MARKETS, MANDARINS, AND MATHEMATICIANS

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Introduction

I would like to begin on a personal note, in part to expiate past sins of omission, partly to allow me to illustrate a major theme of this paper.

Though I began the study of economics at Oxford in 1960, to my shame the sole work of Peter Bauer's that I had read until fairly recently was *Indian Economic Policy and Development* (1961). Leafing through my copy of Bauer's book to prepare this paper, I found the margins covered with exclamation marks and "see Little." The latter reference is, of course, to Ian Little's 1961 review of Bauer's book in the *Economic Journal*. Little's opening salvo gives a fair idea of his central thrust (1961, p. 835):

One would like to discuss this book as the obvious outpouring of a political adolescent with an economic *idée fixe*. But it is meant for laymen who do not know India. They might be misled by the arguments of a professor whose chair has special reference to economic development and underdeveloped countries.

Not wishing to be misled, and impressed by the intellectual authority of our leading mentor, Bauer's work was written off by my contemporaries as that of an economic illiterate and a political adolescent. But when I reread the book, Little's review, and his own subsequent survey of the current status of the economics of development

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(Little 1982), it was apparent that by 1982 Little no longer seemed to subscribe to the views he espoused in 1961.¹

Clearly, Little (along with many other early critics) would now accept that, particularly on issues concerning the role of markets in development, Bauer's 1961 book and other writings on the Third World were prescient. Yet, professional development economists are still reluctant to give him his due. There is, for example, only one reference to Bauer in Little's 1982 book, and that in a footnote identifying him as one of the many economists in England who became "exclusively development economists" after World War II (p. 35).²

While Michael Lipton (1984), in his comments on Bauer's World Bank Pioneers lecture,³ provides a very perceptive appreciation of Bauer's work, T. N. Srinivasan (1984) in his comments on the same lecture is clearly very uncomfortable in Bauer's company. The reasons he gives for his discomfort are highly revealing. They suggest why the *type* of arguments Bauer uses in support of the market mechanism have not been found persuasive by many professional economists.⁴ Srinivasan (1984, p. 59) writes:

¹One example should suffice to illustrate how Little's views changed between 1961 and 1982. In 1961 Little (p. 837) wrote:

Economic arguments are, it seems to me, used in a one-sided manner as persuasive devices. First, [Bauer] says that a bad harvest and a rise in import prices cannot cause a substantial deterioration in the balance of payments, on the insignificant grounds that they also reduce incomes: while on the export side he argues that overvaluation of the rupee discourages exports, implicitly discounting the possibility of inelasticity of demand with the remarkable statement that "the volume of Indian exports bears no relation to the total world demand for the products" (p. 64). No wonder he can imply that there never need be any connection between development and balance of payments difficulties.

In this critique Little is clearly basing himself on the two-gap model of which he recognized himself to be a pioneer (see Little 1982, p. 148, and its references to Little 1960). After summarizing the implausible conditions on which this view is based, Little (1982, p. 148) concludes: "Given time to make adjustments, I doubt whether any country has ever been in such a position." As regards Bauer's illiteracy in not recognizing the inelasticity of the demand for Indian exports, Little (1982, p. 139) states "that incentives work is shorthand for saying that export demand and domestic supply are both elastic." ²My purpose in exhuming this past is not to castigate Little; in fact these changing views parallel my own. I bring these matters up in part as a mea culpa.

³Lipton (1984, p. 45) rightly notes: "Lord Bauer is a *classical* economist. Enterprise, trade, enlargement of markets: these are the engines of development. Bauer makes no neo-classical claim that all businessmen act like profit-maximisers, or would maximise welfare if they did. For Bauer, it is the move from subsistence to ever larger markets that counts."

⁴I, of course, discount the hysteria of those numerous dirigiste development economists who over the years have made Bauer into their bête noire. As Alan Walters rightly notes in his comment on my paper, the primary opposition to Bauer's views in the 1950s and 1960s in the U.K. came from the socialist antimarket followers of Joan

While I agree with Lord Bauer that a much greater reliance on markets is called for in many developing countries, I find in his writings more polemics and debating points than depth. A far deeper analysis of the role of markets and development can be found in the few pages of Kenneth Arrow's presidential address to the American Economic Association.

He then goes on to cite the well-known reasons within the Arrow-Debreu framework for market failure. Srinivasan (p. 55) commends

current research [that] involves investigations into the role of alternative institutional and contractual arrangements that exist in the absence of a complete set of insurance and future markets. . . . A fuller understanding of their systemic role in concrete sociopolitical-economic contexts is essential in devising developmental policies. In the absence of such understanding, a discussion of the place of markets, or, for that matter, central planning cannot go very much beyond assigning totemic value to either. Further, since governments, just as markets, can be and often are imperfect, and are subject to lobbying, interventions to correct market imperfections that are optimal in theory may turn out to be worse than no interventions at all [emphasis added].

The italicized passage provides the reasons that make Srinivasan (and me) suspicious of the presumption for dirigisme commonly adduced within the Arrow-Debreu framework. This indirect and, as some would say (see Barry 1985), "limp justification" for the market is based both on the logic of second-best welfare economics as refined in the 1960s within the Arrow-Debreu tradition, as well as from observations of the actual effects of government interventions in many developing countries (reviewed in Little 1982; Lal 1983). Thus, though Srinivasan would, from his sophisticated Arrow-Debreu perspective, reach many of the same practical conclusions as Bauer on most policy-related issues concerning government intervention, he is deeply suspicious of Bauer's style of argument, of his "fulminating against government intervention" (p. 55), because it is not couched in the Arrow-Debreu language. It is differences in rhetoric (in Donald McCloskey's [1983] sense) rather than divergent assessments of the need for government intervention in specific cases in developing countries that set them apart.

Robinson at Cambridge and Thomas Balogh at Oxford. They were not mathematicians. I do not discuss their views in this paper, in part because I have done so elsewhere (see Lal 1983), and partly because I am more concerned in explaining why the mainstream of the profession—which cannot be put into any narrow ideological category, but which was (and is) by and large led by mathematicians—finds Bauer's views so uncongenial.

The dominance of the rhetoric of mathematicians—particularly their protectionist demarcation of what is to count as rigorous theory—explains Bauer's failure to persuade mainstream professional economists in the 1950s and 1960s, when mathematicians still hoped to provide mandarins with the tools to improve on markets. But even with Bauer's views on the relative efficacy of markets and mandarins, drawn from a different and older rhetorical (but by no means atheoretical) tradition in economics, being vindicated by the development experience of the 1970s and 1980s, there is still much discomfort among mainstream economists in accepting this cuckoo in their nest. This, however, as McCloskey (1983) has cogently argued, is a sign of the impoverishment of the rhetoric of mainstream economics, based as it is on an epistemologically unsound positivist view of economics as a science. By contrast, the popularity of Bauer's work among laymen—much to the fury of the technicians—is partly based on his appeal to an older classical tradition of political economy, whose modern-day representatives can broadly be classified as neo-Austrian.5

The two Weltanschauungs lead to different visions of the market process and how its social efficacy is to be judged. These visions are not mutually exclusive, though overconcentration on one at the expense of the other does lead to different degrees of support for the market. One person's ideology becomes another's vision.

The resulting incivility of economic conversations causes confusion in the lay public's mind with respect to economists' support for the market. Thus, in this paper, I want to argue against the intellectual imperialism of both the axiomatic, positivist, Arrow-Debreu paradigm of mathematicians, as well as the "libertarian" aprioristic paradigm of neo-Austrians. For in ongoing debates on public policy the former directly and the latter indirectly (through the sort of religious resistance it evokes among unconverted positivists) provide intellectual or emotional support for mandarins and what I have elsewhere termed the "Dirigiste Dogma" (Lal 1983). Finally, I shall also deal (albeit briefly) with the arguments advanced by those I call the "moral imperialists" against the market.

