

Freedom and Coordination in Economics: An Epistemological Analysis*

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This article begins by pointing out the difficulties involved by the insertion of freedom in economics: It poses epistemological problems that are not satisfactorily solved by the standard theories. The article suggests that the Aristotelian epistemological frame of practical rationality may be an apt position from which one can deal with freedom in economics. Aristotle's concepts of society and economics are first introduced. The role of virtues in achieving economic coordination is exposed. Then the corresponding concept of practical science is described, showing its main characteristics and how they fit in with traditional political economy. The concept of value neutrality receives special attention in the article: A reinterpretation of the meaning of it is proposed. The article concludes that Aristotle's broad concepts of practical reason and science leave room for a more comprehensive notion of economics.

Introduction

This article will show that Aristotelian practical science offers a satisfactory answer to the issue of fully introducing human freedom into economics. I will argue that practical rationality is a good way to do this successfully. Although social sciences had not yet emerged in Aristotle's time, he proposed and developed an epistemological framework suited to them. However, before analyzing this framework, we need to expose Aristotle's thoughts concerning society and economics. A similarity to the old tradition of political economy will be drawn.

James Buchanan has warned about the problem of inserting an element of subjectivism, or freedom, into economics: It imposes constraints on “positive economics.” Hence, he maintains, *subjective* elements are to be defined as those that exist within the boundaries of positive science and moral philosophy. Buchanan recognizes that there are certain patterns of human behavior in economic interactions that are reactions to stimuli, as if we were rats. However, he stresses other aspects that are more free. This position calls for a “wholly different and uniquely human science—one that cannot, by its nature, be made analogous to the positive-predictive sciences of orthodox paradigm.” Buchanan affirms that there is surely room for both sciences “in the more inclusive rubric that we call economic theory.”¹

Buchanan’s concern is logical and perfectly understandable. Freedom is an essential feature of human action.² He began his article by stating: “The hypothesis is that human beings *choose*.”³ I begin this article with the same supposition. Economic action is human action; thus, economics must allow for an underlying concept of humans as free-acting beings.

However, many could argue: What is the problem with freedom in economics? Is it not hidden in stochastic models and in predictions? The answer is that this is partially true; tendencies rely on habits configured by free actions, and they are actually average of free actions. Free options are incorporated into data and into relationships of models.

Notwithstanding, these models are developed according to rational-choice theories in which freedom is not denied but rather is left aside—“iced” and “paralyzed.”⁴ Let us explain why: Mainstream economics’ rationality is a mean-ends rationality, or instrumental rationality. In this scheme, freedom is included in ends, which are outside data for economics, and means, by definition, are to be optimized in order to achieve ends. Optimization is a technical procedure. Technique calls for precise solutions, even more if the solution ought to be optimized: In this case, the best is only one and thus, freedom has no place: “It was before.”

That is why, freedom being an undetermined openness, real and acting economy surpasses the possibilities of models. Many authors have recently stressed the difficulties for the application of formalist theory caused by the open nature of reality, and, therefore, of actual economy.⁵ Daniel Hausman points out how extremely difficult it is to test a theory designed for a complex, open system.⁶ We would then actually have to speak about models without determined restrictions, without independent variables. “Men,” Buchanan affirms, “can choose courses of actions that emerge only in the choice process

itself.”⁷ The question then is: What kind of science can manage such an indeterminate situation? The answer: One featuring a broader rationality than the models.

Aristotle on Society

Aristotle considered reality as an order “system,” and he designed a theoretical framework for describing that order. According to his physical theory, even physical hazard does not impede cosmic order. For Aristotle, however, order in human affairs is different from cosmic order: It is not a deed but a task—the task of seeking happiness through virtues. As T. Irwin maintains, for Aristotle, happiness was not a conative strength but a normative ideal:⁸ “Effort is needed for reason to discover the goods and virtues of human flourishing, as well as to achieve and implement them,” Rasmussen and den Uyl stated.⁹ This effort and the normative character of Aristotelian ethics distinguish it from utilitarianism.

