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Spencer J. Pack
Connecticut College, spencer.pack@conncoll.edu

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Keywords

Aristotle, economic theory, Karl Marx, Adam Smith, Jeremy Bentham

Comments

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Running Head: ARISTOTLE AND MODERN ECONOMIC THEORY

Aristotle's Difficult Relationship With Modern Economic Theory¹

Spencer J. Pack

Department of Economics

Box #5554

Connecticut College

270 Mohegan Ave

New London, CT, USA, 06320-4196

Phone: 860 439-2221

Fax: 860 439-5332

sjpac@conncoll.edu

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Aristotle and Modern Economic Theory

Abstract

This paper reviews Aristotle's problematic relationship with modern economic theory. It

argues that in terms of value and income distribution theory, Aristotle should probably be

seen as a precursor to neither classical nor neoclassical economic thought. Indeed, there

are strong arguments to be made that Aristotle's views are completely at odds with all

modern economic theory, since, among other things, he was not necessarily concerned

with flexible market prices, opposed the use of money to acquire more money, and did

not think that the unintended consequences of human activity were generally beneficial.

The paper argues however, that this interpretation goes too far. The Benthamite

neoclassical theory of choice can be seen as a dumbing down of Aristotle's theory,

applicable to animals, not humans. Adam Smith and Karl Marx were deeply influenced

by Aristotle's work and both started their main economic works with Aristotle: Smith

ultimately rejecting, and Marx ultimately developing Aristotle's views of the use of

money to acquire more money. Possibilities for the future development of a new

Aristotelian Economics are explored.

Key words: Aristotle, Economic Theory, Adam Smith, Karl Marx, Jeremy Bentham

Spencer J. Pack is Professor of Economics at Connecticut College, New London, Connecticut, USA. Author of previous books on Piero Sraffa and Karl Marx, and Adam Smith, he is currently working on a book comparing the economic thought of Aristotle, Smith and Marx. Recent publications include "S. Todd Lowry and Ancient Greek Economic Thought: an Interpretation", in Stephen Medema and Warren Samuels, eds. Historians of Economics and Economic Thought: The Construction of Disciplinary Memory (2001, Routledge); and with Eric Schliesser, 2006, "Smith's Humean Criticism of Hume's Account of the Origin of Justice", Journal of the History of Philosophy, Vol. 44(1), pp. 47-63.

I. Introduction

This article was written in response to a call for papers for a conference on "Aristotelian Encounters" held at Roosevelt Academy, The Netherlands, January 2007. The aim of the conference was to re-evaluate Aristotle's contributions to various discliplines and/or to investigate Aristotle's relevance for today.² As an economist working in the history of economic thought, I have long been impressed that Aristotle has had quite a difficult, puzzling, contradictory relationship with modern economic theory.³ There are very few people working in the field on the relationship between Aristotle's work and modern economic theory. Yet, it is noteworthy (and perhaps a bit surprising) that the leading living authorities in this field, people such as S. Todd Lowry and Scott Meikle, disagree vehemently with each other. 4 To sort out some of the complexities and disagreements concerning Aristotle's difficult relationship with modern economic theory, work in this field may be fruitfully categorized into several domains. On the one hand, there is a tradition of speculating to what extent Aristotle's work foreshadowed developments in modern economics, especially in the fields of value theory and the theory of income distribution. Consequently, Part II of this paper briefly explains how modern economic theory has been divided into a classical and a neoclassical period, and that a number of the references by economists to Aristotle in the 20th century were trying

² Bert Mosselmans, "Call for Papers: 'Aristotelian Encounters", hes@eh.net, May 23, 2005.

³ This is partly due to the fact that his works did not reach the modern era in their entirety, as well as their circuitous journey through Persian and Arabian, and then European Medieval Church hands.

⁴ See e.g. Meikle's harsh review of Lowry (1989 and basically repeated, 1995, pp. 175-179). For my interpretation of Meikle see Pack (1998); of Lowry, see Pack (2001). This paper will refer often to their work; I have learned a great deal from both of them.

to ascertain if Aristotle was more of a precursor to classical or to neoclassical theory. The section concludes that in terms of value theory and the theory of income distribution, Aristotle could be viewed as a precursor to neither tradition – a bit of a dead end.⁵

There is a distinct second tradition which bends towards an opposite direction, and tends to deny any relation between Aristotle and modern economic thought. This position is largely (although certainly not entirely) put forth by scholars not trained as professional economists. Thus, Part III of this paper goes on to point out that Aristotle did not appear to be determining or necessarily even be in favor of flexible market-prices; did not like the use of money to acquire more money, considering that to be an unnatural, corrupting use of money; and was quite unconcerned with the putatively positive unintended consequences of human activity. Therefore, Aristotle has been reasonably interpreted as at odds with most all modern economic theory.

Nonetheless, ultimately this second tradition of reading Aristotle goes too far. There are indeed various ways Aristotle has influenced modern economic thought –

⁵ Sometimes Aristotle is read as only thinking about autarky, or considering exchange to be desirable within just one and the same polis. That this is not necessarily true, see Rhetoric (1360a), where, in describing a good deliberative orator, Aristotle writes that "With regard to the Food Supply he must know what will meet the needs of his country; what kinds of food are produced at home and what imported; and what articles must be exported or imported. This last he must know in order that agreements and commercial treaties may be made with the countries concerned" (1360a). Also in Politics Aristotle writes that "is it necessary that they should import from abroad what is not found in their own country, and that they should export what they have in excess; for a city ought to be a market, not indeed for others, but for herself' (1327a).