⁵The term "neo-Austrian" refers not to a particular type of capital theory, but to the general Weltanschuung of Austrian economics, beginning with von Mises and further elaborated by Hayek, Haberler and some members of the Chicago and public choice schools.

⁶I fully accept Alan Walters's point in his comment that mandarins do not need economists to convert them to dirigisme. As David Henderson (1985) has pithily documented, they are natural dirigistes. What concerns me in this paper is the indirect or direct support economists may have provided to their irrational dirigisme.

The Arrow-Debreu Vision of the Market

Even though mathematicians can find an antidote within their chosen rhetoric for the prima facie dirigiste implications of the Arrow-Debreu framework, with considerations of bureaucratic failure off-setting those of market failure in any real world, and hence necessarily imperfect economy and polity, there are some who are still bewitched by the seeming plausibility of letting mandarins loose (albeit guided by technical experts) in an imperfect economy. They have lent indirect intellectual support to the natural dirigisme of mandarins and the modern-day lay public in their addiction to what David Henderson (1985) has aptly labeled "do-it-yourself economics."

As examples I would like to consider the writings of three former colleagues of Bauer at the London School of Economics, economic theorists of the highest distinction for whom I have the greatest respect, Professors Dasgupta, Hahn, and Sen. In their writings on "the market" (Dasgupta 1980; Hahn 1984; Sen 1983), all three follow the Arrow-Debreu vision of the market process and assert that the justification for the market is provided by the two so-called Fundamental Theorems of Welfare Economics that can be derived within this framework. I do not need to go into the stringent conditions (which, being coterminus with those for perfect competition, require "complete markets" for all goods indexed by physical and locational characteristics, and by temporal states of nature) necessary for the existence of such an ideal state. All three of these distinguished theorists, however, explicitly or implicitly argue that the case for the market depends on asserting that the conditions in any real world

⁷As Dorfman-Samuelson-Solow (1958, pp. 409-10) put it:

The main propositions of welfare economics are usually stated in terms of a long string of equivalences among marginal rates of substitution in consumption and marginal rates of transformation in production. More recently it has become common to sum up all these in one brief and easily understood theorem which contains everything of significance and provides the backbone of modern welfare economics. This fundamental theorem states: Every competitive equilibrium is a Pareto-optimum; and every Pareto-optimum is a competitive equilibrium.

In its more refined version, in order to distinguish between the infinite number of Pareto "optima" that can be competitive equilibria, starting from different initial endowments of the agents, and the optimal allocation among the Pareto-efficient outcomes—which must depend on an ethical evaluation of the alternative distribution of the endowments or outcomes as summarized in some "social welfare function"—it is usual nowadays to distinguish between Pareto-efficient equilibria, which correspond to the "Pareto-optimum" in the above quotation and the full Pareto optimum which is that ethically preferred among the infinity of potential Pareto-efficient outcomes within this framework.

economy correspond to those required for perfect competition. It is child's play to show the implausibility of the reality of the completeness of markets, and therefore of perfect competition. Hence, economies which significantly depart from perfect competition—that is, in general, actual economies—would be candidates for the deployment of a visible hand" (Hahn 1984, p. 118). Considerations based on the ethically preferred distribution of endowments and incomes, as well as the existence of public goods and externalities, are then adumbrated at length to create the impression that "market failure" is ubiquitous (as it surely is) and that its correction requires massive government intervention (which is arguable). Only at the end and almost in passing is there any mention of the antidote to dirigisme that is to be derived from this framework. As John R. Hicks (1985, p. 6) has rightly noted:

When the economist has got his "welfare" rules and has established (if he can) that, existing organisation does not satisfy them, he has still not finished his job. For he has no right to criticise the existing organisation simply on account of what, he has so far shown. For anything that is yet apparent it may be that there is no practicable organisation which will satisfy wants any "better", which will approach the optimum any more nearly. In order to have a basis for criticism it has to be shown that there is a practicable alternative organisation which can be expected to do this.

Partha Dasgupta (1980, p. 112) does attempt to do this. He rightly notes:

The operational appeal of the Fundamental Theorem of Welfare Economics is of course minimal. The informational requirements for the state are awesome. It is required to know the preferences, endowments and the (personalised) production set of all individuals. These observations alone suggest that individual rights to certain private decisions may not only be a moral imperative, but may

⁸Hahn (1984, p. 115), after summarizing the fundamental theorems, states: "They have led many to claim that the invisible hand is not only smart but also beneficient" (emphasis added). They have led many? Whom? There is not a single citation.

⁹Hahn (1984, p. 120), after expending nearly eight pages on developing the well-known themes of "market failure," makes this central point as a mere qualification to what has gone before:

Nor is such failure sufficient groun[d]s for intervention, since it remains to be demonstrated that "government failure" is less damaging than market failure. Hence although there may be a prima facie ground for intervention when the invisible hand fails, and no such grounds when it does not, there is some arguing and thinking to be done before a case for intervention has been clinched.

In the rest of Hahn's paper, however, there is none of the further "arguing" required to justify government intervention, which essentially concerns the nature and behavior of "governments" or the "state."

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at once be a necessity prompted by the fact that the state possesses incomplete information.

He then summarizes the recent mathematical economics literature on "incentive compatibility" and the problems this raises for a command economy run by mandarins, as Hayek and Mises pointed out at the start of the "planning debate" in the 1930s. ¹⁰ In this framework the only feasible incentive-compatible resource allocation mechanism is *not* a command economy, but one that achieves a full optimum by working through the price mechanism supplemented by optimal taxes and subsidies. ¹¹

But implementation of "optimal taxes" raises a host of questions about the character of the mandarins required for their design and administration. To achieve the desired outcomes, the mandarins would have to be "economic eunuchs" (in James Buchanan's apt phrase). Dasgupta (1980, p. 119), to his great credit, recognized this when he wrote:

It has been an abiding shortcoming of applied welfare economics that it has for the overwhelming part supposed a perfect government—one that faithfully goes about its tasks. But if one addresses oneself to the question of what incentives there must be to ensure that governments undertake their tasks faithfully one is, at a minimum faced with the principal-agent problem with all its attendant difficulties.

Although Dasgupta cites Buchanan's and Hayek's work (in a footnote) as very important exceptions, he does not follow this lead to examine the thinking on "constitutional economics" that the Virginia public choice school has pioneered and which is the next natural stage of the argument. Instead he discusses the complementary viewpoint of Hayek on social organization and his neo-Austrian justification for a market order. But Dasgupta (1980, p. 118) ends by dismissing Hayek's *sustem* of thought:

Such an anti-rational view, disagreeable though it may be to many, is still not the most disturbing feature of Professor Hayek's philosophy. Ultimately, it seems to me, what is most disturbing is the degree of authoritarianism that he would appear to be willing to tolerate for the sake of his conception of progress.

Sen takes a similarly jaundiced view of Hayek's defense of a spontaneous market order. This is not the occasion to discuss such com-

¹⁰See Hayek (1935).

¹¹As Dasgupta (1980, p. 114) puts it, "The full optimum can still be implemented in a manner that is compatible with incentives; but decentralisation is a necessity imposed by the question of incentives now—not solely a moral requirement."

mon misunderstandings of Hayek, which, as John Gray (1984) has recently shown, are based on a lack of understanding of Hayek's epistemology. Instead I want to argue that they illustrate the difficulty faced by even the most sophisticated mathematical economists in comprehending this alternative vision of markets.

Neo-Austrian v. Neo-Classical Views of Government

The neo-classical recognition of the importance of imperfect information and pervasive uncertainty in economic life has been accompanied by the realization that general equilibrium theory with its Walrasian auctioneer only considers "situations in which the invisible hand has already accomplished its task" (Hahn 1984, p. 125). Echoing the Austrians, the market process is seen as a disequilibrium system moving toward the notional Walrasian equilibrium through a sequence of temporary equilibria. At each moment in time, economic agents are Bayesian econometricians updating their probabilistic forecasts of future prices on the basis of currently observed values of the relevant variables.