According to Aristotle, virtues are also a system. They are coordinated by justice—a personal virtue of the will that regulates the social aspect of the whole human system—and by prudence or practical wisdom—the personal habit of the mind and will that discovers and facilitates orderly and just actions. For Aristotle, the work of prudence is essentially free and variable according to circumstances. What is prudent for one person may not be so for another. However, to him, the coordination of free, prudent, different actions leads to social coordination. The prudently and fairly decided individual goals coincide with the social goals. Aristotle coherently thought that economic coordination is also possible when people prudently decide upon and perform economic actions. Because human beings are essentially political, wise agents consider others: the consequences for their well-being and their possible reactions (not only motivated in self-interest as, for example, Gauthier, but also for pure benevolence). Let us bear in mind that, etymologically, *coordination* means “to give an order together.”

Aristotle on Economics

Although Aristotle was not a professional economist, he articulated seminal concepts in economics. Aristotle’s *oikonomike* is more than household management, as opposed to what many economic historians believe. He sustained that *oikonomike* deals not only with the house but also with the *polis*.¹⁰

For Aristotle, the act of *oikonomike* is the use of the things necessary for the so-called good life, a life of virtues. *Oikonomike* can only seek the good; it is essentially moral because it is an act—*energeia*—belonging to the *praxis*, or practical realm (Aristotle linked the practical—and immanent—aspect of an action to its morality). As every good act, *oikonomike* needs a virtue to ease its performance. Moreover, *oikonomike* was embedded in its political environment.¹¹ Summing up, Aristotle’s *oikonomike* is an ethical act with an inner relation to the historical, cultural, social, and political factors surrounding it.¹² As Newman stated, “Political economy almost originated with him.”¹³

Aristotle poses an example of practical analysis for an economic issue on his market analysis in the *Nicomachean Ethics* (V, 5). He concludes that the tenet-ruling demand, and therefore prices and wages, is *chreia*, which [justice] means “economic need.” *Chreia* is relative, subjective, and intrinsically moral. This chapter on economic exchange belongs to his “Treatise on Justice” (*Nicomachean Ethics*, V), which was the main social virtue for him.

Aristotle also spoke about *chrematistics*. According to him, *chrematistics* is a technique subordinated to economics dealing with the acquisition of things used by *oikonomike*. However, it is not essentially oriented toward good. Therefore, while a harmful *oikonomike* is unthinkable, there are two kinds of *chrematistics*: a subordinated, limited, and natural one and a perverted, unnatural, unlimited one.

As a practical science, economics will be a fruitful notion if we can show that the patterns of behavior that it prescribes are conducive to economic coordination. Three difficulties for coordination may be pointed out in economics. Two of them are often recognized: *ignorance* and *time*. We overcome these by conveying information, but, the third, *freedom*, is of a different kind. Intertwined with ignorance and time, freedom stems interpretations and acts that may not lead to coordination. These interpretations, decisions, and actions are not guided by *reason* but by *will*. As *will* is not *mind*, the solution lies in more than information. A teaching-learning process of acquiring habits should be followed so that people decide to act in the right way individually and freely.

At this stage, the question is twofold: (1) How do we develop virtues? (2) How do virtues foster economic coordination? Aristotle developed the first “how” but not, explicitly, the second one.

We modern minds tend to look for mechanical, automatic, technical explanations. However, in this field, we cannot find concrete mechanisms. The practical area depends on life, and life is always changing. This is a field where ends and means are dialectically interacting and changing. Men choose

in the very act of choosing, as already quoted from Buchanan. We can only know some general tendencies depending on circumstances of a concrete society and time.

How do we acquire virtues? Aristotle answers: “We are by nature equipped with the ability to receive them, and habit brings this ability to completion and fulfillment.”¹⁴ Virtues are good habits. Habits are ways of being; that is, firmly fixed possessions set by repeating actions. According to Aristotle, the main means to foster these actions are education and law. First, education, in the broad Greek sense of *paideia*, is the shaping of personal character. This is why “it is no smaller matter whether one habit or another is inculcated in us from early childhood.”¹⁵ Second, law bears a pedagogical objective.¹⁶ Aristotle understands that a set of concrete virtues leads humans to their natural excellence. This process begins with education on those virtues, conveniently consolidated by laws.