⁶ Sometimes, part of their argument is that our very training as professional economists completely warps our ability to understand Aristotle; see e.g. Meikle (2001).

though some of these avenues are surprising and paradoxical. Therefore, Part IV of this paper softens the tradition of denying any relation between Aristotle and modern economic thought by pointing out various avenues where there arguably have been positive Aristotelian influences on modern economic theory. These include Benthamite models of consumer behavior; Aristotle's influence on such major thinkers as Marx, Smith, and A. K. Sen; and attempts to fully mathematicize and or develop a fully axiomatice deductive approach to economics.⁷

As noted above, participants in the "Aristotelian Encounters Conference" were also invited to consider discussing Aristotle's relevance for today. Responding to that request, Part V briefly considers Aristotle's relationship with contemporary and possible future economic theory. Divided into two sections, the first considers positive signs for a bright future for Aristotle and economic theory. The second gives countervailing arguments, suggesting reasons to suspect a bleak or nonexistent future for a reinvigorated Aristotelian economic theory. A brief conclusion follows.

II. Aristotle as a Precursor More to Classical or Neoclassical Economic Theory?

Modern economics has often been conveniently viewed as beginning with Adam Smith's Wealth of Nations in 1776. Smith's work has been pictured as largely emanating from his head fully born, as Athena from Zeus.⁸ More realistically, it can be seen to be a culmination and synthesis of work written during the previous 150 years (Schumpeter

⁷ As Lowry emphasizes in his work, part of the controversy around the relationship between Aristotle and modern economic theory arises because the very understanding of what constitutes economics has changed (1987, 1991, 1995); see also Crespo (2007) on this issue.

⁸ See e.g. Lowry (1987, pp. xiv; 4-5)

1954). In any event, within a generation or two after Smith, many economists, particularly in Great Britain, would begin their own work by consulting and commenting on Smith; and few or no pre-Smithian sources (see, e.g. Ricardo's *Principles*).9

Modern economic theory itself has been conveniently divided into classical and neoclassical periods, the former lasting about 100 years, beginning with Smith and ending with Karl Marx (e.g. Dobb 1973). 10 Classical economics was supply side. emphasizing that the price of a good was largely determined by the cost of producing it. It implicitly, as with Smith, or explicitly, as with Marx, tended to have some kind of a labor theory of value. Income distribution was determined largely by class struggle or bargaining.

No doubt partly for political reasons, with the growing threat of socialism and communism, classical economics was largely replaced by neoclassical economics in the latter part of the 19th century (see e.g. Hunt 1979; Meek,1976; Fusfeld, 2002). 11 Of course, the founders of neoclassical economics tended to think of it as an improvement and generalization of classical economics. 12 Neoclassical economics tended to emphasize

⁹ This, of course, was a myopic view.

¹⁰ Recent work in the history of economic thought suggests this may have been an oversimplification; see, e.g. Blaug, (2001, pp. 159-160).

¹¹ For a persuasive argument that neoclassical economics itself actually arose in the period between Smith and Ricardo (Say, Lauderdale, et. al.), became increasingly dominant in the post-Ricardian period (Scrope, Read, Senior) and then finally consolidated itself in the 1870-1900 stage of capitalist development, see John F. Henry (1990).

¹² See e.g. Wicksteed [1914] who even appeals to Aristotle to buttress his position (in Stigler and Boulding, 1952, pp. 7; 10).

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demand,¹³ marginal utility, and the marginal productivity theory of income distribution. Prices became indexes of relative scarcity, where Px/Py = Marginal Utility of x/Marginal Utility of y. In classical economics a good was expensive if it cost a lot to produce it, and hence it would tend to be relatively scarce. In neoclassical theory the line of causality was largely reversed: if a good was relatively scarce, then its marginal utility would tend to be high and hence its price high. As for income distribution, neoclassical theory held that the price of factor input a/price of factor input b = the marginal product of factor input a/marginal product of factor input b. Thus, if I am paid 100 dollars an hour for my labor input, and you are paid 10 dollars an hour for your labor input, that must mean that at the margin I am ten times as productive as you.¹⁴ This theory tends to be a comforting justification (at least for the relatively well-to-do) for unequal distribution of incomes.¹⁵

¹³ This is particularly evident in general equilibrium theory, where neoclassical general equilibrium theories tend to have fixed supplies of factor inputs; classical theories to have reproduced factor inputs (see e.g. Walsh and Gram 1980). For more on this interpretation see Pack (1985a, pp. 14-19). See also Mosselmans (2004) who shows that the transition from classical to neoclassical economics completes the changing perception of time in economics from one of circularity to linearity; from reproduced factor inputs to scarce, largely given supplies of factor inputs.

¹⁴ Actually, due to ambiguities in specifying productivity in time and space, it is not clear how to exactly apply the marginal productivity theory of income in practice (see, e.g. Thurow, 1975, Appendix A, "A Do-It-Yourself Guide to Marginal Productivity, pp. 211-230); hence the precise relationship between a factor input's marginal and average productivity is also quite ambiguous.

