## Aristotle's 'Natural Limit' and the Economics of Price Regulation

## S. Todd Lowry

In LIGHT OF contemporary concern with price stability and inflation, it is interesting to consider the approach to this problem found in Aristotle's *Politics* (1256b40–1258a20).<sup>1</sup>

Economists who have studied Aristotle's writings, as well as the classicists they have influenced, have generally construed Aristotle's dictum that "retail trade is not a natural part of the art of getting wealth" (1257a15-20) as a moral repudiation of commercial activity lacking analytical significance. This interpretation has tended to reinforce the notion that Aristotle never developed an analytical formulation of the commercial process, but rather limited himself to ethical prescriptions and descriptions of administrative policies. The historian of economic thought J. A. Schumpeter, for example, asserted that Aristotle "was primarily concerned with the 'natural' and the 'just' as seen from the standpoint of his ideal of the good and virtuous life," although he did acknowledge Aristotle's contributions in the areas of value theory, interest and money. Aristotle's theory of money, he wrote, "is the basis of the bulk of all analytic work in the field."3 M. I. Finley contended that "nowhere in the Politics does Aristotle ever consider the rules or mechanics of commercial exchange" and that "his insistence on the unnaturalness of commercial gain rules out the possibility of such a discussion... Of economic analysis there is not a trace." 4 Both Schumpeter and Finley failed to recognize the clearly reasoned analysis of economic relations found in this passage from the Politics.

All that is required to understand the elements of Aristotle's theoretical sketch of the problems inherent in retail trade is that the

<sup>&</sup>lt;sup>1</sup> Quotations from Aristotle's Politics are from Jowett's translation in The Works of Aristotle, ed. W. D. Ross, X (London 1921).

<sup>&</sup>lt;sup>2</sup> J. A. Schumpeter, *History of Economic Analysis*, ed. E. B. Schumpeter (New York 1954) 60.

<sup>&</sup>lt;sup>3</sup> Ibid. p.62.

<sup>4</sup> M. I. Finley, "Aristotle and Economic Analysis," Past & Present no.47 (1970) 18.

material be read with careful attention to the logical coherence so typical of Aristotle and without the naturalistic bias of nineteenth-century economic theory which most economists have brought to their interpretation of it. First, "retail trade is not a natural part of the art of getting wealth." This statement is clearly explained to mean that items produced for human use properly fit into the natural scheme of things only when used for the purpose for which they are intended. Thus, when an item produced for use is temporarily diverted into the exchange process as a digression from its intended purpose, it is not being used naturally. However, if the sole purpose of the exchange is to obtain other goods which are to be used naturally, it is part of "the necessary art of wealth-getting... different from the other [the purely digressive] and... [is] a natural part of the art of managing a household, concerned with the provision of food, not... unlimited, but having a limit" (1258a15-20).

Second, Aristotle assumes a society of self-sufficient households as the functional basis of economic life. Exchange thus "arises at first from what is natural, from the circumstances that some have too little, others too much" (1257a15-20). Thus a reciprocal pattern of complementary surpluses and shortages results so that A, long on grain and short on wine, finds it convenient to trade with B, who is reciprocally long on wine and short on grain.<sup>5</sup> This is, of course, nothing more or less than the format of barter underlying the theory of comparative advantage to be found in the chapter on international trade in any modern sophomore economics textbook. Aristotle uses his theory of barter to explain the basis of village life, specialization, and the mutual benefits of interdependence which draw people together. His doctrine of mutuality is developed as a rationalistic explanation of marriage and master-slave relations, the binding force of the household in which both parties reciprocally benefit by mutually complementing each other (1252b, 1260a5-b15). His exclusion of the artisan from this natural governance (1260a35) deserves further examination in terms of his concept of a natural limit.

Third, where barter exchange occurs, goods move directly from the

<sup>&</sup>lt;sup>5</sup> The mathematical significance of the ratios in Aristotle's theory of reciprocity contained in his discussion of justice and exchange in the *Ethics* was analyzed in the author's "Aristotle's Mathematical Analysis of Exchange," *History of Political Economy* 1 (1969) 44–69, which, due to delays in publication, appeared simultaneously with Finley's 1970 article cited above. Both Schumpeter and Finley confessed difficulty with understanding the meaning of the ratios between the producers in Aristotle's exchange formulation.

producer to the consumer. Trade thus limited by natural need Aristotle regarded as a natural use of goods consistent with economic wellbeing, although he did not consider trade per se as natural. Wealth-getting by exchanging goods for money to facilitate the flexible use of the trading potential of one's commodities he considered a part of "the necessary art of wealth-getting" and, when limited by the objective of satisfying natural needs or wants, a "natural part of the art of managing a household." It was the diversion of goods from their natural purposes by middlemen, whose rôle was made possible by the use of freely circulating money, that Aristotle condemned. With the introduction of money-exchange between the producerconsumer and the middleman or retail trader, a different form of wealth-getting became possible, namely the accumulation of coined money by the retailer. This motivation for exchange is not limited by the natural satiation of desire for goods which regulates the consumer and, by implication, the producer, whose objective is also the direct satisfaction of wants or needs. Aristotle made this point again in reference to international trade when he wrote, "Those who make themselves a market for the world only do so for the sake of revenue, and if a state ought not to desire profit of this kind it ought not to have such an emporium" (1327a25-35). It would follow that, in the absence of natural restraints, the retailer's acquisitiveness should be limited by the state.