How do virtues improve economic coordination? Aristotle never defines “coordination.” However, we can try to draw a definition. According to him, the reason that we need economics is that “it is impossible to live well, or indeed to live at all, unless the necessary conditions are present,”¹⁷ and “it is therefore the greatest of blessings for a State that its members should possess a moderate and adequate fortune.”¹⁸ Happiness is an activity conforming to virtue, and “still, happiness, ... needs external goods as well. For it is impossible or at least not easy to perform noble actions if one lacks the wherewithal.”¹⁹ Thus, for Aristotle, coordination means that, through chrematistic and economic activity, everybody succeeds in possessing what he or she needs to achieve the good life. This goal has various aspects in which virtues collaborate, as we will analyze.

Economic concepts of coordination are more elaborate and concrete. Yet, these concepts are consistent with the “primitive” one by Aristotle. One definition of coordination, for economics, is compatibility of individual plans: Everybody achieves his or her intended ends through his or her plans.²⁰ Human action is always unique, and this uniqueness cannot be overlooked. Thus, all we can state is that people generally act following some tendencies. Precisely, habits are patterns of behavior. This is why O’Driscoll and Rizzo spoke about “pattern coordination,” limited by admitting uniqueness of actual human action.²¹

This is where virtues add on. First, the probability of habits’ originating stable behaviors is larger if these are morally good; namely, virtues. According to Aristotle, the incontinent is unpredictable; instead, the virtuous, the continent, is more predictable because he or she perseveres. “A morally weak

person,” he says, “does not abide by the dictates of reason.”²² “A morally strong person remains more steadfast and a morally weak person less steadfast than the capacity of most men permits.”²³ Thus, the probability of plan coordination is larger among virtuous people because they have a stable character and their conduct can be foreseen. Therefore, coordination is easier within a people possessing an ethical common ethos.²⁴ This conclusion agrees with Hausman and McPherson when they state that “moral norms enable people to coordinate their actions more efficiently than would be possible without a shared morality.”²⁵

Second, virtues also foster the coordination process in other ways. Prudence or practical wisdom—an intellectual and ethical virtue—help people to act accurately in assessing the real situation, thus decreasing errors. Moreover, Aristotle remarks, “It is not possible for the same person to have practical wisdom and to be morally weak at the same time.”²⁶ Justice helps the will to act in the way that prudence points. In fact, as we said, for Aristotle, market relations are regulated by justice, and hence there are no commercial vices. Strongly committed-to-justice people do not ride free.

Aristotle devoted the largest part of his *Nicomachean Ethics* (VIII and IX) to friendship. This virtue, site of social cohesion, takes part in temporary situations where justice does not suffice. In fact, justice is not necessary between friends. Liberality or generosity (IV, 1) also helps to overcome the problems of disequilibrium, through individual or collective action (volunteering, non-profit organizations, and so forth). Note that all virtues are free habits of free people. Otherwise, they would not be virtues at all.

In sum, in an imperfect world, virtues help to reduce error and act as a balm. They foster coordination and reduce problems during coordination adjustments. It is interesting to note that the knowledge of the assistance of virtues in economic coordination is a practical science. This explains how the unintended consequence of individual actions is (or is not) social and economic coordination. This is a traditional belief in economics from Smith to Hayek.²⁷ If everybody acts rationally—technically and morally—coordination will be achieved in an unintended fashion. This explanation leaves room for uncertainty, even if ignorance is defeated, for freedom is always present. In other words, as long as human freedom is radical, the only way for unintended consequences to lead to coordination is to individually follow moral standards. However, the Aristotelian concept entails a different meaning of unintendedness. His vision of humans as political animals implies that a prudent action is an action with a view to the good of others. As long as prudence

becomes a virtue this attitude becomes “natural,” “spontaneous,” “unintended.” But this is not the unintendedness of the invisible hand tradition, which does not acknowledge the need for virtues. For this latter position, coordination is something akin to “magic.” Virtues in the Aristotelian approach replace magic from the invisible hand explanation.

In other words, once the information-conveying requirement is accepted and assumed, coordination, as a result of individual actions, is possible because the subjective aspect of prudence is the application of an objective set of socially recognized values to concrete situations and actions.²⁸ Aristotle supplies a notion of practical science and of economics as a practical science in which not only the definition of coordination but also the know-how to practically achieve it is a scientific matter. This know-how requires a scientific immersion in the troubled waters of values constituting the social *ethos*.