However, this is a vision of the market process as a mechanical system moving through an environment of Knightian risk. It takes no account of the irreducible Knightian uncertainty (or ignorance) in economic life, which is an essential ingredient of both the Austrian view and, it should be said, Keynes. As Stephen Littlechild (1986, p. 28) has observed: "The crucial feature of the neo-classical approach is that the form that the future can take is known in advance. . . . The neo-classical agent lives in a world of Knightian risk." By contrast, Littlechild (pp. 28–29) sees the Austrian view (represented by Kirzner 1973) as an approach whereby

the agent may be characterized as knowing some things and not knowing others. The problem is not uncertainty (or risk) but ignorance. Over time, however, the agent discovers things of which he or she was previously unaware. The Austrian model differs from the neo-classical model with point estimates in two respects. First, the revision of forecasts is not merely an updating in the light of experience—it may take place autonomously, as when, for example,

¹²Also see Lal (1982, 1985) about the importance of the distinction between Knightian risk and uncertainty, which mathematicians and economists had tended to ignore on the grounds that genuine uncertainty cannot be modeled. But see the important paper by Heiner (1983), which argues that the predictable behavior that economists are concerned with can exist only as behavioral rules for an environment that is irreducibly uncertain. "[O]bserved regularities of behavior can be fruitfully understood as 'behavioral rules' that arise because of uncertainty in distinguishing preferred from less-preferred behavior. . . . It is in the limits of maximizing that we will find the origin of predictable behavior" (p. 561).

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the agent discovers a hitherto unsuspected source of supply. Second, this new opportunity is not necessarily a better value for a known variable—it may be a completely new variable. For example, a consumer may discover honey for the first time. Risk (and uncertainty) are not the essence of the Austrian approach (a la Kirzner). Tomorrow is a vector of which the agent knows some components but not others; he or she knows there will be other components, but not what they will be; consequently, the agent cannot form a probability judgment as to the likelihood of their occurring.

The entrepreneur who is at the center of Kirzner's Austrian theory is the agent who moves the real "disequilibrium" world through arbitrage toward the notional competitive equilibrium. He is to be contrasted with the Schumpeterian entrepreneur who, through his innovation and "animal spirits," is a *destabilizer* of a notional Walrasian equilibrium. Mathematicians have attempted to model Schumpeterian innovations, but apart from one effort by Littlechild and Owen (1980) there has been no attempt to provide a formal account of Kirzner's entrepreneur. This lack of formalism and its reluctance to rely on positivist methodology are considered to be shortcomings of the Austrian approach, as noted, for instance, in Benjamin Klein's (1975) review of Kirzner's (1973) book.

But even among Austrian converts, as Littlechild (1986, pp. 32–33) notes, there are critics who question Kirzner's assertion that the market process "tends to coordinate rather than discoordinate": ¹³

Kirzner's view is that entrepreneurship consists in the discovery of opportunities thrown up by exogenous changes but not yet noticed by other market participants. In this sense, the entrepreneurial market process is one of continual discovery and increased coordination. Critics point out that this analysis downplays (or even ignores) the possibility of mistakes. . . . It is true that market participants are trying to foresee the future correctly, and that market forces will tend to eliminate the unsuccessful participants; but they cannot guarantee that every entrepreneurial action (or even most such actions) will increase coordination in the market.

The essential difference between the neo-Austrian and neo-classical viewpoints concerning the proper role of government in an

¹³Hahn (1984, p. 127) makes much the same point. "Opportunities for mutually advantageous trade must be recognised and hence signalled ... trade opportunities are supposed to be signalled by prices which are public and anonymous—they do not depend upon the persons engaged in the trade.... In such a world, it is false to propose that, because there are unexploited gains from trade, it will always be rational to signal this by price changes. The manner in which potential traders can communicate is of basic significance. One should have thought that, in an age where the prisoner's dilemma ... is known far and wide, this point hardly needed making."

economy must therefore lie elsewhere. It seems to me to be analogous to the differences between those who hold to procedural- or "entitlement"-based views of justice (for example, Robert Nozick) as compared with consequentialist views (for example, utilitarians). Thus Buchanan (1986, p. 22) states: "How does one improve a market? One does so by facilitating the exchange process, by reorganizing the rules of trade, contract or agreement. One does not "improve" or "reform" a market-like exchange process by an arbitrary rearrangement of final outcomes."

As one who shares the pluralist vision of society of the great Oxford liberal philosophers Isiah Berlin and H. L. A. Hart, I have found recent discussions in ethics based on a desire to find some absolute ethical standard, to judge social orders conceived as a choice between "rights" and "utility" particularly uncongenial. Similarly, I find the desire to limit discussions of potential interventions to improve market efficiency purely to the derivation of appropriate procedural rules through a constitutional specification of efficient property rights as being too narrow. An example will make my position clear.

As is well known, the Coase theorem concerning externalities shows that voluntary exchanges within an appropriately defined and legally enforced system of property rights will be able to ensure allocative efficiency in the Paretian sense. But as Cootter (1982) noted, this result depends on the assumption of nonstrategic behavior on the part of agents. According to Buchanan (1986, p. 93): "In the absence of some externally imposed rule for dividing the purely distributional gains, there is no assurance that exchanges in rights will shift the economy toward the Pareto efficiency frontier and maintain a position on the frontier once reached."

Buchanan resolves this dilemma (within the neo-Austrian framework) by distinguishing between the ex ante and ex post aspects of choice. He insists that, as only the ex ante aspect of choice is relevant from a full-blooded subjectivist Austrian perspective, revealed preference is sufficient to ensure that voluntary exchanges within a Coasean system of property rights will achieve efficiency, in the sense that resources will necessarily move to their highest valued uses. In this purely subjectivist view, no objectively measurable harms and benefits can be derived (even conceptually) from the ex post results of choice, and which could be used by an external observer

¹⁴Buchanan (1986, p. 51) would be in the same camp. I do not think, however, that Sen's (1985) attempt to marry the two views in his so-called capabilities approach is successful.

¹⁵See Buchanan (1969).

to determine a unique Pareto-efficient outcome. Only the initial assignment of property rights can be questioned. ¹⁶ Moreover, only the rules derived from a community-wide consensus for the designation of these property rights, argues Buchanan, will be efficient. ¹⁷

Even if the logical validity of this full-blooded subjectivist-contractarian view is granted, it still seems to me to make no allowance for the contingent factors of history. As a descriptive theory of the evolution of modern states, it is obvious that apart from the United States and, paradoxically, modern India, most modern states did not emerge from the deliberations of constituent assemblies. The logrolling, vote-trading equilibria that the theory depends on are irrelevant for most Third World countries—which are not democracies. Moreover, on purely practical grounds I find it well beyond the bounds of the "suspension of disbelief" that, in the myriad countries of the

¹⁶Thus Buchanan (1986, pp. 94-95) states:

If the only source of valuation of assets or resource claims is the revealed choice behavior of parties to potential exchanges, there is no means through which an external observer can determine whether or not trade, as observed, stops short of some idealized norms. If a person A is observed to refuse an offer of \$x for asset T, then person A must be presumed to place a value on T in excess of \$x. That asset, in A's usage, must be yielding a value or benefit more than \$x. The fact that, some portion of the imputed subjective value of T, to the current owner, A, may be based on his estimates as to the real preferences (valuations) of B, the potential purchaser, is totally irrelevant. . . . ("Efficiency") in resource use, given the institutional setting, is ensured so long as A and B remain free to make the exchange or to refuse to make it. [But he goes on to note that with the Coase theorem] so interpreted, the theory becomes a tautology.... In this construction how can inefficiency possibly emerge? [He argues, however,] that agreement is the only ultimate test for efficiency, but that the test need not be confined in application to the allocative results or outcomes generated under exploiting existing or defined institutionalstructural rules.... Agreement on a change in the rules within which exchanges are allowed to take place would be a signal that patterns of outcomes reached or predicted under the previously existing set of rules are less preferred or valued than the patterns expected to be and generated under the rule as changed. Hence, the new rule is deemed more efficient than the old.

