equilibrium.

It is instructive to consider the series of rhetorical questions posed by Yeager (p. 96) midway into his article. These are designed to drive home his point that Mises could not possibly have been contending about arithmetic. But once it is finally understood that Mises's arguments about calculation referred neither to arithmetic nor to knowledge but to appraisement, it also becomes quite clear that these questions do not merit the answer Yeager seeks to elicit. Representative of Yeager's queries are: "Was Mises conceding that the planners might conceivably assemble all of this unimaginably detailed information [about the economic data]? Was he balking only at the next step, denying that they could use all of it to calculate a pattern of production and resource allocation that would in some sense be optimal?" To these questions I reply with a resounding "Yes, indeed!" Mises did concede, for the sake of argument only, that

planners possessed perfect information.[5] But he emphatically denied that this information would be of any use to them in efficiently allocating resources.

I conclude with Mises's own words (which are difficult to explain away without invoking some problematic hermeneutical principle[6]): "It was a serious mistake to believe that the state of equilibrium could be computed, by means of mathematical operations, on the basis of the knowledge of conditions in a nonequilibrium state. It was no less erroneous to believe that such knowledge of the conditions under a hypothetical state of equilibrium could be of any use for acting man in his search for the best possible solution of the problems with which he is faced in his daily choices and activities" (Mises 1966, pp. 714–15).

[5]It should be emphasized that Mises did recognize a separate and "practical" knowledge problem confronting socialism. But he hastened to make it clear that it was not this problem that rendered a socialist economy a logical impossibility. Thus Mises (1966, p. 715) concluded his chapter in *Human Action* on the "The Impossibility of Economic Calculation under Socialism" with the following sentence: "There is therefore no need to stress the point that the fabulous number of equations which one would have to solve each day anew for a practical utilization of the [mathematical] method would make the whole idea absurd *even if it really were a reasonable substitute for the market's economic calculation*" [my emphases]. Mises then refers the reader in a footnote to Hayek's knowledge-based critique of the mathematical solution in the volume on *Collectivist Economic Planning* (Hayek 1975, pp. 207–14).

[6]Yeager (pp. 100–5) devotes over one-third of the text of his article to supporting his interpretation of Mises's calculation argument with appeals to similar interpretations advanced by other notable Hayekians on the contemporary scene as well as to his own past intellectual experience in coming to terms with Mises's writings. But it is precisely this now conventional explication of Mises's calculation argument–which rapidly became entrenched among Hayekians after the work of Don Lavoie—that SRH take issue with, because they believe it represents a palpable conflation of Hayek's and Mises's thought. Thus, it is difficult to see what these appeals add to Yeager's case beyond an argument from authority. For a critique of the unwarranted "homogenization" of Mises and Hayek by some contemporary Austrian economists, see Salerno (1993).

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The Philosophy of Austrian Economics

The Philosophical Origins of Austrian Economics. **By David Gordon. Auburn, Alabama: Ludwig von Mises Institute, 1993.**

Barry Smith

This is a useful, clearly written study of the philosophical origins of Menger's theorizing in economics. As the author points out in his conclusion: philosophy has been an accompanying presence at every stage in the development of Austrian economics. Moreover, "Action, that leitmotif of praxeology, has in the Austrian tradition received a distinctly Aristotelian analysis. Austrian economics and a realistic philosophy seem made for each other."

Gordon packs considerable material into a short span, and inevitably some simplifications arise. Thus in defending a view according to which Austrian economics arose in reaction to the "Hegelianism" of the German Historical School, he ignores the differences which existed between the views of Knies, Roscher, Schmoller and other members of the German school, as he ignores also recent scholarship which points to hitherto unnoticed similarities between the work of some of these thinkers and that of Menger.

Underlying Gordon's treatment of nineteenth-century philosophical thinking in the German-speaking world is the idea of a division into two camps. On the one hand (and here I, too, am guilty of some simplification in expounding Gordon's views) is the camp of German philosophy, which Gordon sees as being Hegelian, anti-science, and organicist. On the other hand is the Austrian camp, which he sees as Aristotelian, pro-science, and individualist in its methodology. The members of the Historical School are placed in the former camp and

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are described as having embraced a Hegelian position inimical to the development of economic science. Menger, in contrast, falls squarely in the latter camp, and is presented as having shown the way towards a genuinely scientific theory of the "principles" of economics, a theory capable of being applied at all times and to all cultures.