Aristotle on Epistemology of Social Sciences

Practical rationality is reason applied to *praxis*. *Praxis* is human action. Hence, practical reason is the capacity to guide action to be adequate, while practical rationality is the way to adequate action. Adequacy requires both a goal and a path leading to it. Thus, practical rationality begins with motivation toward ends, proceeds by way of corresponding means, and follows through by achieving the ends. Therefore, it calls for an inquiry about ends, which, in the human realm, includes moral values.

Practical science aims at making correct statements about human action. It is a prudential science that tries to answer the questions: (1) What should we do? (2) What should we choose? (3) How should we achieve it? For Aristotle and modern practical science supporters, a rational research on values is possible. Practical science is the Aristotelian antecessor of social science.²⁹ It is an essentially moral or evaluative science. A strong movement of rehabilitation of practical science has arisen, mainly in Germany. A collective work edited by Manfred Riedel (1972–1974), entitled *Rehabilitierung der praktischen Philosophie*, could be mentioned as a hallmark of this current movement,³⁰ which conceives the practical paradigm as a reaction against the modern, prevailing requirement of value-neutrality in the realm of the social sciences where scientific reason only applies to means; the ends are a matter of private decision surpassing the limits of science.

Some years ago, Leo Strauss, a predecessor of the above-cited movement, stated:

It is impossible to study social phenomena, that is, all important social phenomena, without making value judgments.... Generally speaking, it is impossible to understand thought or action or work without evaluating it. If we are unable to evaluate adequately, as we very frequently are, we have not yet succeeded in understanding adequately. The value judgments that are forbidden to enter through the front door of political science, sociology, or economics, enter these disciplines through the back door.³¹

If these values permeate all social thinking and are not rationally found and established, we are confronted with ideology. The answer to this challenge in our area is an evaluative economics. We are, in fact, returning to Buchanan's challenge. We are dealing with a broader notion of economics that lies closely linked to social, political, and moral thought. The boundaries of these disciplines are vague. In this concept, economics is neither exact nor separate.

This is not new. Let us remember the already-old K. Boulding's claim: "The concept of a value-free science is absurd.... Let us return then to economics as a moral science."³² Hausman and McPherson surveyed recent work by economists and moral philosophers who join both disciplines and concluded: "In defending their model of rationality, economists wind up espousing fragments of a moral theory"—"economics remains partly a moral science."³³ They suggest that there is a deep affinity to utilitarianism.³⁴ Actually, the scheme proper to economic instrumental rationality is parallel to that of utilitarianism. One may wonder, however, whether that ethical position is misleading or, at least, limiting. Hausman and McPherson question the resulting narrowness of the current, normative-economics evaluative apparatus.³⁵

If the former applies, what becomes of the value-free requirement? We have to interpret this concept in another way. Value-neutrality will not "officially" leave values aside but will "impartially" reason about them. In that way, they will be scientifically considered. In fact, current new revisions of Weber's thought point out that *Wertfreiheit* means "impartiality" in the context of German academic struggles.³⁶

John Finnis has worked on the concept of value freedom. How could we neutrally describe social facts? Neutrality in the "concept-election" of social sciences, he maintains, is only attainable through scientific definition of the standards of rational, practical reasonableness.³⁷ That is, the way to resolve the value-free problem is not to put away values but to reason about them and, thus, rationally determine the set orienting economics. As Hausman and McPherson also affirm, "one addresses moral questions ... by making arguments."³⁸ We may think, for example, that real concern for human rights sup-

poses a set of attitudes and habits in the economic realm. Further, detailed analyses should come after the acceptance of this framework. This is a task and a teaching that, in my opinion, should not be denied to students of economics, but it must be done in the interdisciplinary field in which economics cannot work separately from moral sciences.

A last remark on the epistemological frame required by the Aristotelian social theory is that it actually constituted the ancient antecessor of methodological individualism. Social analysis begins in individual actions and ends. Societies, Finnis maintains, cannot be adequately described, explained, justified, or criticized unless they are understood as the realization of free choices.