¹⁷It should be noted that the "unanimity rule" does not require unanimity of values or views; as in the vote-trading equilibrium that Buchanan and Tullock (1962) envisage, logrolling could still lead to unanimous decisions. The main argument against the procedure is that it ignores the "consequentialism" that many find appealing (see Sen 1970, pp. 24-26).

¹⁸There is also de Jasy's (1985, p. 65) criticism that these contractarian theories remain instrumentalist and like other theories of the benign state "carry the tacit assumption that the satisfaction or happiness of the state is for some reason and in some manner attained through the happiness of its subjects. No good reason is offered for this, nor a plausible manner in which it could take place." As regards the faith of those "constitutionalists" who believe that Leviathan can be chained to the mast through constitutional rules, de Jasy is surely right that, "with its key always within reach, a chastity belt, will at best occasion delay before nature takes its course" (p. 187).

world, the unanimous decisions of a constituent assembly continually discussing matters of entitlements and property rights is a *feasible* method of dealing with the "market failure" admitted to potentially arise from externalities and strategic behavior—even within the neo-Austrian perspective. As Buchanan (1979) himself notes:

It seems to me that one of the dangers of the subjectivist approach, and particularly in its pure Austrian variant, is the tendency to form a priesthood, with the converted talking only to those who are converts.... Milton Friedman... objects to the Austrian-subjectivist approach largely on the grounds that it implies conversion rather than gradual conviction by the weight of logical argument and empirical tests [pp. 83–84, 90].

An understanding and appreciation of the principle of spontaneous order or coordination may emerge from the very citadels of objectivism, and often does. After all, Adam Smith was no subjectivist. What I am implying is that to the extent that subjectivism tends to concentrate attention on the interaction among persons and away from the "economic problem," an understanding of the principle of order is facilitated rather than retarded. The post-Robbins maximizer must learn the principle of order in spite of rather than because of his analytical paradigm [p. 84].

With this last statement I can agree. As such I remain an agnostic in these tussles between the alternative grand visions (objectivist-subjectivist) of markets and how they can be improved. As Deng Xiaoping is reported to have said: "It does not matter whether a cat is black or white, the important thing is, does it catch mice." ¹⁹

Ethical Justification of the Market

All three of our representative "mathematicians," however, raise one thorny issue concerning the ethical justification of the market that can be illumined by the Austrian vision of the market as a process, and by the constitutional perspective of the public choice school. This is a large subject that I cannot discuss with any thoroughness in this paper (but see Sen 1985; Buchanan 1986; Gray 1984; and Brittain 1986).

Ethical criticisms of the system of voluntary exchanges that constitute the market process can be considered misguided for a very simple reason. The market process itself translates the initial endow-

¹⁹This position can of course slide into a form of utilitarianism that is open to de Jasy's (1985, p. 88) charge: "Judging things on their merits with an open mind fatefully attracts open minds." But as I argue later, we do not need to commit ourselves to any particular set of theoretical or ethical beliefs to form a practical judgment about the need for economic liberalization in the Third World.

ments of agents into final outcomes. Ultimately, it is the ethical justification of the initial distribution of endowments that is usually in question—as is recognized by traditional welfare economists (using the so-called converse theorem and distinguishing between Paretoefficiency and Pareto-optimality), by Marxists (whose notion of exploitation emphasizes the distribution of the ownership of the means of production, recently extended to include human capital [see Roemer 1983]), as well as by the Austrians and other procedural (rights-based) moral theorists (e.g., Nozick). The voluntary market exchange process for transforming these endowments into market outcomes can hardly be called moral or immoral.

In this context it is particularly surprising that Sen (1983) should argue, against the procedural theorists of justice, ²⁰ that the existence of disasters such as famines is an argument against the market process, particularly when he himself states that he has "presented evidence to indicate that many famines—even very big ones—have taken place in the recent past with no overall decline of food availability, and millions have died because of being deprived of food in terms of market command, reflecting sharp failures of entitlement" (Sen 1983, p. 12, emphasis added). But if it is "failures of entitlement" that lead to the awful outcomes, why should the process of voluntary exchanges be blamed?²¹

The real argument against a property-rights-based, converse theorem of welfare economics depends, as Sen (1983, 1985) recognized, on adopting the "imperfect information" insights of the neo-Austrians. Sen (1985, p.12) argued: "If the *information* regarding individuals is inadequate for determining what the initial distribution should be, or if there is an absence of—or reluctance to use—a political mechanism that would actually redistribute resource-ownership and endowments appropriately, then the practical relevance of the converse theorem is severely limited." As a second-best solution, it may only be feasible to achieve an ethically preferred distribution of endowments through interferences with market outcomes, with the gains in equity being set against any losses in efficiency that may result.

²⁰Such as Nozick, who has argued that once an initially just distribution of endowments has been created—a tall order as we shall see below—there is no moral justification for altering the outcomes resulting from "capitalist acts among consenting adults" (Nozick 1974, p.173).

²¹The Indian famine code introduced by the British in the late 19th century explicitly recognized that famines were a result of a loss of entitlements, and instructed district authorities to transfer purchasing power to the poor once a state of famine was declared in the district.

The argument against the "moral imperialist" view—if I may so label it—depends on the assumption of a universal moral code that allows some observing economist to make value judgments encompassing both the efficiency and equity components of economic welfare. But casual empiricism is enough to show that there is no such world society; nor is there a common view, shared by mankind, about the content of social justice.

Against Sen's assertion that egalitarianism is a universal value, because "indifference to the inequality of well-being requires some justification,"22 one can only say that, as witnessed by numerous societies both past and present, the value of the equality of (I presume) "material well being" has rarely commanded wide public support, as seen in the actual practices and behavior of the people constituting these societies.²³ Among modern societies I only have to mention Sen's and my own country, India, which for millennia has had a hierarchical society based on the caste system, whose values, as Louis Dumont (1970) has emphasized, do not even recognize the notions of equality and inequality. In such a hierarchical society all are encompassed within their proper stations by the hierarchy, and questions of "equality" in Sen's sense are meaningless. Lest it be thought that the Enlightenment ethics incorporated in the Indian constitution, and rhetorically espoused by its Westernized castes, reflect a change in these more atavistic values,²⁴ one has only to peruse the marriage advertisements in the pages of various English-language papers in India to see that caste considerations still seem paramount, even among this group, when it comes to vital matters such as whom to wed.25

More seriously, even if there were a universal egalitarian distributional ethic, it is not obvious that, as Sen argues the case for

²²See Berlin (1978) for the various counterarguments to the argument for egalitarianism, which is ultimately based (as he demonstrates) on some form of natural "symmetry" argument, which, itself, requires "sufficient reason" to be upset, but which is deeply ambiguous. Also see de Jasy (1985, pp. 170-81).

²³I am aware of the inadmissibility of moral arguments based on the naturalistic fallacy (deriving an "ought" from an "is"), but as so much of current moral theory seems to depend on an appeal to common moral intuitions, it is important to note that these intuitions are not generally accepted by all cultures.

²⁴Also see Lal (1986c).

²⁵When the moral imperialists argue that no sensible person would dispute the force of egalitarianism, I am reminded of the story in the Flanders and Swan musical "At the Drop of a Hat," in which the son of a cannibal returns home and says he won't eat people because "Eating people is wrong." This leads to much derision, and the poor boy is driven into madness, screaming "Eating people is wrong" to the laughter of the rest of the tribe.

redistributing endowments, we could find a political process that could deliver the goods for the ethically desired realignment of outcomes.