The simplification involved in this two-camp hypothesis can be seen already in the fact that Brentano, normally and correctly regarded as the Austrian philosopher (and as the philosophical representative of Austrian Aristotelianism) *par excellence*, was in fact born in Germany, and his Aristotelianism was decisively influenced by the thinking of the German metaphysician F. A. Trendelenburg. What is more, Hegel himself was seen by his contemporaries as having been responsible precisely for a *revival* of Aristotelianism, and Aristotelian elements are quite clearly present in the thinking of those whom he influenced (not least, as Meikle and others have shown, in that of Marx).

Interestingly, the two schools of Brentanian philosophy and of Mengerian economics were in a number of ways intertwined—to the extent that the Brentano school was dubbed the "second" Austrian school of value by analogy with the "first" school of Menger. It is difficult to establish the degree to which Brentano influenced Menger (the history of philosophy is, as Gordon himself points out, not an apodictic science), and in my own writings on this matter I have preferred to leave this question open. Gordon writes (p. 27) that Brentano revived the study of Aristotle in Austria; this, too, is a simplification: a certain institutionalized Aristotelianism had survived in Austria (a Catholic country), as it had not survived in those Protestant parts of the German-speaking world influenced by Kant and by the Kantian criticism of all "metaphysics." Both Menger and Brentano were able to flourish in Austria in part because of this Aristotelian background, but all of this makes still more urgent the question as to the precise difference between the "Aristotelianism" of Hegel, Marx, the German Historical economists, and the "Aristotelianism of the Austrians.

Both groups embraced a suspicion of mathematics. And both groups embraced a form of essentialism: they saw the world as being structured by "essences" or "natures" and they awarded a central role to the necessary laws governing these. (The propositions expressing universal connections amongst essences are called by Menger "exact laws." It is such laws which constitute a scientific theory in the strict sense, as Menger sees it. The general laws of essence of which such a theory would consist are moreover subject to no exceptions. In this respect they are comparable to the laws of geometry or mechanics,

and contrasted with mere statements of fact and with inductive hypotheses.)

Both groups held that we can know *what the world is like* in virtue of its conformity to laws, so that the laws are in some sense intelligible, a matter of what is accessible to reason. And both held further that general essences do not exist in isolation from what is individual. Thus they each embraced a variety of immanent realism: they were interested in essences and laws as these are manifested in *this* world, and not in any separate realm of incorporeal Ideal Forms of the sort which would absorb the attentions of philosophers of a Platonistic bent.

Both groups would thus stand opposed to the positivism which has been dominant in philosophical circles for the bulk of the present century and serves as the unquestioned background of almost all contemporary theorizing among scientists themselves. For positivists the world consists of elements that are associated together in accidental and unintelligible ways; all intelligible structures and all necessities are the result of thought-constructions introduced by man, and the necessities involved can accordingly be exposed without remainder as matters of logic and definition. The positivist sees only one sort of structure *in re*, the structure of accidental association. The two groups of Aristotelians, in contrast, see also non-trivial yet intelligible and law-governed worldly structures, of a sort that one can understand. Hence where the positivist sees only one sort of change—accidental change (for example of the sort which occurs when a horse is run over by a truck)—the Aristotelian sees in addition intelligible or law-governed change, as, for example, when a foal grows up into a horse (or when a state-managed currency begins to lose its value in relation to other goods). The presence of intelligible change implies, moreover, that there is no "problem of induction" for either group of Aristotelians. When we understand a phenomenon as the instance of a given species, then this understanding relates also to the characteristic patterns of growth and evolution of the phenomenon in the future and to its characteristic modes of interaction with other phenomena.

In what respects, then, do the German and Austrian Aristotelians differ? First, we mention one minor point (which plays too central a role in Gordon's exposition): the two groups differ in their respective estimations of the role and potentialities of scientific theory, and offer different accounts of the relations between history and philosophy, and also between both of these and "exact" and empirical science. Yet these differences are a matter of emphasis only. Thus Marx himself embraces the assumption that science is able to penetrate through

the ideological obfuscations by which the commonsenical mind (as he conceives things) is of necessity affected. Other German philosophers saw philosophy itself as a science, indeed as a rigorous science in something like the Mengerian sense.