Characteristics of Practical Science

An exposition of the characteristics of practical science will complete our understanding of it. First, practical science acknowledges the inexact character of its conclusions, due to human-action contingency stemming from freedom and singularity. Aristotle asserts in his *Nicomachean Ethics*:

Now our treatment of this science will be adequate if it achieves that amount of precision that belongs to its subject matter. The same exactness must not be expected in all departments of philosophy alike, any more than in all the products of arts and crafts.... We must therefore be content if, in dealing with subjects and starting from premises thus uncertain, we succeed in presenting a broad outline of the truth: When our subjects and our premises are merely generalities, it is enough if we arrive at generally valid conclusions.³⁹

This belief seems to be coherent with economics' stress on subjectivism and with the actual economy's uncertainty. Science should not be asked for more than possible in relation to the nature of its subject. We should not blame science for this limitation. It does not derive from a weakness on its part but, as Aristotle also says, on "the nature of the case: The material of conduct is essentially irregular."⁴⁰ That is, uncertainty stems from an ontological reason (ultimately human freedom). It is an essential feature of economic actions, and it will always be present.

A second feature directly follows from the previous trait. Practical science must be closely linked to the concrete case. "Now no doubt," Aristotle says, "it is proper to start from the known. But 'the known' has two meanings—'what is known to us,' which is one thing, and 'what is knowable in itself,'

which is another. Perhaps, then, for us at all events, it is proper to start from what is known to us.”⁴¹ Adjusting to the particular case, with its cultural and historical environment, is necessary. This approach allows for our focusing on institutions such as some recent economics currents. A wise mix of adequately chosen, scientific types along with historic, cultural, and empirical elements ensures a correct interpretation of economic action.

While inexactness and closeness to reality are features of freedom and singularity in human action, the ethical commitment of practical science arises from the moral aspect of human action, as conceived by Aristotle. However, let us bear in mind that *economics is not ethics*. While ethics studies the ethical problem in itself, political economy studies the economic problem—as politics and law do with their corresponding subjects. These problems cannot be isolated from their ethical aspects. Aristotle distinguished between ethics—which is a science—and practical sciences, which are ethical insofar as they consider ethical aspects of each subject. These ethical aspects are essential to human action. Why? In transitive human actions, we find a triple rationality: practical or moral, technical, and logical. Anyway, practical *inmanens* rationality permeates the whole action: The existence of a purely technical *transiens* action is not sustainable. Whatever the action, it is *always* essentially ethical. Because economic action is human action, *oikonomike* has an ethical commitment. Gilles-Gaston Granger states that “within the economic area, an intertwining between the different perspectives of rationality seems to be necessary in order to attain an effective definition of concepts.”⁴² Hausman and McPherson also extensively show how moral reflection has a role in both positive and normative economics.

Aristotle’s *oikonomike* approximately corresponds to political economy, and *chrematistics* refers to economics.⁴³ As Zamagni points out, traditional political economy used to be a branch of practical philosophy.⁴⁴ It appears to be present in Aristotle’s work. Twenty centuries after Aristotle, Adam Smith said that political economy is “a branch of the science of the statesman or legislator,”⁴⁵ namely, political or practical science. Actually, a great deal of interest has arisen lately on Smith as a moral philosopher and economist. According to Jeffrey Young, for example, Smith’s moral philosophy and economics are intertwined and belong to a unified whole, composed by moral philosophy, jurisprudence, and political economy. For Smith, morals and economics, in spite of having their own treatises and “moments,” are blended. Moreover, Young sustains, Smithian economics was born in a predivorce [of positive from normative] environment.⁴⁶

Political economy was eclipsed by the birth of neoclassical economics. Nowadays, the term *political economy* has been reborn but, in some cases, with a different meaning.⁴⁷ Hence, it is important to highlight that we are referring to this old tradition of political economy as it was also rescued by Lionel Robbins.⁴⁸

A fourth trait of practical science is its pragmatic aim. An abusive theoretical intentionality has invaded the realm of the social sciences. Many claim that this process has led economics into a certain barrenness that is mainly seen in the mainstream economic journals.⁴⁹ Although a social science may have a theoretical aim, it is always virtually oriented toward action because its subject defines its epistemological criteria.