The New Political Economy

This brings me to the fundamental insight of the neo-Austrian view, which until recently has been lacking in the neo-classical view of the market. It has been most fully developed by the public choice theorists, but it also can be arrived at by the neo-classical route (see Krueger 1974) and by the subsequent literature on rent seeking and directly unproductive activities (Bhagwati 1982). This view incorporates and revives various classical insights as found, for instance, in the works of Adam Smith and Karl Marx.

Although problems concerning imperfect knowledge have undermined the implicit assumption of the omniscience of governments, recent developments in what is called the "new political economy" have led to a questioning of the linked assumptions about the omnipotence and benevolence of governments that underlie the tradition of formulating public policy as if it were advice to a committee of Platonic Guardians. It is evident the guardian or so-called public interest view of the state, as well as other views such as the Marxists' view of the idealized Communist state, ²⁶ ignore the fundamental question about the motives of the state. In particular, viewing the state as a guardian of the "public interest" fails to answer the important question posed by Anthony de Jasy (1985) in the first sentence of his book, namely, "What would you do if you were the State?"—nor does it address the more ancient question of "who will guard the guardians?"

A detailed typology of actual and possible governmental forms (in terms of the objectives they seek to subserve) is beyond my remit.²⁷ But I have recently found it useful to think in terms of two polar types, the benevolent (Platonic Guardian) and the self-serving (predatory) state (see Lal 1984). The objectives of the former are well known as they form the staple of every elementary economics text-book. The objectives of the latter are more murky but must, by analogy with biological predator-prey models, involve the self-serving extraction of the maximum continuing flow of resources (which includes intangibles such as power and prestige) for the members of the government and its associates. Predators will share an interest in

²⁶On other such views, see my review of Roemer (Lal 1986a).

²⁷The following is based on Lal (1987).

the enlargement of the incomes of their prey (say, through economic growth) insofar as this raises the potential flow of their own income. Unlike the benevolent state, the welfare of their subjects—as conceived by economists—may only at best be a minor direct component of a predatory state's objective function. More important, however, is the likely opportunistic nature of its behavior, so that when compared with that of the more principled benevolent state, its orderings over social matters are likely to be fickle.

Of course, most actual states will not fall into either of these extreme categories, but it is useful here to maintain this stark contrast. The grand tradition of economics of Marshall, Keynes, Pigou, and others has tacitly assumed that it was by and large working out the economics for a benevolent state. This in itself was not an unreal or absurd assumption. For, as Robert Skidelsky's (1984) biography of Keynes shows, by its excellent description and dissection of the intellectual and social milieu of Edwardian and post-Edwardian Britain, English economists of the day could reasonably assume that the governments they were advising were either benevolent—made up of people like themselves—or, even more important, could be directly influenced to serve the commonweal as viewed by these self-proclaimed Platonic Guardians.

The resulting paternalism underlying this mandarin view, which is by no means stifled in the breasts of many economic advisers, particularly to developing countries, is best summed up in Douglas Jay's immortal words, written in 1937:²⁸

Housewives on the whole cannot be trusted to buy all the right things, where nutrition and health are concerned. This is really no more than an extension of the principle according to which the housewife herself would not trust a child of four to select the week's purchases. For in the case of nutrition and health, just as in the case of education, the gentleman in Whitehall really does know better what is good for people than the people know themselves.

But as the Platonism of the Guardians has slipped even in Britain, that whole splendid body of elegant, sophisticated, and subtle theory that leads from Ramsey, Samuelson, Meade, Little, and Diamond-Mirrlees to Atkinson and Stiglitz, based as it is on the assumptions of a benevolent state run by Platonic Guardians, increasingly appears naive and unrealistic. I will cite but one example.

Those of us who have been raised to accept arguments justifying various forms of governmental action as a solution to the "assurance

²⁸As quoted in Howarth (1985, p. 30). If mandarins do have relevant knowledge not generally available to the public, they should diffuse it to the populace.

paradox" (see Sen 1967) must find the recent savings behavior in developing countries paradoxical. It has been argued (and incorporated in the project evaluation literature) that the social rate of discount must be lower than the private rate of time preference, on the grounds that society as an immortal collectivity would wish to save more than mortal individuals. The latter would thus sign a social compact to save more than they would atomistically. Governments as a result were charged by the "grand tradition" with the task of using the choice of public projects as an indirect means of raising national savings above the suboptimal levels resulting from individual choices. Apart from the obvious "project illusion" on which this argument must be based (see Lal 1973, p.123), it is not applicable if a predatory rather than a benevolent state is assumed as the executing agency of this social compact.

No vast empirical research is required to test the assumptions of this view. All we need point to is the amazing "stylized fact" that (except for Sub-Saharan Africa since 1973) household savings in developing countries have risen consistently over the last two decades to levels that, in Arthur Lewis's view in the *Theory of Economic Growth*, should have led to self-sustaining growth in most of the Third World.²⁹ At the same time one distinguishing feature, at least of the last decade, has been the prodigal behavior of the public sector nearly everywhere. Instead of supplementing national savings, most Third World governments have been depleting the household savings pool through budget deficits and the losses of public enterprises.

From the perspective that views most states as being closer to the "predatory" end of the spectrum, this is hardly unexpected. Countries and societies may be immortal (though even that is dubious), but governments certainly are not. Concerned about their tenure, which is likely to be much shorter than the average individual's lifetime (and that of his offspring), the government's rate of time preference is likely to be much higher than that of private individuals. Hence the observed savings behavior.

Convergent Views of Collective Action

Both the neo-classical and Austrian visions of the market use a notional equilibrium as the fulcrum of the order toward which the

²⁹See Lal and Wolf (1986) for empirical substantiation of these assertions.

market economy moves.³⁰ Despite their divergent attempts at explaining the market process, due to differing views of the environment (primarily concerned with the nature of uncertainty) facing economic agents, both traditions recognize the need for collective action—and both reach similar practical judgments on the relative efficiency of markets and mandarins in organizing economic life. Thus from both perspectives the choice is not the stark one between markets or the state. Apart from anarchists, I do not know of any economist who would want to do away with mandarins altogether. That is why characterizing all supporters of the market as adherents to a laissez-faire dogma (as Keynes recognized in *The End of Laissez-Faire*) is at best a debating point.³¹

In this context it is surprising, as I have noted elsewhere (Lal 1983, pp. 45–47), that Sen should argue that "the difficulty—in reading great significance into the performance of South Korea as a success story for the 'invisible hand'—is the fact that the hands that reared South Korean growth were very visible indeed" (Sen 1983, p. 13). Elsewhere in the same article he makes clear that by the "invisible hand" he means laissez-faire. Thus he writes, "while the 'converse theorem' is a tribute to the market mechanism, it is not a tribute to the invisible hand, i.e., to the market unassisted by political intervention" (p. 5). But who has ever argued that Korea's success is a demonstration of the validity of laissez-faire?

The important distinction in explaining the relative performance of different developing countries is not in terms of an active state versus a state that does nothing. Even Bauer (1984, p. 28), who many consider to be a free market ideologue, argues:

Criticism of central planning or of the policies pursued in its name must not obscure the importance of the essential tasks of govern-

³⁰Some criticisms of the notional equilibrium concept, for instance, those of Lord Kaldor (1972), are unsustainable. Hahn (1974), in a splendid paper that imaginatively weaves together aspects of the neo-classical and Austrian views of the equilibrium of a market process, rightly castigates the idea that the absence of perfect competition—due primarily to the ubiquitousness of increasing returns (which recent work on contestable markets within the equilibrium framework demonstrates is the least likely cause of market failure [see Baumol et al. 1982])—means that all efficiency claims for the market are spurious. For, as both modern neo-classicists and neo-Austrians emphasize, the actual disequilibrium economies we observe cannot thereby be castigated as inefficient, nor can every government intervention then be justified solely on these grounds to serve the particular observers' personal definition of efficiency or equity.