¹⁵ Note that strictly speaking, for a contemporary neoclassical theorist, this theory is merely a description of a phenomenon, not a justification. Contemporary neoclassical theorists tend to hold a strict separation between so-called normative and positive economics, claiming that their theories are generally strictly positive.

Much of the (limited) economic references to Aristotle in the 20th century can be seen as adjudicating which camp, the neoclassical or the classicals, could find most support in Aristotle¹⁶. So, for example, Soudek claimed that Aristotle "anticipated by more than two thousand years Jevons' [neoclassical] theory of exchange" ([1952], in Blaug 1991, p. 12); and "Jevons' theory of value ... is practically the same as Aristotle's" (*ibid.* p. 40). Kauder argued that "Aristotle had at least some knowledge of diminishing utility. Even Menger's [neoclassical] theory of imputation based on loss calculation can be found in Aristotle" ([1953] in Blaug 1991, p. 43). More recently, Rothbard claimed that "By analyzing the logical implications of the employment of means to the pursuit of ends in all human action. Aristotle brilliantly began to lay the groundwork for the Austrian [neoclassical] theory of imputation and marginal productivity over two millennia later" (1995, p. 18).

This line of interpretation seems a bit of a stretch. ¹⁷ It is true that in the *Topics* Aristotle does use some marginal analysis. For example, "the question which is the more desirable, or the better ..." (116a); or "... a greater number of good things is more desirable than a smaller" 117a). Aristotle employs the concept of opportunity cost when he teaches to "judge by the destructions and losses and generations and acquisitions and contraries of things; for things whose destruction is more objectionable are themselves

¹⁶ Many of these are handily excerpted in Blaug's useful collection (1991).

¹⁷ Much of the traditional work of economists in the field of the history of economic thought is teleological: they look back to see what were the precedents of current thought. One of the first to do this was Marx, looking back to see the precedents to his own thought (1963, 1968, 1971). I think this is one (although not the only) legitimate way to study this field. Since there are now various schools of economic thought, it also means that there will be various histories of economic thought.

more desirable" (117b). Also, do addition: "things whose acquisition or generation is more desirable are themselves more desirable" (117b); and "judge by means of addition, and see which when added to the same thing makes the whole more desirable" (118b). Yet, these suggestions come in a work about how to win a dialectical argument; Aristotle is not dealing explicitly with economic issues and valuations. ¹⁸ As Spengler argued, "since the goods to which he [Aristotle] refers often are not ostensibly economic goods, we are confronted with the problem of determining whether or not what he says has implications for economics analysis" ([1955] p. 58 in *Blaug* 1991). Spengler also concluded that Aristotle "contributed little to an understanding of the process of deriving the value of productive agents from that of their products" (*ibid.*, p.65).

At other times Aristotle was seen as being more associated with the classical tradition of modern economic thought. So, for example Gordon found that there was a labor side to Aristotle's value theory; and claimed that "there are a number of passages in Aristotle's writing which can be interpreted as indicating that he also thought that labor cost was connected with the process of value determination" ([1964] in *Blaug*, 1991, p. 113). Schumpeter, with some hesitation, felt that "Aristotle was groping for some labor-cost theory of price which he was unable to state explicitly" (1954, p. 61 fn.).

¹⁸ Moreover, it is not clear that Aristotle even believed everything in this work, since the point of the book is how to win an argument in certain settings. For example, above when Aristotle says that a greater number of good things is more desirable than a smaller, this is indeed what modern economics (and most people) tend to think; but for Aristotle there can be too much of most everything, including wealth and material goods.

¹⁹ In an earlier writing Gordon stressed more the neoclassical side of the debate (1963)

Nonetheless, in terms of value theory or the theory of income distribution, it is arguably a mistake to place Aristotle too closely with *either* wing of modern economic thought. Marx himself thought that Aristotle had *no* theory of value (*Critique*, p. 68 fn.; *Capital*, pp. 151-152).²⁰ As well, Schumpeter's conclusion, "there is no theory of 'distribution'" in Aristotle (1954, p. 60) seems cogent. Indeed, Aristotle's entire relationship with mainstream modern economic theory is quite problematic for a number of reasons.

III. Aristotle at Odds With all Modern Economic Theory?

Before modern economic theory, economics was part of an administrative tradition dealing with efficient household, military, and political management.²¹ So, for example, Protagoras claimed to be able to teach success and virtue in managing the affairs of the household and the city-state (*Protagoras* in *Plato* 318e-319a). Xenophon's *Oeconomicus* explained how to manage an estate, and his *Education of Cyrus* showed how to be a great military leader.²² As Lowry points out, "the ascendance of the view of

²⁰ Ostwald, in a note to his translation of *Nicomachean Ethics* 1133b explains that "unfortunately, Aristotle gives us no hint about the way in which such equivalences [between traded goods] should be established" (1962, p. 126 fn. 36).

²¹ Here I am following Lowry's position, who argued that "The Greeks used the word *oikonomia* to refer to a formal discipline, estate management and public administration (the "royal art" of Plato and Xenophon), a usage that maintained some continuity for more than two thousand years before the discipline became known as political economy. Aristotle's study of the household as a unit of the political economy of the *polis* was framed in terms of *oikonomia*" (1987: 214).