Last but not least, we mention the methodological devices proper to practical sciences. The abundant bibliography on this topic could be summarized in a proposal of methodological plurality. In his *Politics* and in *Nicomachean Ethics*, Aristotle admirably combines axiomatic deduction, inductive inference, dialectic arguments, rhetoric, imagination, examples, and topics. Such a prudential science resources to these instruments. Methodological strategies developed separately in some economic currents are blended into this approach, thus doing away with any dogmatic, methodological reductionism of the social and economic sciences.

Conclusion

Then, how does Aristotle's thought contribute to economic methodology? It does so by providing an epistemological framework in which the concept of rationality may handle an open system such as the subject of economics. This approach favors a methodological pluralism, as recently sustained by some economic methodologists. This Aristotelian epistemic position relates to a notion of society and economy in which uncertainty stems not only from time and ignorance but also from human freedom. Within this concept, virtues act as free coordinating strengths. Thus, the corresponding science is not only explanatory and predictive but also normative.

Many economic methodologists nowadays criticize neoclassical theory, claiming that it holds a deterministic view of human conduct. They support the inexactness of economic conclusions and predictions; they stress the need to adjust economics to its subject matter; and they consider factors such as institutions, time, historical and cultural elements, and, even, for some authors, values. The Aristotelian practical-science paradigm constitutes a useful framework to sort out these basic problems.

If it is all so obvious, however, why has no one said it before? Because it is not easy to bring economics and philosophy together adequately. As Mäki says, “One is required to have a deep knowledge of both economics and philosophy, and to combine the two in a creative and rigorous fashion.”⁵⁰ For a philosopher educated in the classical tradition, human sciences are practical sciences, while the average economist is not usually familiar with them. On the contrary, philosophers are far away from economists’ practices. To look to Aristotle, a scientist before the “diaspora” of sciences, may help us in this difficult task of serving two masters:⁵¹ philosophy and economics.

Notes

- * Some parts of this article are extracted from “Reappraising Austrian Economics’ Basic Tenets in the Light of Aristotelian Ideas,” *Review of Austrian Economics* 15, no. 4 (November 2002), 313–32. I am grateful to Kluwer Academic Press for permission to use them here. I also want to acknowledge Daniel Finn, Stephen Grabill, Samuel Gregg, Jorge Martínez Barrera, and Gabriel Zanotti for helpful comments on a previous draft. I also want to thank Clarisa Bourg and Patricia Friedrich for stylistical correction of my English. The usual caveat applies.
1. J. M. Buchanan, “The Domain of Subjective Economics,” in *Method, Process, and Austrian Economics*, ed. Israel M. Kirzner (Lexington and Toronto: Lexington Books, 1982), 7–20, cf. 17.
 2. At this stage, a rigorous research calls for a definition of freedom. In this article, I consider *freedom* as an analogous term. Its main meaning is *liber arbitrium* or freedom of choice, the inner capacity of *will* to decide, a power to will. Will is conditioned in its decisions by sociological, psychological, and physiological antecedents, as well as by previous habits. It is not, however, totally and univocally determined by them. Decisions are not uncaused: They are caused by the person who wills, conditioned as it were. In the human realm, “to be caused” is not equivalent to necessity. (I am adopting a causal indeterminist position—which may include agent causation, as Chisholm sustains: Roderick Chisholm “Agents, Causes, and Events: The Problem of Free Will,” in *Agents, Causes, and Events: Essays on Indeterminism and Free Will*, ed. Timothy O’Connor (New York and Oxford: Oxford University Press, 1995), 95–100. Choice is, as Shackle thought, a beginning.
Liber Arbitrium requires a fundament, which is another of its analogous meanings: a radical openness of mind and will toward reality. These kinds of freedom are innate.

Two more meanings of freedom can be pointed out that are acquired. They are: first, a capacity to act; and second, external freedom, an absence of coercion that allows one to do. These latter freedoms find their sources and fundaments in the former.