³¹As Michael Lipton has rightly pointed out to me, it is equally as much a debating point "to paint all advocates of the design of central policy in order to *affect* prices and endowments as being 'against the market,' 'mandarins' or believers in a benevolent and neutral State" (Lipton, private correspondence). I have noted elsewhere (1983) precisely this point.

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ment. The adequate performance of these tasks is indeed helpful to the effective operation of the market, if not necessary for it. The tasks include the successful conduct of external affairs, notably the defense of the country, and also the preservation and encouragement of external communications contacts; the maintenance of public security; the effective administration of the monetary and fiscal system; the promotion of a suitable institutional framework for the activities of individuals; and the provision of basic health and education services and of basic communications.

The successful economies are not laissez-faire economies. Korea and most of the other so-called Newly Industrializing Countries (NICs) in the Third World certainly have activist governments, nor have they fully succeeded in avoiding policy-induced distortions in their economies, but, in comparison with the less successful developing countries (such as India, Sri Lanka, and Tanzania),³² they have concentrated the state's energies and resources *relatively* more on doing those things that only governments can do and less on those areas of economic life that are by and large best left to private agents.

The accumulating empirical evidence of the gross distortions that mindless dirigisme has created in many developing countries³³ should (as it has) convince even the most skeptical that purely as a practical matter, and irrespective of one's theoretical position, the pendulum has swung too far against the market in most of the Third World. In this sense, it is now a fair professional judgment that in many developing countries most of the more serious distortions are due not to the inherent imperfections of the market mechanism but to irrational government interventions, of which foreign trade controls, industrial licensing, price controls, and various forms of inflationary financing of fiscal deficits are the most important.³⁴ Thus, regardless of theoretical beliefs and differing judgments about where the ideal line between the market and the state should be drawn, these practical arguments should suffice for economists as a group to unite in urging Third World governments to liberalize their economies.³⁵ Without

³²On a comparison of Indian and Korean industrial development, see Lal (1986b). On the relative lack of success of Sri Lanka during its dirigiste phase see Lal and Rajapatirana (1986); Bhalla (1986); and the exchange between Sen and Bhalla in Bardhan and Srinivasan (1986). On Tanzania, see Coulson (1982) and Collier et al. (1986), who argue that its dirigisme has led to an imploding economy.

³³Which has put them well within their potential production possibilities so that removing these distortions would lead to a movement toward the frontier (assuming all goods are normal) and would imply an improvement in terms of any ethical welfare function. ³⁴See Harberger (1985); Little (1982); Lal (1983) for evidence.

³⁵That is, remove the grossest of those policy-induced distortions in the working of the price mechanism, which cannot be justified even on dubious second-best grounds to subserve efficiency or equity.

settling any more fundamental disputes, this nevertheless provides a practical agenda for reform. As Queen Elizabeth I said in another context, as long as her subjects were willing to swear allegiance to her, "she would not . . . make windows in men's souls" (Elton 1955, p. 264).

It is therefore astonishing that some development economists consider it ideological to urge Third World countries to liberalize their economies. The dictionary defines "ideology" as "thinking or theorizing of an idealistic, abstract or impractical nature; fanciful speculation." I find it amazing that those who recognize the gross policy-induced distortions in most Third World economies would nevertheless resist the inevitable conclusions that pragmatism now dictates, on purely theoretical or emotional grounds, and label the advocates of liberalization as ideological. This is surely a case of the pot calling the kettle black.

Nor, so far as I can judge, do most moral critics of markets advocate their extinction. Thus Sen (1985, pp. 18-19), discussing "the moral standing of the market," concludes:

The argument that is much harder to dismiss is one that claims little for the market mechanism except superiority over other *practical* alternatives. Indeed it is not unfair to ask a critic of the market mechanism what precise system he would put forward *instead*, how well does it work, and how does it compare? When all the qualifications have been put in, the market mechanism certainly has some instrumental moral relevance, related to its handling of information and incentives.

It is not because of the "internal logic" of the neo-classical research program, or because of any great falsification of its predictions, that the neo-Austrian insights regarding the information and incentive functions of markets and prices have been incorporated into mainstream economics. Nor is it because there has been a neo-Austrian, neo-liberal scientific revolution in economics. For as Hicks (1975) has noted, unlike the natural sciences there are no real scientific revolutions in economics, in the sense of a more powerful or general theory superseding others. Most revolutions in economic thought are more in the nature of "a change of attention." Economic theories underpinning beliefs about how the world could, should, or does work, which at particular times are fairly appropriate, are subsequently rejected or neglected because in the course of time they have become inappropriate in light of changing circumstances. But this does not mean that the older theories disappear or are superseded as in the natural sciences.

Therefore, despite the recent shift of attention, we must not imperialistically limit our conversations (the rhetoric of economics, in McClosky's terms) to members of one sect or creed. In their different ways, those lonely figures Hayek and Bauer have kept alive an alternative way of looking at the world that would not have been possible if Hahn's recent positivist prescriptions for the proper conduct of economics had been universally implemented. There is a role for "preachers." But equally we must not let visionaries (on either side) blind us in our practical thinking about the commonsensical and obvious so that the best becomes the enemy of the good.

The Role of Political Economy

Hahn (1985, p. 1399) makes the following distinction between "economics" and "political economy":

The political economist seeks to understand economic events and arrangements in the framework of a comprehensive social theory, or at least as part of a social totality.... The economist, by contrast, sets out to study the "economic" in isolation from the "social" not by ignoring the latter but by taking it as given.

He then goes on to admit "there is substance to the complaint that economists have too sparse a description of the constraints under which agents act in society, and too narrow a view of the motives of actions." Hahn concludes:

But if forced, I will choose economics and that for two reasons: first, one can understand what it has to say and second, that it attempts to say only those things which have a chance of being understood. That limits what it can claim to know or do. There are many economists who pretend otherwise. To account for them is a task for political economy.

Elsewhere Hahn (1984) makes clear that for him economics is coterminus with current mathematical economics and I suppose econometrics. This forms part of his positivist methodological stance (see Coddington 1975; McCloskey 1983 for critiques). However, as illustrated by the neglect of certain neo-Austrian insights of market processes (and as emphasized by Keynes, 37 one of Hahn's apparent

³⁶There also seems to be an assumption that the new political economy is not rigorous, but this is false. As the work of Krueger, Becker, Findlay and Wellisz, Bhagwati, and Srinivasan attests, standard theoretical tools and modes of arguments are being employed in developing the new political economy.

³⁷See Keynes's review of Tinbergen's work in the *Economic Journal* and the subsequent exchange of letters with Harrod, all reprinted in Keynes (1973).

heroes), this failure to comprehend anything not put in symbols must certainly impoverish the mind.

Nevertheless, when Hahn (1984) discusses rational expectations, the austere pose of the scientific applied mathematician sticking to his last begins to slip. He is "scandalized" by monetarism and the new macroeconomics (p. 13). He finds the strategic interaction between the policymaker and the public, which is the basic insight of this new macroeconomics, to be a "not very deep observation" (p. 123). And, most extraordinary of all, he believes that "on the basis of this specious nonsense Keynes has been pronounced dead and Mrs. Thatcher advised" (p. 125).

