Entrepreneurship, Austrian Economics, and the Quarrel Between Philosophy and Poetry

TYLER COWEN tcowen@gmu.edu

Department of Economics, George Mason University, Fairfax, VA 22030, USA

Abstract. I consider whether entrepreneurship is a distinct category within economic theory. More generally, I consider the links between discussions of entrepreneurship and philosophic debates over the nature of the aesthetic. For instance, Kant's attempt to elevate the category of the aesthetic has much in common with Kirzner's attempt to elevate the concept of the entrepreneur. Shackle's theory of choice refers very directly to the notion of the aesthetic. Theories of the aesthetic and theories of the entrepreneur have common strengths and weaknesses.

Key Words: economic method, entrepreneurship, aesthetics, philosophy and economics

JEL classification: B0, B1, B2, B4.

I. Introduction

Is the entrepreneur a special category within economic theory? Or is the entrepreneur simply another example of the rational, maximizing individual, as exemplified by search theory or human capital models?

Entrepreneurship is a common concept within economics, but basic questions about the nature of the entrepreneur have brought little consensus. The extent positions can be divided into two broad camps. The first group thinks that entrepreneurship is a useful historical category but is analytically nothing special. Most neoclassical economists hold this view, whether implicitly or explicitly.

The second position posits entrepreneurship as a general feature of human action, and distinct in principle from maximizing behavior. In particular many of the Austrian economists have stressed the special nature of the entrepreneur. Israel Kirzner's *Competition and Entrepreneurship*, which outlined a systematic theory of entrepreneurship, is arguably the most influential text in the last thirty years of the Austrian school. Whether they agree with all the details of Kirzner's theory, many other Austrians view the entrepreneurial construct as an important feature neglected by neoclassical economics.

Economics, and Austrian economics in particular, faces the danger (promise?) of being trapped in a "Walrasian box," to use a phrase I once heard from Roger Garrison. The Walrasian box refers to a theoretical construct where all forms of behavior, and all economic outcomes, are explicable in terms of rational maximization and market equilibrium. Most neoclassical economists, especially of the Chicago variety, welcome the Walrasian box. For them, reducing economic phenomena to the Walrasian box is virtually synonymous with scientific progress. Melvin Reder (1982), in his classic *Journal of Economic Literature*

survey article, identified the Chicago school with the "tight prior" assumptions of market equilibrium and the efficient use of information.

Austrian economists have tried to conceive of the entrepreneur in a way that escapes the Walrasian box. They are searching (no irony intended) for an element that lends vitality to economic systems, and yet somehow stands beyond traditional models of efficiently used information. Taking this task as the focus of my paper, I draw on the philosophic literature on *aesthetics* for some potential answers and insights. I consider analogues to the Walrasian box problem in aesthetics, examine a few potential ways out of the problem, critically evaluate those options, and draw some implications for Austrian theories of the entrepreneur. I show that the distinction between Austrian and neoclassical approaches, in some regards, resembles what Plato called the "ancient quarrel between poetry and philosophy." Poetry and philosophy, two distinct ways of looking at the world, have competed for human attention since their beginnings. Until we have resolved this quarrel, and indeed Western thought has not, theories of entrepreneurship will remain hanging or underdetermined.

It is difficult to give a simple account of aesthetics, since a central question is what the field itself consists of. Nonetheless we may think of philosophic aesthetics as examining the phenomenon of "beauty," and our intuitions about beauty, and asking what those intuitions consist of. How can an object be beautiful, what is beauty, and what makes an object a work of art?

I start by focusing on Immanuel Kant, who tried to carve out a separate sphere for knowledge of the aesthetic, as distinct from the traditionally construed knowledge of science or reason. I show that the Kantian aesthetic project, in some critical ways, resembles the Austrian project of trying to establish the entrepreneur as a separate category in economic theory. Both Kant and the Austrians try to outline a kind of human behavior that is not governed by the traditional formulae or rules of inference, and run into the stumbling block of whether such an attempt can ever succeed. Kant tried to put aesthetics on an equal or commensurate footing with science, yet playing by the ground rules established by philosophy. Moving to Austrian economics, Kirzner has suggested that the Austrian theory of the entrepreneur coexists with neoclassical economics but holds a separate explanatory sphere; this solution is analogous to how Kant tried to place the aesthetic in a broader framework consistent with the knowledge of science.