²² See also Plato's *Statesman* where it is held that there is one kind of expert knowledge concerned with kingship, statesmanship and household management (258e-259c).

the market as a natural phenomenon ... tended to obscure the earlier administrative tradition of political economy from ancient Greek times through the Middle Ages to Adam Smith..." (1987, p. 249). Indeed, this tradition was so totally swamped, that in the mid-20th century Schumpeter could write of Rousseau, who may be viewed to be at the end of this tradition, "His article on political economy in the *Encyclopedie* contains next to no economics" (1954, p.139). Thus, what was considered to be economics had changed so radically that by the mid-20th century Schumpeter could, or would, no longer recognize the previous work as of the same species. Furthermore, Aristotle's work, so important and seminal for so many fields of Western Thought, arguably fits quite poorly with the geist of most modern economic theory, of either the classical or neoclassical variety.

For example, modern economic theory generally assumes that most prices are and ought to be flexible: they do and should relatively quickly change with changing market conditions.²³ It is not clear that this is Aristotle's view at all.²⁴ Aristotle deals with isolated bargaining in the exchange of goods in *Nicomachean Ethics* 5.5. Yet, there Aristotle is concerned with justice in the exchange of goods. He is not dealing with a modern impersonal market price which is the outcome of many buyers and sellers (see e.g. Lowry, 1987, Chapter VII "Aristotle and Two-Party Exchange"). Also, Aristotle

²³ Money is probably the major exception to this. It is almost always held that one or more of its various prices (interest rates, foreign exchange rates, and the general price level) should be fixed or regulated by administrative authorities. Even the late Milton Friedman argued that money should be regulated to keep the price level constant (while arguing against efforts to regulate interest or foreign exchange rates).

²⁴ See e.g. Polanyi, 1968.

seems to be concerned with finding a just price or perhaps a just price range: more in keeping with medieval, rather than modern economic thought.²⁵

Also, Aristotle is not happy with the acquisition of monetary interest. Yet, for Aristotle, the lending out of money to acquire more money is merely the *most* unnatural and corrupting way to employ money (see e.g. Langholm 1984).²⁶ Aristotle is not really happy with any use of money to acquire more money. In a commercial or capitalist (or chrematistic) society, where money is used to accumulate more money, passions will have the tendency to rule reason. Money, used with the goal or end to make more money knows no limit. Thus:

For, as their enjoyment is in excess, they seek an art which produces the excess of enjoyment; and, if they are not able to supply their pleasures by the art of getting wealth, they try other causes, using in turn every faculty in a manner contrary to nature. The quality of courage, for example, is not intended to make wealth, but to inspire confidence; neither is this the aim of the general's or of the physician's art; but the one aims at victory and the other at health. Nevertheless, some men turn every quality or art into a

²⁵ Because medieval economic thought was largely based on Aristotle. See e.g. Langholm (1992); also Chapter 1, "Just Exchange, Charity and Community of Goods", in Claeys (1987).

²⁶ That is, for Aristotle, the use of money to acquire more money is a corruption of the original use or end of money; just as in modern society is it generally held that the selling of sex is a corruption of the original use or purpose of our sexuality. The issue here is not that Aristotle did not think about the opportunity cost of using money; it is just a wrong way to use money, just as for many, selling sex is a wrong way to use our sexuality. It would probably not be without interest to speculate about the change in the relative esteem held by the financial and sexual services "industries" in contemporary versus ancient Greek society.

means of getting wealth; this they conceive to be the end, and to the promotion of the end they think all things must contribute (*Politics* 1258a).

The power of money, particularly when the goal of much activity in society is to use money to acquire more money, is such that people will want to accumulate more and more money, and/or to spend more and more money in subservience to their passionate desires. The passions, instead of being ruled by reason, will overwhelm the intellect and human reason (Pack, [1985b] in *Blaug* 1991).²⁷ Again, this is more in line with medieval, rather than modern socioeconomic thought:

Aristotle had a broader message. To him it was not so much a question of the market value of your gold as what kind of man your gold makes of you. If you set your sights by business success, it will distract you from the real values of the virtuous life, for which material wealth serves only as a basis. The function of money is to help provide for that

²⁷ A very sharp anonymous reviewer of this paper perceptively noted that I am repeatedly writing as if what matters in assessing Aristotle's relationship to economic theory is how Aristotle *felt* about various things. He is correct; in terms of methodology I am a Smithian. For my views on Smith's methodology, and the importance of passions and the sentiments for Smith's work, and the relative limits of rationality, see, e.g. Pack (1991, Chapter 6, "Rhetoric, Science and Smith's *Wealth of Nations*", pp. 104-118), (1993), (1995), (1996). That Smith is in some ways more Humean than Hume, see Pack and Schliesser (2006); in a deep sense, the two greatest followers of Hume are Smith and Kant (see, e.g. Fleischacker 1999). My personal view is that under a chrematistic (or capitalistic) society, the problem is not so much that the passions in general will rule reason; but that one particular passion, greed, will tend to rule all the other passions as well as reason. This is the major problem of our capitalist era.

basis. It is nothing in itself. In [medieval] Christian Europe this message fell upon a rich soil (Langholm, 1983, p. 66).²⁸