I am not concerned with assessing the relative merits of Keynesianism and the new classical macroeconomics, but there are four interesting points to note. First, Hahn's wrath is expended against a mathematical theory that he (erroneously) believes is the reason why so many no longer find Keynesian panaceas persuasive. 38 Second, he rails against the descriptive content of the rational expectations theory, while at the same time judging the equally unrealistic general equilibrium theory as a beautiful theoretical construct. Third, he commends Keynesian policies even though, as he himself admits, there is no logically tight Keynesian model available, nor one whose empirical validity has been established in any scientific manner; thus his belief in the validity of Keynesian panaceas could hardly be justified by his austere positivist standards. Fourth, as an organizer of the famous letter of 364 British academics who predicted dire consequences for Margaret Thatcher's policies, he has not followed his own advice that:

Economists who seek to influence people in power soon come to resemble their patrons. Moreover, they come to feel an urgent need to defend what they proposed through thick and thin. Add this to political beliefs and one is well on the way to explaining some of the zealotry. My own position is that economists are at their most

³⁸For a more persuasive account of why Keynesian fiscalism and easy money are not sensible policies to deal with stagflation, see Haberler's contribution in Lal and Wolf (1986). Haberler shares Hahn's jaundiced view of rational expectations, but he equally recognizes the limitations of Keynesian policies in the stagflationary conjuncture. He rightly stresses the importance of the "classical" prescriptions—sound money, tight fiscal policy, and a reduction of rigidities, particularly in the labor market, to deal with these problems. Though I have argued against the views of mathematicians that have lent support to mandarins rather than markets, I am not suggesting that the mathematicians have had much (or any) influence on mandarins or public policy. Alan Walters is therefore right in his comments in noting that apart (in this sense) from some minor aiding and abetting of mandarins, mathematicians must be absolved of responsibility for the dirigisme of the post-World War I period.

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useful when they give an account of the alternative scenarios which the present state of our knowledge allows [1984, p. 8].

The reasons why Keynesianism no longer persuades many economists³⁹ are not due to any rational expectations mathematical model, but, first, to the gradual recognition that many Keynesian prescriptions relied on the questionable assumption that ignorant private agents react passively to the macroeconomic policies devised by well-informed and well-meaning public agents. Increasingly, the authorities were seen to be engaged in a strategic game with private agents, who were at least as well informed as themselves, and who had incentives to undertake countervailing actions to undermine the intended outcomes of public policies. Second, as the public choice theorists argue, in democratic welfare states self-interested politicians with a necessarily short time horizon will have a natural tendency to be inflationists. Third, the problems of stagflation and increasing unemployment need to be tackled at their source by removing the institutional rigidities that are their prime cause.

These insights are increasingly denied to the mathematical economists with their self-imposed blinders against what Hahn terms "political economy." But if, as I have argued, most economists are ultimately writing essays in persuasion, the advice proffered by Hahn on the proper nature and scope of economics will make most economists mere applied mathematicians—dullards who few would want to engage in any conversation. This is not an argument against the use of mathematical methods in economics, or against rigorous analysis (which need not necessarily be couched in mathematics), but rather to suggest that to make the subject matter of economics coterminus with a particular type of applied mathematics, as Hahn seeks to do, is to impoverish the subject by narrowing our minds. 40 I would instead endorse Keynes's (1951, p. 141) judgment:

[T]he master-economist must possess a true *combination* of gifts. . . . He must be mathematician, historian, statesman, philosopher—in some degree. He must understand symbols and speak in words. He must contemplate the particular in terms of the general, and touch abstract and concrete in the same flight of thought. He must

³⁹Which in the U.K. began not with Margaret Thatcher but her predecessor, the Labour prime minister, James Callaghan.

⁴⁰I agree very much with McCloskey (1983, pp. 511, 515) that economic intellectuals should not discriminate against propositions on the basis of race, creed, or epistemological origin. There are some subjective, soft, vague propositions that are more persuasive than some objective, hard, precise propositions.... The cure would not throw away the illuminating regression, the crucial experiment, the unexpected implication unexpectedly falsified.

study the present in the light of the past for the purposes of the future. No part of man's nature or his institutions must lie entirely outside his regard. He must be purposeful and disinterested in a simultaneous mood; as aloof and incorruptible as an artist, yet sometimes as near the earth as a politician.

As economists increasingly recognize that the state is not a disembodied, omniscient, omnipotent, and benevolent entity, but made up of self-interested persons like ourselves, it becomes necessary to think hard and clearly of the ways in which we can make these our agents serve our ends. The new political economy—which Hahn eschews—while still in its infancy, holds some promise of answering this question. It is an area of research, both empirical and analytical, that is likely to have the greatest pay-off. It can be as rigorous as most of economic theory. Consequently, contrary to Hahn, we all need to be political economists in the classical sense. Peter Bauer is par excellence a political economist.⁴¹

Finally, in writing our essays in persuasion one has to judge one's audience. Peter Bauer's correct arguments were seen as those of a dissenter in the 1950s and 1960s partly because they were not couched in the positivist terms that carried conviction in the existing climate of opinion. 42 It is the accumulation of empirical evidence, as well as the developments of the theoretical antidote to the "market failure" based dirigiste dogma within the mainstream of positivist analysis. that has led to the changed perceptions of development policies namely the importance of markets and incentives and the limits of government intervention and central planning. I wrote a popular book (Lal 1983) summing up these developments, which to my astonishment many people seem to have found persuasive. But among those who did not like it was a reviewer in the Cato Institute's *Policy* Report. 43 The criticisms were from a neo-Austrian perspective, which is fair enough, but they misjudged the purpose of my essay in persuasion. As I argue in this paper, neo-classical economics properly interpreted, as well as neo-Austrian economics, reinforce the case for markets. Hence, given the positivist temper of the times, friends

⁴¹Whatever view one might take about Peter Bauer's castigation of foreign aid, it is important to recognize that his observations that foreign aid induces (a) the formation of anti-Western coalitions of Third World states, and (b) the alteration in the behavior of recipient governments that become "aid-addicts" can be derived from an application of simple economic principles to the behavior of political agents. They are insights of political economy.

⁴²See, for example, the exchange between Stern (1974) and Bauer (1975).

⁴³See Cato Policy Report (July/August 1984).

of the market would be well advised not to reject even the limp hand proffered by "second best welfare economics."

As recent polls of economists have shown.44 there is relatively greater agreement among them on the importance of the market than among the lay public and the mandarins, who, as Henderson (1985) documents, are natural "do-it-yourself" economists. For economists interested in public policy, it is more important to convince the mandarins and their principals of the recognized (though some would say limited) virtues of the market than it is to enter into scholastic debates that seek to convert one group of economists to another's abstract vision of the ideal balance between markets and mandarins. In this task of public education, through the lucidity of his thought, the clarity of his prose, and his unflinching vision, few have been more persuasive than Peter Bauer, and I am pleased to be able now to pay him his due. But in understanding the paradox of his unjustified past neglect, it is also important to note that, though ultimate glory may await those who stand against their time, to be influential, the pamphlets we write must to some extent be in tune with their times.

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⁴⁴See Brittain (1973); Kearl et al. (1979).

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FRAMEWORKS FOR THINKING ABOUT REALITY Alan Walters

On first reading Deepak Lal's (1987) paper I was profoundly depressed by the contents. I was so completely in agreement that I was nodding away at point after point—realizing, with a sense of concern if not panic, that I would have nothing to say. So I had to read it again. Then I realized that, naturally enough, I had read it with the object of discovering echoes of my own beliefs on, for example, the irrelevance of much mathematical economics. Such examples I found in full measure, and I can only applaud the elegance and élan with which Lal has dissected the litany and the literature. But I do not think Lal can sustain the argument that the dominance of the mathematical (Arrow-Debreu) rhetoric is the main reason for the neglect of Peter Bauer's work in the 1950s and 1960s compared with the widespread acceptance of his views in the 1970s and 1980s.

In fact the dominance of the mathematization of economic theory in academic institutions has undoubtedly increased sharply since the 1950s, just as the appreciation of Bauer's distinctly amathematical contributions has burgeoned. Similarly, a cross-sectional study of countries would show that Bauer's stock is highest where the mathematicians are most ubiquitous (that is, the United States), and that he is less well known where mathematical economics is all but unknown or regarded merely as uninteresting esoterica, such as Germany and Japan.