The first major difference between the two groups concerns the account they give of the degree to which the laws of a science such as economics are *strictly universal*. For Menger and Brentano (as for Aristotle before them) strict universality is the necessary presupposition of any scientific theory in the genuine science. Such universality is however denied by Marx, for whom laws are in every case specific to *a given social organism*.[1]

The second such difference concerns the issue of methodological *individualism*—a feature which is of course characteristic of Menger and his school. Note, however, that Menger was opposed not only to the holism or collectivism of the sort that was propounded by (among others) Marx, but also, at the opposite extreme, to atomistic doctrines of social organization. For methodological individualism deals with individuals not as isolated, independent atoms, but as nodes in different sorts of complex cross-leaved relational systems. Society and its institutions (including the market) are not merely additive structures; they share some of the qualities of organisms. The behavior of such structures is, for the methodological individualist, to be understood in the last analysis entirely in terms of complex systems of desires, reasons, and motivations on the parts of individuals; but the institutional structures themselves are for all that real, and the desires, reasons, and motivations—and thus also the actions—of the constituent members of such structures exist and have the texture and content that they have only in virtue of the existence of the given institutional surroundings. We may recall, in this connection, Aristotle's view of the city-state as an organic entity: these and other organicist elements in Aristotle's thinking were, I want to suggest, taken over by Menger, too, though mediated through the latter's theory of the essential laws governing the world of economic and other social phenomena. Economics is methodologically individualist when its laws are seen as being made true in their entirety by patterns of mental acts and actions of individual subjects, but economic phenomena are then grasped by the theorist precisely as the results or outcomes of *combinations and interactions* of the thoughts and actions of individuals.

[1]Cf. S. Meikle (1985), p. 6, n. 4.

The third major difference turns on the fact that, from the perspective of Menger, the theory of value is to be built up exclusively on "subjective" foundations, which is to say exclusively on the basis of the corresponding mental acts and states of human subjects. Thus value for Menger—in stark contrast to Marx—is to be accounted for exclusively in terms of the satisfaction of human needs and wants. Economic value, in particular, is seen as being derivative of the valuing acts of ultimate consumers, and Menger's thinking might most adequately be encapsulated as the attempt to defend the possibility of an economics which would be at one and the same time both theoretical (dealing in universal principles) and subjectivist in the given sense. Among the different representatives of the philosophical school of value theory in Austria (Brentano, Meinong, Ehrenfels, etc.) subjectivism as here defined takes different forms.[2] All of them share with Menger however the view that value exists only in the nexus of human valuing acts.

Finally, the two groups differ in relation to the question of the existence of (graspable) laws of historical development. Where Marx, in true Aristotelian spirit, sought to establish the "laws of the phenomena," he awarded principal importance to the task of establishing *laws of development*, which is to say, laws governing the transition from one "form" or "stage" of society to another. He *treats the social movement as a process of natural history governed by laws*,[3] and he sees the social theorist as having the capacity to grasp such laws and therefore also in principle to sanction large-scale interferences in the social organism which is the state. Marx himself thereby saw social science as issuing in highly macroscopic laws, for example to the effect that history must pass through certain well-defined "stages." The Aristotelianism of the Austrians is in this respect more modest: it sees the exact method as being restricted to essences and to simple and rationally intelligible essential connections only, in ways which set severe limits on the capacity of theoretical social science to make predictions. It is in this connection that the methodological individualism of the Austrians has been criticized by Marxists as a form of atomism, though such criticisms assume too readily that methodological individualism trades in mere "sums."

What, now, of the German historical economists? As already noted, Aristotelian doctrines played a role also in German economic

[2]See, on this, the papers collected in Grassl and Smith, eds. (1986).