3. Buchanan, "The Domain of Subjective Economics," 7.
4. For a review of those theories, cf. Robert Sugden, "Rational Choice: A Survey of Contributions from Economics and Philosophy," *The Economic Journal* 101 (1991): 751–85.
5. For example, Victoria Chick and Sheila Dow, "Formalism, Logic, and Reality: A Keynesian Analysis" (paper delivered at the International Network for Economic Method Conference, Vancouver, June 30, 2000).
6. Cf. Daniel Hausman, "Confirming Mainstream Economic Theory," *Theoria* 13, no. 2 (1998): 261–78.
7. Buchanan, "The Domain of Subjective Economics," 17.
8. See Terence W. Irwin, *Aristotle's First Principles* (Oxford: Clarendon Press, 1990), 193–94, 204.
9. D. B. Rasmussen and D. J. Den Uyl, *Liberalism Defended: The Challenge of Post-Modernity* (Cheltenham & Northampton: Edward Elgar, 1997), 29.
10. Cf. *Politics*, I, 8, 1256b 12-4; I, 10, 1258a 19-21; I, 11, 1259a 33-6. I used Aristotle's *Politics*, ed. and trans. Ernest Barker (Oxford: Oxford University Press, 1958).
11. Cf. Karl Polanyi, "Aristotle Discovers the Economy," in *Primitive, Archaic, and Modern Economies: Essays of K. Polanyi*, ed. G. Dalton (Garden City, N.Y.: Doubleday, 1968), 64–94.
12. I analyze the Aristotelian concept of economy and economics at length in some works: Ricardo F. Crespo, "Aristóteles y la economía," *Philosophia* (1993–1994): 9–84, and *La Economía como Ciencia Moral. Nuevas perspectivas de la teoría económica* (Buenos Aires: Educa, 1997), chaps. 4 and 5.
13. W. L. Newman, *The Politics of Aristotle* (Oxford: Clarendon Press, 1950), 1:138. Hereafter *Pol*.
14. *NE*, II, 1, 1103a 24-5. I used Aristotle's *Nicomachean Ethics*, trans. by H. Rackham (Cambridge: Harvard University Press; London: William Heinemann Ltd., 1934). Hereafter *NE*.
15. *NE*, II, 1, 1103b 24.
16. Cf. *NE*, X, 9, 1179b 31–1180a 4.

17. *Pol*, I, 4, 1253b 25.
18. *Pol*, IV, 11, 1296a 1.
19. *NE*, I, 8, 1099a 31–33.
20. Cf. Gerald P. O’Driscoll and Mario J. Rizzo, *The Economics of Time and Ignorance*, 2d ed. (London: Routledge, 1996), 80.
21. O’Driscoll and Rizzo, *Economics*, 85.
22. *NE*, VII, 9, 1151b, 25-7.
23. *NE*, VII, 10, 1152 a, 26-7.
24. Lawrence Boland suggested that this highlights today’s problem: Much of international trade takes place between peoples with different ethos.
25. Daniel M. Hausman and Michael S. McPherson, *Economic Analysis and Moral Philosophy* (Cambridge: Cambridge University Press, 1996), 51.
26. *NE*, VII, 10, 1152a 7-8.
27. To the notion of belief as used here, cf. Uskali Mäki (1989) “On the Problem of Realism in Economics,” *Ricerche Economiche* XLIII, nos. 1–2 (1989): 176–98, cf. 195.
28. Israel Kirzner said in a personal letter on this topic (July 23, 1998, emphasis in the original): “You suggest that ‘*moral coordination* is an implicit condition for economic coordination.’ Now I have, in other papers, expressed my agreement with the central idea with which you conclude your letter: ‘Economy does not run without a common *ethos*.’ Like you, I do not believe that a market economy (and the economic coordination that it is able to achieve) is feasible, as a practical matter, without a shared moral framework. So that I agree that a condition for the *practical achievement* of economic coordination is (what you call, if I understand correctly) *moral coordination*.” In the same sense, Bruce J. Caldwell affirms: “It seems clear that the existence of a ‘certain moral climate’ is indeed a necessary condition for an economy to be able to function adequately,” “Economic Methodology: Rationale, Foundations, Prospects,” in *Rationality, Institutions and Economic Methodology*, ed. U. Mäki, B. Gustafsson, and C. Knudsen (London and New York: Routledge, 1993), 45–60, cf. 58.
29. Cf. Yves Simon, *Practical Knowledge*, ed. Robert J. Mulvaney (New York: Fordham University Press, 1991), 120.
30. Manfred Riedel, *Rehabilitierung der praktischen Philosophie* (Freiburg: Rombach Verlag, 1972–1974).
31. Leo Strauss, *What Is Political Philosophy?* (Glencoe, Ill.: Free Press, 1959), 21.