Aristotle would also not be too comfortable with modern economics' emphasis on the putatively positive unintended consequences of human activity. Of course, Aristotle was aware of the unintended consequences of human activity. It is just that for Aristotle, these unintended consequences were generally bad and disappointing.²⁹ This is generally not the case for modern economics, where the unintended consequences of human activity are seen as something basically positive. Thus, Adam Smith (following Mandeville and Hume) developed and systematically used this concept to explain such disparate phenomena as the evolution of human history from early hunting societies to his contemporary commercial society (1978); the development of money (*Wealth of Nations* Book I Chapters 2-4); as well as, following Rousseau's *Discourse on the Origin of Inequality*, the development of human speech ("Considerations Concerning the First Formation of Languages" in Smith, 1983). This concept took on new life in the 20th

²⁸ I do not mean to say that Aristotle's thought was medieval. He was, of course, the great systematizer of the ancient world, whose work was then extensively used by medieval theorists. It is indeed noteworthy, however, that Odd Langholm, one of the world's leading experts on Aristotle's economic thought, is actually an economist who specializes in the history of scholastic thought. In order to understand scholastic economic thought, Langholm had to thoroughly study Aristotle; which he obviously did.

²⁹ See for example, *Politics* V where Aristotle explains how various types of political regimes typically change for the worse due to the unintended negative consequences of human action. The difference between what appears to be good for us, and what is really good for us, and the problems this entails, (i.e. the problem of the negative unintended consequences of human action) permeates all of Aristotle's ethical writings.

century as a potent ideological weapon in the war between capitalist and communist societies. It was forcefully promulgated that a decentralized unplanned capitalist society, with each person pursuing his or her own individual interests, would have the unintended consequence of increasing the wealth of the nation faster than a centrally planned government with that same objective.

Yet, for Aristotle, the most important cause of something is its final cause, that is, the goal or reason why something is done. Aristotle either did not know about, or was not terribly concerned with the supposed positive unintended consequences of human actions. Rather, for humans, the most important cause of any of our activities is the reason we do it. For example, the real or most important cause of taking a walk is because we decide or choose to take the walk for the sake of our health (*Metaphysics* 1013a). Thus, in light of all of the above differences, one could be tempted to agree with the Scottish philosopher, Scott Meikle, that indeed "Aristotle did not do any economics" (1995, p. 196); or the earlier conclusion of the classicist Moses Finley, "Of economic analysis there is not a trace" ([1970] in *Blaug* 1991 p. 165).³⁰

IV. Positive Aristotelian Influences on Modern Economic Theory?

Yet, there are other possible, rather disparate avenues of Aristotle's influence on modern economic theory.³¹ Consider for a moment the question of choice, a major concern for Aristotle. Neoclassical economic theory frequently presents itself as a theory

³⁰ See also Patrick Murray's position, that Aristotle essentially provides the basis for a successful critique of mainstream modern economic theory (1997, pp. 69-71; also "General Introduction" pp. 1-37).

³¹ For more on the various ways Aristotle has influenced modern economic thought see Lowry (1987, pp. 176-241).

of choice.³² The model it generally uses is the Benthamite one of individuals effortlessly and mindlessly pursuing pleasures and avoiding pain.³³ According to Fusfeld, Bentham's "view of humans as pleasure machines, continually calculating the advantages and disadvantages of alternative courses of action, became the accepted view, and rational economic behavior was defined in those terms" (2002, pp. 50-51). 34 These models also often assume perfect information, in which case the actors are not earthly beings at all, but some sort of god. 35 Yet, in most other ways, by Aristotle's perspective, these actors are not up to humanity at all; rather, for Aristotle, they are a lower form of being. That is, theoretical Benthamite models of consumers pursuing pleasures and avoiding pain are an oversimplification or dumbing down of how humans act, more applicable to animals than to people. According to Aristotle, animals generally move towards their food and away from their enemies. For Aristotle, "where there is sensation, there is also pleasure and pain, and where these, necessarily also desire" (On the Soul 413b); thus "when the object is pleasant or painful, the soul makes a sort of affirmation or negation, and pursues or

³² See e.g. the extended spirited thread on this issue, not so innocently started by Pack, 7/28/05, HES e-mail archives http://eh.net/pipermail/hes/. See also the spirited discussion on unintended consequences of human action on this same list serve, end of September/beginning of October, 2006.

³³ To be unfashionable, hedonism.

³⁴ Mainstream economics in the 20th century did switch from Bentham's view of a cardinal measurement of utility to an ordinal measurement of utility. For a discussion, see e.g. Hicks (1946, pp. 11-25). According to Stigler, nothing of substance was changed by this switch (1987, p. 43); I agree.

³⁵ It may be that the modeling or fantasizing of human beings as gods, in a self-consciously putatively scientific discourse, could only arise in an era where, as Nietzsche so indelicately put it, "God is dead". If so, then the widespread rebirth of God in much of the world in the 21st century bodes ill for the future of this aspect of neoclassical economic theory. See below, Part V, B.

avoids the object" (On the Soul 431a) and "what is painful we avoid what is pleasing we pursue" (Movement of Animals 701b).

Yet, in addition to this animalistic proclivity to pursue pleasure and avoid pain, humans have reason. Humans deliberate, they recall the past at will. They need leisure and education and proper habits and characters to be able to make good choices. That is to say, for Aristotle choice involves reason and thought, time and leisure and commitment (Pieper 1998; Staveren 2001 Chapter One). Hence, for Aristotle "in the other animals choice does not exist" (*Eudemian Ethics* 1226b). Human choices, as opposed to animal movements, are voluntary and under the control of reason. The putative choices generally described in economics may indeed come from Aristotle's ideas. But they are Aristotle's ideas of the causes of the physical movements of animals; not the careful, actual choices of rational adult human beings.