To illustrate the 'digressive' potential of money in the barter process, assume that A sells a bushel of grain to a retailer for three drachmae and that the retailer sells the same bushel of grain to B for four drachmae. Assume further that B sells an amphora of wine to the retailer for three drachmae which the retailer in turn sells to A for four drachmae. The normal barter process has been served by these transactions, but the retailer has picked up two drachmae. Since the bargains between A and B and the retailer would be *prima facie* fair if freely and voluntarily entered into under the Greek law of sale, the retailer's revenue is limited neither by the traditional rules of bargaining nor, as is the case with the consumer, by the constraints of his personal needs for goods.

What, then, is to prevent the retailer from using the exchange process to acquire excess wealth in the form of coined money? In the absence of a natural limit to his wants and needs which the use value

<sup>&</sup>lt;sup>6</sup> See Fritz Pringsheim, The Greek Law of Sale (Weimar 1950) 130, 137, 168.

of commodities would impose, the retailer is able to take advantage of the secondary or exchange use of goods (their non-natural use) for the unlimited pursuit of wealth. As long as goods are used for their natural purposes, natural satiation limits their accumulation. Retail trade, however, sets up the conditions for the secondary use of goods as items of exchange for money as an end in itself and thus requires administrative restraint or artificially imposed limits in the absence of any natural restriction.

Newman dealt with this problem in terms of the limiting effect of natural use as discussed above. However, he seems to lose the thread of Aristotle's argument regarding the importance of a natural limit. He defends the profit of the retailer [the 'intermediary'] as "payment for a social service, not something filched from his neighbour," citing Plato, Laws 918B-E, for a "truer way" of construing this social function.<sup>7</sup> The question of whether the retailer has valid expenses which deserve reimbursement is, however, irrelevant to the basic issue of whether there are natural restraints, such as satiable physiological desires, upon his interest in accumulating money above and beyond any reasonable payment for services. Part of the problem is that Newman associated the natural limit with a concept of virtue deduced from the hypothetical good life. He is conscious of some inconsistencies in Aristotle's views as he interprets them, but he fails to explore the possibility that Aristotle's explanation of the limits on social and economic activity was in naturalistic and materialist rather than in moral terms. One might even say that the careful development in the *Politics* of the physiological preconditions for family and village organization has a distinctly Atomist flavor.8

There is some evidence that the question of the existence of natural limits to human desire and the need for legislative regulation in their absence was a well developed issue in classical economic policy. Aristotle quoted from one of Solon's poems, "No bound to riches has been fixed for man." He disagreed, and asserted, "But there is a

<sup>7</sup> W. L. Newman, The Politics of Aristotle I (Oxford 1887) 131.

<sup>&</sup>lt;sup>8</sup> See, generally, Thomas Cole, Democritus and the Sources of Greek Anthropology (APA Monograph 25, Cleveland 1967), and David J. Furley, Two Studies in the Greek Atomists (Princeton 1967). It is of interest to recall that the major thrust of Adam Smith's contribution to political economy was his projection of the natural propensities of the individual into a theory of a system of natural constraints which provide the otherwise absent limits on the behavior of the participants in the market economy.

<sup>&</sup>lt;sup>9</sup> It should be noted that Aristotle is here discussing the physical bases of riches and not money wealth. Newman, op.cit. (supra n.7) 138, commented that Aristotle "appears to

boundary fixed, just as there is in the other arts" (1256b30–35). Elsewhere he noted that the laws of Solon had coped with the problem by setting limits on the acquisition of land (1266b15–20). The issue was also elaborated in abstract terms in Plato's *Gorgias* (493–94), where containers are used as an analogy in a discussion of the problem of natural limit. As long as money is sought only for the object of buying goods to be used, the constraints of the natural limit of desire operate. Wealth-getting of this nature Aristotle did not deny to be a valid pursuit of the household manager. The desires of the retailer, however, which are not tied to the ultimate consumption of his acquisitions (namely coin), are subject to no such limit.

Nineteenth-century economic theory dealt with this problem by extending the concept of natural control with the aid of Adam Smith's theory of natural competitive price. Natural price, enforced by natural competition, presumably kept the retailer from charging more than the bare minimum necessary to cover the costs of servicing the needs of his customers regardless of his motives. Where this was not the case, higher price as a short-run anomaly was presumed to serve as a stimulant to expand production and improve distribution. The retailer, responding to the higher price, would try to stock more of the goods and would be inclined to offer higher prices to their producers. Under these conditions, a flexible price would stimulate an expansion of supply which would quickly reestablish the price-limiting restraints of the natural competitive market.