I wish to show that when the Austrian theory of the entrepreneur encounters neoclassical economics, our possible classificatory and analytic responses are richer than the literature has presented to date. Many of the dilemmas in Austrian theory were debated long ago, albeit in modified form, in the literature in philosophic aesthetics. This literature therefore can be used to enrich Austrian economics. At the same time, however, the literature on aesthetics gives us a better sense of the costs of holding Austrian positions vis-à-vis the neoclassical challenge.

The paper will proceed as follows. First I will consider how Kirzner and the Austrians attempt to escape the Walrasian box, and whether this attempt succeeds. I then consider some broader philosophic and aesthetic approaches to analogous problems, focusing on Kant's *Critique of Judgment*. I discuss the views of Giambattista Vico and G.L.S. Shackle (the economist) as well, and how they relate to this problem. I do not pretend to survey these thinkers in depth, nor do I commit myself to a strong position on "what they really meant."

Rather I hope to sample their thought, and draw out some strands relevant to current debates on entrepreneurship and Austrian economics.

II. Israel Kirzner and the Theory of Entrepreneurship

Kirzner's theory of entrepreneurship can be understood as an attempt to escape the Walrasian box. Kirzner is well aware that any coherently specified theory of entrepreneurship may collapse into a broader theory of search. If, for instance, we make the decision to exercise entrepreneurial powers a matter of direct choice, individuals will face an *ex ante* optimizing decision about their entrepreneurial activities. They will equate costs and benefits at the margin, and they will treat entrepreneurship as simply another way of allocating time and creative effort, as might be represented in a model by Gary Becker or George Stigler.

Kirzner, to avoid this conclusion, describes entrepreneurship is terms of alertness or "costless discovery." This emphasis is perhaps clearest in his 1980 essay "Economics and Error." Entrepreneurial alertness brings new knowledge and discovery of a kind that does not result from conscious search or any other traditional optimizing process. We thus have a source of value that comes from "outside the system," so to speak. Discovery constantly injects new value into the system, without those discoveries or that value being reducible in terms of maximizing behavior. Economic systems thus involve fundamental and ongoing sources of newness.¹

Note that this concept of the entrepreneur does not necessarily fit the common sense or historical meaning of the term entrepreneurship. When the term entrepreneurship is presented, most people think of someone like Bill Gates. Bill Gates may in fact be entrepreneurial in the Kirznerian sense, but we cannot infer this from standard biographical information. Gates might have discovered his breakthroughs through processes of conscious search, rather than through serendipitous discovery. In the Kirznerian framework, the person who suddenly notices an extra banana on top of the refrigerator may be a better example of an entrepreneur than is Gates. The Kirzner model is truly logical in nature, but with no direct historical referents of the kind we might expect, given the use of the word entrepreneur.

Kirzner's doctrine also makes room for a theory of error. Not only is the system open in the sense of making room for new discovery, but the system can lose value as well. Individuals make errors, for Kirzner, when they fail to notice opportunities that they could have noticed at zero cost. Error is thus the direct flip side of discovery.

Kirzner's theory of entrepreneurship and error has come under fire from several quarters. Don Boudreaux (1994) and Jack High (1986) both challenge the notion of costless discovery in Kirzner's theory. If discovery truly has no opportunity cost, it appears to be beyond the pale of any kind of economic reasoning, Austrian, neoclassical, or otherwise. No rational calculus of any kind would govern discovery. Furthermore, discovery would not have subjective meaning to the individual agent, since the presence of subjective meaning implies scarcity and calculation, given the limited nature of individual attention. Kirzner's theory almost appears to be an account of automatic bodily functions, rather than an account of how the human mind relates to economic phenomena.²

Perhaps most significantly, it is not obvious that entrepreneurial alertness does in fact break the Walrasian box. Kirzner argues that alertness is not the result of any optimizing

decision or any cost-benefit calculus. But this is hard to accept. The degree of entrepreneurial alertness will almost certainly vary with some set of decisions or another, no matter how we specify alertness. An individual who locks himself in a closet and takes heavy sedative medication is likely to be less alert than an individual who wanders the streets with his eyes and ears open. The latter individual may not be wandering about *with the aim* of being alert, but he is nonetheless more likely to discover something or stumble on a new truth. In this regard entrepreneurial alertness always varies with *ex ante* investment decisions, as the neoclassical model would indicate.

In alternative language, entrepreneurial discovery can never be said to be "costless," because there is no single, uniquely correct definition of cost, as pointed out by Armen Alchian (1968). To provide a simple example, if I am walking down the street I might notice something costlessly. The noticing is costless, but walking down the street is not, since I could have been performing some alternative activity. Most activities will appear costless in one time frame but costly in terms of another time frame, or costless in terms of one set of varying inputs but costly in terms of another set. We cannot answer whether the activity is "truly costless," but rather the matter remains relative to the question we are trying to answer. In this regard an essentialist account of entrepreneurial discovery, as Kirzner attempts to provide, is likely to fail. The underlying category of cost admits of flexible interpretations, relative to the problem at hand.