[3]Passage cited by Marx himself in the "Afterword" to the second German edition of volume 1 of *Capital* and adopted as a motto to Meikle 1985.

science, not least as a result of the influence of Hegel. Thus for example, Roscher, as Streissler has shown, developed a subjective theory of value along lines very similar to those later taken up by Menger. Such subjectivism was accepted also by Knies. Moreover, Knies and Schmoller agreed with the Austrians in denying the existence of laws of historical development. In all of these respects, therefore, the gulf between Menger and the German historicists is much less than has normally been suggested. The German historicists are still crucially distinguished from the Austrians, however, in remaining wedded to an inductivistic methodology, regarding history as providing a basis of fact from out of which mere empirical generalizations could be extracted. (Schmoller, especially, attacked the idea of universal laws or principles of economics.) For an Aristotelian such as Menger, in contrast, sheer enumerative induction can never yield that sort of knowledge of exact law which constitutes a scientific theory. For this, reason and insight are indispensable to the science of economics as the Austrian conceives it; and (as Mises has stressed) a knowledge of the science of human action is in fact an indispensable presupposition of that sort of fact-gathering which is the task of the historian.

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Second Thoughts On *The Philosophical Origins of Austrian Economics.*

David Gordon

Professor Barry Smith's characteristically erudite remarks about my pamphlet provide me with a welcome opportunity to offer some additions and corrections. I have no major disagreement with Smith's comments, but he has at one place ascribed to me a much more ambitious thesis than I intended.

He thinks I wish to divide "nineteenth-century philosophical thinking in the German-speaking world" (p. 125)[1] into two camps: German, which I see as "Hegelian, anti-science, and organicist" and Austrian, which in contrast is "Aristotelian, pro-science and individualist" (p. 125–26). Against this view, Smith maintains that Hegel, Marx, and the German Historical School display marked affinities with the Austrians: both groups, in particular, count as Aristotelian.

I meant to advance a much more limited conjecture than this: Hegel's stress upon organic unity may have influenced the aversion toward a universal science of economics found among Schmoller, Sombart and other members of the German Historical School. I also had a little to say about Hegel's politics, but I did not intend a full characterization of Hegel's philosophy, much less nineteenth-century German and Austrian philosophy as a whole.

Smith's emphasis on the Aristotelian elements in Hegel seems to me entirely well taken and supported by longstanding scholarly opinion. As an example, one outstanding British authority on Hegel, G. R. G. Mure, in his *Introduction to Hegel* (Clarendon Press: Oxford, 1940) devotes his first few chapters entirely to Aristotle before so much as mentioning Hegel. But I venture to suggest that

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[1]All references to *The Philosophical Origins of Austrian Economics* (Auburn, Ala.: Ludwig von Mises Institute, 1993) and to Barry Smith's review, which appears in this volume, are by page number in parenthesis in the text.

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the similarities between Aristotle and Hegel leave my suggestion untouched. For Hegel, "the Truth is the Whole" in a way that inhibits the elaboration of separate sciences. Like Aristotle, Hegel favored teleological explanation; but if, as Hegel thought, everything is organically related to everything else, how can one develop a distinct discipline of economics with universal laws?

Or so at least it seemed to me in 1988, when I gave the lecture on which the pamphlet is based. I did not then know that an important study had challenged the view of Hegel's doctrine of internal relations which I presented. R. P. Horstmann, in *Ontologie und Relationen* (Koenigstein: Atheneum, 1984) argues strongly that Hegel did not support a doctrine of internal relations in the style of the British Idealists. Further, Robert B. Pippin, in *Hegel's Idealism* (Cambridge: Cambridge University Press, 1989), sees Hegel as a "conceptual holist" rather than the advocate of a metaphysical thesis.

But it is exactly here that Hegel's philosophy poses a problem for a science of economics. If one believes that our categories generate contradictions that can only be resolved by resort to a "higher" standpoint, and that this overcoming or "sublation" is continually repeated, will it not be difficult to construct independent scientific disciplines? Even, then, if my statements about internal relation in Hegel need to be changed, my suggestion is still in the running.

To turn to a few details, Smith with complete justice notes that my picture of the German Historical School ignores the views of the earlier Historical School (his term, "simplifications" is much too kind). My remarks on the group should be taken as limited to the later Historical School, as I note at page 43 of the pamphlet. When I gave the lecture, I did not know the material on the earlier group to which Smith refers.