In Aristotle's day, when virtually all commercial activity was in the hands of metics, no such natural market process seems to have been recognized, and the common practice among municipal governments was apparently to resort to public regulation, particularly of the flows of staples such as corn upon which the people depended.<sup>10</sup> With regard to the agora, Andreades wrote: 'The existence of the market . . . greatly facilitated the collection of internal revenue, and that of the kykloi made the collection of special taxes . . . a comparatively simple matter.''<sup>11</sup> It may even be that markets in ancient

understand better the true nature of wealth than the laws of its production or the office of capital." See also the author's "The Classical Greek Theory of Natural Resource Economics," *Land Economics* 41 (1965) 203–08.

<sup>&</sup>lt;sup>10</sup> See Lysias, Or. XXII, Against the Corn Dealers.

<sup>&</sup>lt;sup>11</sup> A. M. Andreades, *History of Greek Public Finance*, transl. C. N. Brown, I (Cambridge [Mass.] 1933) 295. Andreades documents (pp.238–46) the fact that percentage taxation was often levied in ancient Greece in the absence of a market transaction. Unfortunately, he

Greece, rather than being a natural outgrowth of private economic activity, were organized by municipal authorities primarily for purposes of regulation and tax collection. Several scholars<sup>12</sup> have called attention to the significance of the rôle of metics in the commercial life of classical Greece and of the importance of this fact in interpreting ancient economic discussions. Because of the anomaly of a commercial life dominated by foreigners with alien values, one would expect theoretical explanations such as Aristotle's 'natural limit' to have been advanced in support of the need for restrictions on the activities of the non-citizens.

The highly individualized nature of bargaining and the lack of uniformity in most goods in ancient times would have made it easier to conceive of trade as an accumulation of separate transactions rather than as elements in a comprehensive, self-regulating market system. This would explain why Aristotle did not develop a Smithian view of the market despite his naturalistic explanation of human motives. Such individualized market processes still characterize the handicraft economies of less developed countries today.

Under modern conditions, however, variations in packaging, the extremely large number of different items bought, and the long intervals between purchases of similar items all tend to reduce the consumer's sense of competitive market price. This tendency is reinforced by the practice among sellers of emphasizing factors other than price in their advertising. The potential of the modern market process to regulate price is thus eroded, and we face the paradoxical dilemma of rising prices on the one hand and unemployment and surplus productive capacity on the other. The traditional assumption that prices rise only when unsatisfied demand bids up the price of scarce goods and that this process stimulates expanded production (and lower prices) is mitigated by forces similar to those Aristotle could observe: namely, fragmented and discontinuous buying and selling, as well as monopoly power. Cost-push inflation resulting from administered prices in both ancient and modern times has been

does not examine the appraisal system by which goods were valued for tax purposes. Such public appraisals may well have dominated market price in many areas of trade, instead of vice versa.

<sup>&</sup>lt;sup>12</sup> See M. I. Finley, *The Ancient Economy* (Sather Lectures 43, Berkeley and Los Angeles 1973) 60–61, 144–45, and J. Pečírka, "A Note on Aristotle's Conception of Citizenship and the Role of Foreigners in Fourth Century Athens," *Eirene* 6 (1967) 23–26.

an outgrowth of manipulative slack in the hands of economic intermediaries. In a society where self-interest and wealth-getting are presumed to be consistent with the public interest, the otherwise unlimited private power to administer prices in one's own interest is an understandable source of inflation and private accumulation.

If the analysis in the *Politics* is viewed as an explanation of the need for the regulation of retail trade necessitated by the absence of any natural forces adequate to protect the citizen of the Greek city-state from the possible predatory accumulation of coined money by the useful but suspect metic population, it emerges as a theoretical justification for administrative policy rather than mere ethical commentary. In this light, Aristotle's concept of a natural limit meets M. I. Finley's criteria for "a concept of the economy," namely that it deals with relevant "laws" (or "statistical uniformities").<sup>13</sup>

Although Aristotle had no occasion to account for the complexities of modern industrial production, the market problems he dealt with and those we face are somewhat similar. He believed that any surplus resulting from mutuality in exchange beyond the natural needs for survival rightfully belongs to "the offspring" (posterity) and that such surpluses should not be diverted to what he considered sterile accumulation by an intermediary (1256b10, 1258a35). In our society, where an individual's total output is sold and his total consumption must be purchased, the rôle of intermediaries makes it impossible for the producer and consumer directly to divide the benefits of mutuality, as may be done in a barter economy. Despite the intermediary's important historical rôle of capital accumulation in the expansion of our industrial economy, there is growing concern among economists<sup>14</sup> (and environmentalists) as to whether the unlimited production of material goods is as pressing today as it was in the nineteenth century.<sup>15</sup>

Washington and Lee University August, 1973

<sup>&</sup>lt;sup>13</sup> M. I. Finley, op.cit. (supra n.4) 22.

<sup>&</sup>lt;sup>14</sup> See, for example, Paul W. Barkley and David Seckler, Economic Growth and Environmental Decay: The Solution Becomes the Problem (New York 1972).

<sup>&</sup>lt;sup>15</sup> The author, an economist, gratefully acknowledges support received from the American Council of Learned Societies while this paper was in preparation.