32. Kenneth Boulding, "Economics As a Moral Science," *American Economic Review* LIX, no. 4 (1969).
33. Hausman and McPherson, *Economic Analysis and Moral Philosophy*, 7, 8.
34. *Ibid.*, 70.
35. Cf. *Ibid.*, 99.
36. Cf. Wilhelm Hennis, *Max Weber: Essays in Reconstruction* (London: Allen & Unwin, 1988) and "The Pitiless 'Sobriety of Judgment': Max Weber Between Carl Menger and Gustav von Schmoller—The Academic Politics of Value Freedom," *History of the Human Sciences* 4, no. 1 (1991): 27–59.
37. John Finnis, *Natural Law and Natural Rights* (Oxford: Clarendon Press, 1980), 12.
38. Hausman and McPherson, *Economic Analysis and Moral Philosophy*, 5.
39. *NE*, I, 3, 1094b 11-27.
40. *NE*, V, 10, 1137b 17-9.
41. *NE*, I, 4, 1095b 2-4.
42. Gilles-Gaston Granger, "Les trois aspects de la rationalité économique," in *Forme di Razionalità Pratica*, ed. Sergio Galvan, 63–80 (Milan: Franco Angeli, 1992), cf. 80. For two examples, cf. Hausman and McPherson, *Economic Analysis and Moral Philosophy*, chap. 2.
43. I think that P. Boettke and I have agreed on this terminology, cf. Ricardo F. Crespo, "Controversy: Is Economics a Moral Science?" *Journal of Markets & Morality* 1, no. 2 (1998): 201–11; "A Response to Peter J. Boettke," 220–5; and Peter J. Boettke, "Controversy: Is Economics a Moral Science? A Response to Ricardo F. Crespo," *Journal of Markets & Morality* 1, no. 2 (1998): 212–19.
44. Cf. Stefano Zamagni, "Economics and Philosophy: A Plea for an Expansion of Economic Discourse," in *International Economic Relations Seminar Series: Occasional Paper* (Baltimore: Johns Hopkins University, Bologna Center, 1996), 6.
45. Cf. *Wealth of Nations*, IV, introduction.
46. Jeffrey T. Young, *Economics as a Moral Science: The Political Economy of Adam Smith* (Cheltenham: Elgar, 1997), 5.
47. For a review, cf. R. D. Collison Black, "Position and Prospects of Political Economy," in *Methodological Controversy in Economics*, ed. A. W. Coats (Greenwich and London: JAI Press, 1983), 55–70. The term is used by Neo-Marxists, Radicals, Institutionalists, Post-Keynesians, and Public Choice economists.

48. On this issue, cf. Ricardo F. Crespo, “The Rebirth of Political Economy and Its Concept According to Lionel Robbins,” *Jahrbuch für Philosophie des Forschungsinstituts für Philosophie Hannover* 9 (1998): 233–48.
49. Cf. Mark Blaug, “Disturbing Currents in Modern Economics,” *Challenge* 41, no. 3 (1998): 11–34. Blaug affirms: “To pick up a copy of *American Economic Review* or *Economic Journal*, not to mention *Econometrica* or *Review of Economic Studies*, these days is to wonder whether one has landed on a strange planet in which tedium is the deliberate objective of professional publication.... To paraphrase the title of a popular British musical: ‘No Reality, Please. We’re Economists.’”
50. Uskali Mäki, “Two Portraits of Economics,” *Journal of Economic Methodology* 3, no. 1 (1996): 1–38, cf. 34.
51. Inspired in the title and topic of a paper by Roger Backhouse, “Serving Two Masters: Economic Methodology Between Philosophy and Practice” (paper delivered at the INEM Conference, Vancouver, June 30, 2000).