As I read Kirzner, he intuitively conceptualizes entrepreneurship in terms of Austrian *intentionality*, namely whether the wandering individual "intends" to be alert. If not, Kirzner thinks he has broken the Walrasian box, since the results of that entrepreneurship would then disassociated from any direct maximizing decision. But the neoclassical Walrasian box does not require any notion of "intending" to be alert, whatever that concept of intention might mean. If alertness varies with individual investment inputs, it is subject to the traditional neoclassical cost-benefit calculus, regardless of what "intentional" status it might hold under a more subjectivist account. The neoclassical account of maximization is an *ex post* reconstruction of observed individual behavior, rather than a phenomenological description of the mental processes that underlie choice. Optimizing search therefore can encompass what Kirzner calls alertness.

The related criticisms of Bryan Caplan (1998a, 1998b) suggest that Kirzner is simply redrawing the "returns to effort" curve in search theory. If we imagine a graph with effort on the horizontal axis and returns to effort on the vertical axis, Kirzner is saying that the returns line intercepts the vertical axis at some point above zero. While the intersection may in fact occur at this point, this may not be economically important, given that virtually everyone invests more than zero effort in discovering new information. Even if some logical room for Kirznerian discovery remains, it appears to be an irrelevant theoretical residual, given that so few individuals stand at the point of zero search.

For these reasons, I conclude that Kirzner's attempt to break the Walrasian box fails, or at least remains incomplete as currently stated. The question then arises whether we might develop an alternative account of individual choice that allows for some degrees of freedom, but without encountering the problems encountered by Kirzner's theory of entrepreneurship. With these points in mind, I turn to the theory of aesthetics, and Immanuel Kant's *Critique of Judgment*.

III. Kant and the Aesthetic

Kant, in what is called his "third critique," (*Critique of Judgment*), posed many of the central problems of moden aesthetics. This work provides a profound meditation on the importance of freedom in life, the category of purposiveness, the difference between nature and art, and the link between morality and beauty. John F. Zammito (1992:342), in his lengthy study of the work, describes the *Critique of Judgment* as "Kant's master work on man's complex being-in-the-world."

The central questions of the work are how the aesthetic faculty of the mind is at all possible, and what such a faculty means. Most importantly, Kant conceives the aesthetic faculty in terms of judgments that are not governed by rules or formal canons. In this regard the aesthetic differs from knowledge of science and mathematics. Kant asks how we can have knowledge of a kind that is not reducible to some kind of formula or algorithm. Unlike many of his contemporaries, Kant is not a reductionist about aesthetics. He argues for the independence of aesthetic judgment, rather than its reduction to some other set of categories, such as science.

We thus see an immediate link between Kant's third critique and the problems considered by the Austrian school, especially Kirzner. Kant's notion of aesthetic is hardly the same as Kirznerian alertness, but they address similar problems. Both Kant and Kirzner have sought to explain how elements of freedom can enter an apparently closed system. The fundamental problem is to explain these elements of freedom, to make them intelligible in terms of some other set of constructs, without those explanations destroying or reducing the very source of freedom that is postulated. Arguably this is the very central problem that Austrian economics has had to face, and its conception originates in Kant.⁴

To create room for a realm of the aesthetic, Kant tried to carve out a separate category for beauty, as distinct from a traditional ends-means framework. We value some objects for their adherence to specific rules and forms, such as when we observe that a fishing rod is well-suited for catching fish. Such a rod serves our interests, and we can say that the rod is good, relative to a specific means-ends framework. Beautiful objects offer something to human beings as well, but they cannot be boiled down to rules and formula in similar fashion. Poetry, music, and beautiful paintings do not serve our interests in the same way that the fishing rod does. We perceive the beauty of these objects as something above and beyond the pleasure that we receive from them. Kant postulates that judgments of beauty recognize and value the creator's ability to exercise free play of the imagination, without being tied by definite rules or formulae.

Kant (pp. 56, 58) writes: "There can, therefore be no rule according to which any one is to be compelled to recognize anything as beautiful... The cognitive powers brought into play by this representation are here engaged in a free play, since no definite concept restricts them to a particular rule of cognition. Hence the mental state in this representation must be one of a feeling of the free play of the powers of representation in a given representation for a cognition in general. Now a representation whereby an object is given, involves, in order that it may become a source of cognition at all, *imagination* for bringing together the manifold of intuition, and *understanding* for the unity of the concept uniting the representations."