Smith notes that Brentano was "decisively influenced by the thinking of the German metaphysician, F. A. Trendelenburg" (p. 126). Certainly, this makes it difficult to assert a complete polarity between German and Austrian philosophy; but, once more, this is not my thesis. I do not think that Trendelenburg's influence can be used to show a similarity between Hegel and Brentano, since Tredelenburg, far from being a Hegelian, sharply criticized Hegel's *Logic*. But Smith does not use Trendelenburg for this purpose.

I think it doubtful that the "presence of intelligible change implies . . . that there is no problem of induction for either group of Aristotelians" (p. 127). It is of course right that if one grasps a law-governed change, one is not restricted to induction by simple enumeration. But does this solve the problem of induction? Does it logically

follow from the existence of an intelligible change at a particular time that the law will continue to hold in the future? Or are these doubts merely an undue Humean skepticism? (I am not sure whether Smith intends only to give the view of the Aristolelians or also to endorse it.)

Smith's review has a fundamental failing I have so far ignored: he is entirely too easy on me. Before I turn from Smith to my own corrections, however, may I say that I hope the rumor is true that Smith has forthcoming a book on the philosophy of the Austrian School. He is one of the world's foremost authorities on nineteenth and twentieth century Austrian philosophy.

And now for my "second thoughts." At page 7, it would be better to say that Sombart knew Mises rather than that the two economists were friends.[2] At pages 10–11 I describe the doctrine of internal relations in a grossly mistaken way. A supporter of internal relations thinks that any property of an entity is essential to it. But it does not follow from this that any change in a property will affect every other *property* of an entity. Someone might hold that internal relations connect only properties and substances, not properties by themselves. (A more exigent version of the doctrine *would* hold that every property is internally related to every other property of the substance it modifies. A still more demanding version would hold every property is internally related to every other property of *any* substance). And the first sentence on p. 10 should read: "the person who has met the President is an *essentially* different person from the one who has not."

At p. 27, when I claim that for Aristotle "[e]mpirical science exists as a placeholder for true science, which must work through deduction," this wrongly suggests that a deductive science for Aristotle is non-empirical. "Empirical" must be understood in the sense of "mere empirical hypotheses" of the preceding paragraph. For Aristotle, the evident principles of a deductive science come from observation of the world.

Much more serious is the confused discussion of self-evident axioms on pp. 27–28. The regress argument of the *Nicomachean Ethics* is used to establish the existence of a highest end. I should have explicitly stated that the regress argument that I discuss is a generalization of the argument of the *Ethics*, not given there in the form in which I present it. An objection to my discussion which I overlooked is this: I claim that a science can have several basic axioms: justification need not proceed from a *single* self-evident

[3]I am grateful to Ralph Raico for this point.

axiom. But if there are several axioms, can't they be combined into a single axiom through conjunction? I ought to have specified that the argument is restricted to axioms that are not logical parts of other axioms. Further, it is not clear that the discussion is needed: has anyone claimed that a science is derived from a single axiom? Perhaps Mises hints at it; but even he allows subsidiary postulates.[3]

The discussion of the verification principle at p. 36 is seriously mistaken, and I am greatly indebted to Matthew Hoffman for pointing this out to me. First, I ought to have made clearer that I make two assumptions *not* part of the verification principle, on which my argument depends: if a statement is verifiable, its negation is verifiable; and any logical consequence of a verifiable proposition is verifiable. The argument then proceeds as follows: "From p, we derive (p or q). But suppose that p is false—then we have:

$$\begin{array}{l} p \text{ or } q \\ \underline{\text{not-p}} \\ \therefore q \end{array}$$

By hypothesis, p is verifiable; then (p or q) and (not-p) are verifiable, by our assumptions. Then q is verifiable, since it is a logical consequence of verifiable propositions." This should be substituted for the erroneous argument at p. 36.

[3]I am grateful to Murray Rothbard for this objection.

The Review of Austrian Economics, the predecessor to the *QJAE*, was founded and edited by Murray N. Rothbard and functioned as the premier Austrian School scholarly journal between 1987 and 1997. After 1995, it was edited by Walter Block, Hans-Hermann Hoppe, and Joseph T. Salerno. Published first by Lexington Books and later by Kluwer Academic Publishers, the journal played a central role in attracting a new generation of economists to the theoretical foundations established in the work of Carl Menger and Ludwig von Mises.

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