³⁶ It is interesting that for Aristotle, neither gods with perfect information, nor animals really make choices.

Only humans in the middle need, must, and have the ability to make real choices.

As Veblen acerbically argued, "The [neoclassical] hedonistic conception of man is that of a lightning calculator of pleasures and pains, who oscillates like a homogeneous globule of desire of happiness under the impulse of stimuli that shift him about the area, but leave him intact. He has neither antecedent nor consequent. He is an isolated, definitive human datum, in stable equilibrium except for the buffets of the impinging forces that displace him in one direction or another. Self-imposed in elemental space, he spins symmetrically about his own spiritual axis until the parallelogram of forces bears down upon him, whereupon he follows the line of the resultant. When the force of the impact is spent, he comes to rest, a self-contained globule of desire as before. Spiritually, the hedonistic man is not a prime mover. He is not the seat of a process of living, except in the sense that he is subject to a series of permutations enforced upon him by circumstances external and alien to him" ("Why is Economics Not an Evolutionary Science?" in Veblen 1948, pp. 232-233).

Also, if we consider Marx to be an economist, 38 then it is evident that Aristotle had a profound influence on this theoretical tradition. Marx consciously begins his analysis with Aristotle (Pack, 1985a: "Aristotle and Marx on the Origins of Capital", Appendix D, pp. 126-131). The first paragraph of his 1859 Critique of Political Economy ends with a reference and a quote from Aristotle's Politics 1257a. The middle of the first sentence of Volume I of *Capital* then footnotes this first page of his *Critique*. For both Marx and Aristotle, a good may have a use value and an exchange value. For both the exchange of goods generates money. Money can then be used to accumulate more money: for Marx this is capital, for Aristotle it is chrematistics.³⁹ For both Marx and Aristotle this use of money to make more money is fundamentally bad and corrupting – although for Marx, it is more an historical necessity in the development of the human species which needs to be superseded. Marx can be viewed as beginning his analysis of the capitalist mode of production with Aristotle's own description and critique of chrematistics.40

³⁸ Meikle (1995), quoted above, is consistent in viewing neither Aristotle nor Marx as economists (see fn. p. 189).

[&]quot;... chremastistike. The word is not used quite consistently either; sometimes it is used broadly to mean acquisition in general, elsewhere it indicates acquisition by trade, and this is the kind which Aristotle condemns. The root of the word is chrema, a thing needed or used; in plural it means goods, property. But chrematistics in its narrow sense is one of the Aristotelian words which have found their ways into modern languages untranslated; it is hard to convey with precision its particular sense of disdain for the slightly unsavoury skills of the commercials classes (Langholm, 1983, p. 51).

⁴⁰ Meikle's (1985) gives an Aristotelian reading of Marx. See also the readings in George E. McCarthy ed. (1992), and George E. McCarthy (1990), Chapter 2.

Adam Smith also can be viewed as more or less beginning his *Wealth of Nations* with Aristotle. Again, as with Aristotle, a good for Smith can have both a use value and an exchange value. The exchange of goods generates money, and this money can be used to acquire more money. However, contra Aristotle, for Smith this use of money to acquire more money is perfectly good and natural. Indeed, it has the wonderful side effect that, given proper societal institutions, it will lead to an increase in the wealth (and hence power) of the nation. Thus, Smith can be viewed as largely beginning his analysis with Aristotle. Then Smith consciously parts company with Aristotle and argues against him. Aristotle's influence then is one of helping to stimulate Smith to develop his own modern largely anti-Aristotelian system.

The influence of Aristotle is also clear in the work of Nobel Laureate A. K. Sen and his sometimes co-worker, the philosopher Martha Nussbaum. For both Sen (e.g. 1987; 1999) and Nussbaum (e.g. 2000) the role of the government should be to help people develop their human capacities. Governments should address the Aristotelian question of finding out what people need to flourish as human beings and then help people to satisfy these needs. They urge public discussions, open debates, and social agitation about the values of various human capacities.

Finally, mention should also be made about Aristotle's possible influence in the attempts to either fully mathematize or to develop a fully axiomatic deductive approach to economics. Aristotle's *Posterior Analytics* has been traditionally interpreted as

⁴¹ Actually, the first several chapters of *The Wealth of Nations*, where Smith argues that output is largely a function of the division of labor, is most likely a development of ideas in Xenophon's *The Education of Cyrus* (Book VIII, Chapter 2, 5-6).

⁴² See e.g. Blaug (1985, pp. 61-63).

claiming that the goal of a truly scientific discourse should be to present the disciplinary material in a fully deductive, hopefully mathematical form. Modern economic theory has been the subject of various attempts to realize this stark, pristine ideal in its mainstream (see e.g. Akira Takayama, 1974), Marxist (Kozo Uno, 1980)⁴⁴ and Austrian (Ludwig von Mises1966) guises. Uno, 1980) under the disciplinary material in a fully deductive, hopefully mathematical form.