Kant goes further and suggests that *genius* is the driving force behind the creation of the beautiful. For Kant, the genius "may be defined as the faculty of *aesthetic ideas*." (p. 212). Elsewhere Kant (p. 168) defines genius as "a *talent* for producing that for which no definite rule can be given...", and opposes genius to imitation. In other words, genius is able to engage in the free play of creative imagination that is the source of beauty. We apprehend genius, not through the application of specific concepts or rules, but rather by recognizing "the faculty of concepts generally" (p. 212) in a work. We recognize a kind of purposiveness without specific purpose. Kant (p. 170) is clear that a scientist, no matter how great, cannot exhibit genius, which is restricted to creators of beauty and the aesthetic.

Kant well understood a problem analogous to what the Austrians and Kirzner later faced. Kant grasped that any attempt to account for non-rule-governed behavior tends to explain that behavior in terms of rules and principles, thereby undercutting the very notion of non-rule-governed behavior. The aesthetic thus faces the danger of collapsing into instrumental knowledge, just as entrepreneurship faces the danger of collapsing into optimizing search. Kant (p. 86) saw this tension clearly in his own account of the aesthetic: "But that the *imagination* should be both *free* and *of itself conformable to law...* is a contradiction." If the imagination does follow definite laws and rules, then for Kant we are no longer considering the beautiful, but rather the good, in a kind of formal perfection, and the judgment is no longer a judgment of taste (p. 86). Kant (p. 86) then concludes: "Hence it is only a conformity to law without a law, and a subjective harmonizing of the imagination and the understanding without an objective one—that can consist with the free conformity to law of the understanding ... and the specific character of a judgment of taste."

Kant's doctrines on beauty can be contrasted with earlier aesthetic views of the eighteenth century. These alternatives sought to find the beautiful by looking for general rules that characterize beautiful objects, thus hoping to establish general rules and criteria of taste. Kant believes that such rules can never be found. An object whose effects or properties could be described in terms of such rules would bore us or would be seen as stiff and lacking in inspiration.⁵

Rather than looking for rules in aesthetic objects, Kant inquires about the basic lawfulness of consciousness, and how this lawfulness underlies aesthetic judgment. For Kant, the beautiful is located in the subject, rather than the object. Aesthetic judgments have what Kant calls a "subjective universality" but not an objective universality. Kant does not take the position of extreme aesthetic subjectivism, whereby claims of beauty are merely announcements that a particular kind of object invokes a particular kind of feeling in the observer. For Kant, the claim of beauty has an ought-like force, referring to its potential universality. Kant postulates a "common faculty" for perceiving beauty that underlies all aesthetic judgment and discourse, and claims that our sense of beauty is based on these commonly held presuppositions. The force of a claim about beauty comes from an appeal to these common faculties and presuppositions. Near the end of his discussion of the aesthetic, Kant (p. 227) suggests that these common faculties stem from the capacity of the beautiful to symbolize that which is good and moral (which for Kant *is* objective), but he does not develop this suggestion at length.

According to Kant, subjective universality accounts for the apparently paradoxical nature of aesthetic judgments. Aesthetic judgments reflect both objective and subjective elements

at the same time. On one hand, aesthetic claims are made with a kind of objective force. When we claim something is beautiful, we are claiming that the judgment of beauty ought to command the universal assent of others. Unlike the objective claims of science, however, aesthetic disagreements possess an unresolvable subjective element. When two honest people continue to disagree about the aesthetic merit of an object, it is very difficult for either of them to convince the other, or to adduce evidence for or against the claim of beauty. Neither of them can point to definite rules or formulas that would allow the object to be classified into the "beautiful" or "not beautiful" camp, thus making universal agreement problematic.⁶

Note how the concepts of genius and "creative free play" tie together with the universally subjective validity of aesthetic judgments. Creative free play, and its non-rule-governed nature keep aesthetic judgments from collapsing into the same objective status that science and other forms of knowledge hold. At the same time, the common faculty of the viewers of the beautiful, the ability to appreciate purposiveness without specific purpose, provides a large and open playing field for the operation of creative innovation.⁷

To be sure the modern Austrian and Kantian stories do not allow for direct translation. Perhaps most importantly, the Austrian entrepreneur typically operates in a market economy, while Kant's genius creates beautiful objects in a context devoid of institutions. Nonetheless the Austrian theory relates to the general logic of human action, rather than to market transactions more narrowly, which allows us to draw some parallels between the Austrian and Kantian approaches.