But as Bauer would affirm, correlations have little substantive meaning. One must go behind the data and observe the real situation or process that generated such statistics. I believe the essence of an explanation is to be found in the binary split of the economic genre—one into the mathematics of elegant models of great aesthetic appeal,

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the other into attempts to understand the real world of institutions, constitutions, and incentives. Elegance is the main aim of the mathematical models. But of course the mathematical economists could hardly avoid claiming that such elegance was also relevant; mathematics that is not pure must have some relevance to reality if it is to be accepted as valuable. It should, so to speak, provide some sort of framework for thinking about reality.

Perhaps it does—at least for mathematical economists. Yet, since World War II, the remarkable fact is that virtually all significant advances in economics—and by that I mean advances that affect the way economic advisers go about their business—have owed little or nothing to mathematical economics. The permanent income hypothesis (PIH), the revitalization of money, the Coase theorem, the Buchanan-Tullock political economy, and even those theorems showing the "neutrality" of finance—none emerged from mathematical economics. And generally speaking (perhaps the most notable exception is the PIH) these advances were greeted as either trivially obvious or most dubious propositions by the mathematical economists. Yet they survived this cold academic shoulder and certainly changed attitudes toward policy, largely because there was clear evidence to support their approach.

Thus it was not because of his epistemology that Bauer (and Hayek) was neglected in the 1950s and 1960s, but rather because the world had to wait a few years to review the effects of the massive growth of the state that began in the 1950s and burgeoned in the 1960s. By the 1970s it was clear that Bauer's analysis and predictions were validated; peasant supply curves did not bend backward, central planning did not beget prosperity, and the vicious circle of poverty was shown to be merely a cipher.

In my view the initial hostility to Bauer was much enhanced by the fact that he used simple, basic analysis, but used it in the most sophisticated, logically tight way. Rather like Milton Friedman, from a few simple principles of economics and with almost a pedantic penchant for logic, accuracy, and evidence, Bauer derived results that surprised and even shocked the profession and the clerisy. He defeated the fundamentalist dirigistes on their own ground and with their own weapons. And if so much could be achieved with so little, was this not an indictment of those arid acres of mathematical manu-

¹A possible candidate for this list of advances is Arrow's Impossibility Theorem, which showed that majority voting, inter alia, would not achieve Pareto optimality. It seems to me, however, that Arrow was simply providing a proposition that most economists had long accepted as common sense. It was not surprising, as was the Coase theorem or the PIH.

scripts that suffocated the professional landscape? Small wonder the profession was driven to denigrate such simplistic reasoning (as exemplified in the remarkable attack by Nick Stern and his gang), especially when the mathematical methods of planning (such as input-output analysis) were going through such lean periods. But such a critique of Bauer grew increasingly threadbare as his arguments were more and more accepted by the sophisticated lay public. Even while Armartya Sen beavered away at attempting to undermine the credibility of Bauer's evidence, such as claiming the miracle Newly Industrializing Countries (NICs) were really an illustration of dirigisme, Sen had to accept much of the substance of Bauer's analysis, largely because, had he not done so, Sen would have lost his credibility and much of the lay audience he was so anxious to return to the pre-Bauer fold.

But more important, the origins of dirigisme and the academic denigration of Bauer did not originate in, nor, in my view, was it much augmented by, the mathematical economics of the 1950s and 1960s. Similarly, if my contacts with those august persons do not deceive me, the mandarins already embraced dirigisme long before the mathematicians began to provide rationalizations. The view that the market mechanism did not work became pervasive in Britain in the interwar years. The contributions of Sraffa, Shove, and Joan Robinson were thought to have demolished the idea that free markets could conceivably be an efficient and equitable way of allocating resources, and, on the other hand, the tales of political pilgrims of the success of Russian communism provided the working model of an alternative controlled economy. Institutional nepotism (with adopted children) ensured that Cambridge, the cradle of economics for more than a century, promoted the dominant paradigm of the necessity for central planning. Similarly, Oxford, in the form of Balogh and his acolytes, was soon under the dirigiste dogma. One of the remarkable features of this Cambridge conversion was that the leaders largely rejected mathematical economics as mumbo jumbo or, as Joan Robinson said, mathematics was a "substitute for thought." (This remarkably revealing phrase shows the degeneration of Cambridge economics. First, thought is the scarcest commodity, and so one would welcome some substitutes as valuable additions to resources. Second, the phrase illustrates the hostility to the basic idea of substitution—the linchpin of classical economics—and the embracing of Marxian notions of fixed proportions and no substitution. No doubt mathematical economics has a lot to answer for, but not as a substitute for thought.) Indeed the most distinguished of this fraternity were innocent of mathematics. Similarly, the influential

American planners, such as John Kenneth Galbraith, eschewed mathematical economics, certain in the knowledge that, without any such assistance, he knew how to control prices and incomes and considerably improve upon market performance. Oddly enough, the Galbraith amathematical approach received some weak support as the application of input-output methods to the Western economies soon exposed their great weaknesses as practical guides to planning economies. An economist mandarin indeed.

Mandarins are naturally inclined to distrust and dislike the messy activity of business, particularly competitive business. British mandarins rejected business as a suitable career when they chose to enter the civil service for virtually their entire working life. The ambient ideology of Oxbridge cultivated the view that, left unregulated, particularly the smaller businessmen were up to little social good.

Planning came naturally to such an elite. I suppose it was of some assistance when the mathematical economists, who, however much disliked by the ancien régime, were obviously very clever indeed, provided rationalizations, even a planning process, for different forms of controls. But it would be unwise to give too much credit or rather blame to the mathematical economists. After all, one of the most brilliant mathematical theorists and one of the most abundant sources of absurdities, Frank Hahn, is reckoned to be the leader of the *right* wing at Cambridge. So I think we must declare the mathematicians as largely innocent of promoting, as distinct from latter-day aiding and abetting, socialist dogma.²

But what of the cultural imperialism of neo-Austrians? And how does Bauer's work relate to these competing empires? Whatever the shortcomings of many neo-Austrian ideas, the overwhelming contribution of Hayek and the other founders of the Austrian tradition was to emphasize, first, that the normal state of man was one of ignorance, not knowledge, and, second, that there are severe and very restricting

²I believe also that the mathematical economists and even the econometricians can be declared innocent of the main resurgence of dirigisme in 1986, namely, the drift toward another system of controlled exchange rates. Nonmathematical economists, such as John Williamson and Fred Bergsten, declare that they can define the fundamental equilibrium exchange rates (and they mean *real* exchange rates), that they can measure the fixed equilibrium exchange rate (FEER) with an acceptable degree of accuracy, and, finally, that they can design monetary-fiscal-intervention policies that will bring economies back to the FEER. They have apparently convinced the U.S. Treasury that they, or perhaps members of the treasury, command these extraordinary talents, and that by employing them the international economy can reach a higher level of performance. Such a new-found dirigisme will have consequences far beyond the supposed righting of allegedly wrong exchange rates, as I have tried to explain elsewhere (Walters 1986, ch. 7).

limits on what is knowable. Third the subjectivist view emphasized the organic development of institutions reflects a process of experiment and discovery, human error and triumph—a spontaneous order.

I agree with Lal that Bauer's work, like that of the Austrians, is classical in approach and method. He distrusts long chains of abstract reasoning, where one might easily lose contact with reality. He prefers the simple and short links of basic price theory, and he continually seeks to check his reasoning by close observation and understanding rather than by superficial statistical corroboration. He is impressed by the revealed performance of people with few or none of the "privileges" of education when they are free to work and make contracts in the ambience of social order. This view of the market is based in part on a careful consideration of theory, but in the main it is supported by Bauer's intimate knowledge of market processes in, for example, the rubber industry of Malaya and in the manifold petty trading of Africa. In my experience, most economists who actually take the trouble to know an industry or a set of markets emerge from this process of learning with an abiding respect for the market process. Such a respect is also counterpointed by an understanding of how little we know in the economics profession. Indeed the Austrians are right: the abiding quality of the economist, so rarely acknowledged, is his ignorance.

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