V. Aristotle's Relationship with Current and Possibly Future Economic Theory?

This section briefly considers the possible future relationship between Aristotle and economic theory. It argues that there are grounds to feel that there is or ought to be a bright future for this relationship; and there are opposing grounds to feel that there is a

⁴³ I think it is generally conceded now that this is probably a misunderstanding or oversimplification of Aristotle's views on how to do (or present) science. On contemporary controversies concerning Aristotle's views on the scientific method and the presentation of scientific discourses see e.g. Lennox (2001) and Lloyd, (1996). See also Crespo (2007, Section 1.4) on Aristotle's views of economics considered as a subject of scientific investigation.

⁴⁴ A large number of Marxists in Japan, as well as a fair number in Canada, are Unoites, or followers of Kozo Uno. For an introduction to the Unoite school, see Albritton (1986).

⁴⁵ A sometimes intended, and sometimes unintended result of this endeavor has been to denude economics of its ethical garb. Most recently, there were several spirited, at times heated, threads around Mises' position on the HES list serve, December 2006. Among Marxists, the Unoite position has also often generated a great deal of heated controversy (see, e.g. Lie 1988; Pack 1988). It seems that in the social sciences, claims to have developed a fully deductive, "logical" system of "proofs" based on a few a priori "axioms", will have a strong tendency to divide believers from non-believers in the system, and hamper their ability to effectively communicate with each other.

bleak future for this relationship.⁴⁶ It may be that the answer to this question is partly spatially specific. Arguably the answer may depend upon which side of the Atlantic Ocean one is dealing with.⁴⁷ Perhaps economics and Aristotle will have a better future relationship in Europe than in the U.S. and Canada; or perhaps not.

A. A Bright Future?

There is an economics basis to Aristotle's social theory. For example, the origin of the *polis* is partly due to economics. Economics, and economic issues may be said to be the material cause of the *polis* and the good life.⁴⁸ The sexual and social division of labor, and some friendships are based upon the exchange of utilities. Indeed, friendship based upon the exchange of utility is one of the foundations of the family, the community and the state. For Aristotle, "friendship for utilities sake seems to be that which most

⁴⁶ As the late John Kenneth Galbraith used to delight in pointing out, there are really only two types of economic forecasters: those who know they do not know the future, and those who do not know they do not know the future (most recently in his last book, 2004, Chapter VIII, "The World of Finance"). Hence, my own caution and uncertainty about what the future will hold.

⁴⁷ As Deirdre McCloskey acidly noted about the extreme narrowness of American academic economics "standards": "every economic problem just is a constrained maximization problem; social justice that can't be put into a utilitarian framework is silly; econometrics understood as mindless tests of statistical significance just is empirical economics; history is a waste of time; philosophy is, too" (hes@eh.net, June 27, 2007, second posting).

⁴⁸ Of course, at the same time, economics itself exists for the final cause, the good life; indeed, for Aristotle, this final cause is also the most important one. Thus, one could also say that there is a political basis to Aristotle's economic theory, and Aristotle's economic theory is subsumed to his political and social theory.

easily exists between contraries, e.g. between poor and rich, between ignorant and learned; for what a man actually lacks he aims at, and he gives something else in return" (*Nicomachean Ethics* 1159b). Commerce or exchange can be viewed to be a type of friendship and it also leads to justice. As Aristotle explains:

We speak of friendships of kinsmen, comrades, partners, the so-called 'civic friendship'....Civic friendship has been established mainly in accordance with utility; for men seem to have come together because each is not sufficient for himself, though they would have come together anyhow for the sake of living in company ... The justice belonging to the friendship of those useful to one another is pre-eminently justice, for it is civic or political justice (*Eudemian Ethics* 1242a).⁴⁹

Also, there have recently been some relatively isolated calls for a return to reorient economic thought based upon a more Aristotelian footing. These include Steve Fleetwood (1997) from a largely Marxist perspective; ⁵⁰ and Odd Langholm's "The Neoclassical System and Its Critics" (1998, Chapter 10) from a more institutionalist perspective. As Crespo (2007) emphasizes, proper institutions are a necessary and crucial component to Aristotle's economic thought. And, of course, in the 21st century, Irene van Staveren has been working in this field, demonstrating how economics can move "Towards an Aristotelian Economics" (2001). So there are indeed some prospects that

⁴⁹ This is not to say that each individual exchange leads to justice; individual exchanges can often be unjust. For a full study of Aristotle on friendship see Pangle (2003); also the review by Dirk t. D. Held (2005). Montesquieu (1748) emphasized the pacifying, friendly side to commerce.

⁵⁰ Also in the Cambridge Journal of Economics see Ricardo F. Crespo (2006).

the future could see some sort of rapprochement between Aristotle and economic theory.

On the other hand, there are other more discouraging signs concerning this potential relationship.

B. A Dark Future?

Sometimes it is held that we are no longer in the modern age, but are past it, in some sort of frenetic post-modern age. In economics, that would suggest that we are past the age of neoclassical economics (see e.g. Philip Mirowski 2002; John B. Davis 2006). Post modernism seems to be characterized by a certain disjointedness. There is an aversion to big pictures or grand narratives which can get a firm hold of the truth, or the essence of any given situation or broad problematique. In economics this trend is characterized by theory becoming a series of disjointed mathematical puzzles, expertise with math in general, sundry game theories, detailed experiments demonstrating that people are not fully 'rational', etc. ⁵¹

⁵¹ I believe that the societal popularity of Levitt and Stephen J. Dubner (2005) can also be seen as symptomatic of this broad cultural trend. On the other hand, a defender of mainstream economics could argue that their book is actually part of the grand modern narrative of neoclassical economics, that incentives matter. In this viewing, it is the fruition of the dream of the young Hicks (among others) that "What begins as an analysis of the consumer's choice among consumption goods ends as a theory of economic choice in general. We are in sight of a unifying principle for the whole of economics" (1946, p. 24); or, indeed, by this school of thought, all human behavior.

To the extent the world in general and economics in particular is becoming this way, ⁵² then it is moving farther away from Aristotle. Aristotle was a systematic, encyclopedic thinker. He was comparative. He considered alternatives. So, for example, in preparing to write *The Politics*, he gathered 158 constitutions, and considered the pros and cons of various political systems. Aristotle used math as a tool to solve problems; not as an end in itself.

At least in the U.S., economics currently seems to be used more as a tool to help export U.S. institutions, than to reasonably compare and contrast them with other institutions. Studies and courses systematically comparing economic systems and economic institutions seem to be relatively few and diminishing in number.

My guess is that Aristotelian economics will definitely be of interest to some heterodox economists. However, in general, at least in the U.S. and Canada, I suspect that economists who study Aristotle and attempt to promote Aristotelian economics will be viewed with suspicion by their colleagues. They will tend to be disinvited from economics departments on the grounds that they are not really doing "economics". 53

The great Canadian economic historian Harold Innis argued that the most fruitful way to understand world economic history is to study changes in the means of communication (1950, 1951). An Innisian interpretation of recent history would be that a major change in communications to computers and electronic communications is ushering in a new stage in world history, with an emphasis on (geographic) space over time (durability). This is basically compatible with Mirowski's history (2002).

This may be painting too dark a picture. An exception to the above generalization would be small liberal arts colleges and small teaching-oriented universities such as Roosevelt Academy which hosted this conference, where there is still a relatively strong tradition of studying and teaching economics as a liberal art.

Aristotle's future with mainstream economics departments appears dim. Certainly in the U.S., the current academic, societal, and political⁵⁴ viewpoints emphasize the slipperiness and malleability of truth. The Aristotelian ideal that the world is rational, and if we try hard enough we can use our own rationality to really grasp or approach that truth is in retreat. Increasingly, we are seeing varieties of mysticism, if not in academia, then certainly in the public at large (see, e.g. Thomas Frank 2004).⁵⁵ The broad general trends in the world at large and in academia, to this observer, currently bode ill for the potential for a hearty development of a new Aristotelian economics. Hopefully, I will be shown to be wrong.⁵⁶

VI. Conclusion

E. Roy Weintraub (2006) argues that most all historians of economic thought are tending to be disinvited from economics departments, and that we should flee economics departments and try to join a science studies community. My view is that on the one hand, to the extent that economists study and try to develop Aristotle's economics, they will be seen by many of their economist colleagues to be even more alien and foreign, than other economists who study dead theorists. On the other hand, urging that economists who study the history of economic thought should leave economics departments seems to me to be unduly pessimistic; even defeatist. Other economists need our help and insights.

⁵⁴ See e.g. Rich (2006).

The postmodern overemphasis on the inability of humans to use reason to comprehend the world, encourages faith-based religions to leap into the explanatory void; and, the post modern world joins forces with the remnants of the pre-modern world. Witness, for example, the remarkable resurgence of the Lubavitcher movement in Judaism; as well as the numerous Christian and Islamic fundamentalist religious movements.

⁵⁶ On the other hand, one may always argue (or sigh) that it is generally darkest right before the dawn.

Aristotle does indeed have a relationship with modern economics, but it is a difficult, complex, contradictory and ambiguous one. In reviewing the literature on this subject, several traditions may be delineated. On the one hand, particularly in the twentieth century, there was a debate on whether Aristotle was a precursor more to classical or neoclassical economics, particularly with regard to value theory and the theory of income distribution. With regards to these two issues, I think Aristotle was a precursor to neither tradition.

There is a second tradition which considers Aristotle's views to be at complete odds with all modern economic theory since Aristotle, among other things, was concerned with finding a just price or just price range; was against the use of money to acquire more money; and did not think that the unintended consequences of human activity were generally beneficial; indeed, the reverse. Yet, I think this tradition ultimately goes too far. Among other things, Bentham's view of actors pursuing pleasure and avoiding pain, and the economists' use of that ideal, may be an accurate reproduction of Aristotle's views of how sub-human animals act. The work of Sen and Nussbaum in welfare economics and the proper role of government in society is Aristotelian. Also, Marx can be viewed as starting his analysis with Aristotle and continuing the analysis into a critique of capitalism, just as Smith can be viewed as basically starting with Aristotle but then arguing against Aristotle to defend what he termed commercial society. Methodologically, most all schools of modern economic thought have made various (controversial) attempts to present economic theory in a fully mathematized and/or axiomatic deductive form.

As to Aristotle's relationship with current and possibly future economic theory: some heterodox, including Marxist and institutional economists may find inspiration from Aristotle's work. As evidenced by the interest in economics and Aristotle at this conference (Crespo, 2007; Roberts 2007), the potential does exist for its fruitful future development. Yet, there are also grounds for believing that the future of Aristotle and economics is quite dim, and that economists who work in this field will be viewed with great suspicion by their colleagues that they are not really doing economics; hence, they will be invited to leave economics departments. Time will tell which tendency will prevail.

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