The Kantian notion of genius bears some resemblances to the Austrian notion of entrepreneur. In both cases individuals engage in creative activity of a kind that stands outside of traditional rule-governed behavior. For Kant the foil is the knowledge of science, whereas for the Austrians the foil is neoclassical economics and its theories of search and optimization. Kant tries to show there is a form of knowledge distinct from the rules of science, just as Kirzner tries to illuminate a form of behavior distinct from optimizing search. If we mix Kantian and Austrian terminology, we can say that art viewers value the product of artistic entrepreneurship. Kant refers to those entrepreneurial abilities as "genius," which is the ability to create products that defy description by rules or formal conceptual schemes.

Mises discusses the notion of the genius in his *Human Action*, and appears to have been influenced by Kant and Schopenhauer. Mises, however, regards the genius as standing outside the categories of human action; Mises suggests that the science of praxeology does not apply to the genius. For such an individual the "means" of creating something grand, and the process of creation, provide the relevant ends as well, thus making it difficult to apply a means-end framework to the choices of the genius. Mises calls the creative accomplishment of the genius an "ultimate fact for praxeology," a "free gift of destiny," and claims that society can do nothing to further genius (though it can hinder genius). For Mises, the genius stands even further away from the neoclassical calculus than does the Kirznerian entrepreneur. Mises's notion of genius is not Kant's, but evidently Mises realized just how strong and strange a category is needed to establish Kantian-like conclusions about the uniqueness of some kinds of creations.

We also can introduce Michael Polanyi's concept of tacit knowledge here, although it cannot be found explicitly in the writings of Kant. Polanyi (and Hayek) argued that

much of the economic knowledge in a system cannot be articulated or put into words, just as we are unable to explain how we ride a bicycle without falling off. Aesthetics presents another example of inarticulable knowledge. We have an awareness of the beauty of art in a way that we cannot reduce to verbal categories. In pointing out the importance of the category of the aesthetic, Kant is implicitly drawing our attention to inarticulable knowledge.⁸

Kant and the Consumer

Kant's *Critique of Judgment* emphasizes that the *product* of the genius—the beautiful aesthetic creation—cannot be described by rules. For the Austrians, the *nature* of entrepreneurial behavior stands outside of rules of search and optimization; the Austrians do not emphasize the products of the entrepreneur. While Kant accedes to the uniqueness of the behavior of the genius, he places greater emphasis on the products of genius than on the behavior of genius *per se*.

Oddly, the Austrians focus on the logic of choice for the entrepreneur and do not consider how the products of the entrepreneur, and their properties, might allow for a way out of the Walrasian box, or might help us distinguish entrepreneurship from neoclassical search. In this regard the Austrian theories can learn something from Kant. If the products of the entrepreneur possess special properties, analogous to Kant's notion of how art reflects the free play of the creative imagination, the Austrian theory might receive some additional degrees of freedom. We might, for instance, regard an action as "less entrepreneurial" if it consists of mechanical arbitrage, and "more entrepreneurial" if it builds some new structure, such a firm, with new and unique properties. Such a move would bring the Austrian theory closer to traditional historical and common sense understandings of the entrepreneurial concept.

Ironically Kant's notion of genius is more consumer-oriented and more demand-oriented than is the approach of the Austrian economists. Kant starts first with the "consumer" (i.e., audience) judgment of the product of the genius, and only then moves to the nature of what genius is and does. For Kant, the ultimate demarcation of genius comes in terms of how the audience, with its common understanding of the beautiful, is able to regard the product of genius. Without the possibility of audience appreciation, genius cannot be present. The Kirznerian view of entrepreneurship makes the consumer a central part of the market, but does not involve the consumer in the notion of entrepreneurship. In principle an individual can engage in costless discovery when looking for socks in his or her draw, without the presence of any consumers. In other cases, such as entrepreneurial arbitrage, consumers underpin the market but ultimately they play a passive role vis-à-vis the entrepreneurial concept.

In Kant, the valuation of the consumer is integrated with what the entrepreneur actually does, rather than allowing the two notions to stand separately. Consumers (audiences) value the products of genius, because they derive a sense of beauty from observing the free play of the creative human faculty in the relevant work of art. So it is not just any kind of consumer (audience) valuation that gives rise to beauty and genius. Rather, the consumer (audience) perception must accord with the reality of what is going on, namely the embodiment of

human free play and creativity in concrete material objects. Kantian genius requires a concordance of objective and subjective factors in this fashion.

The Austrian theories have struggled with how the subjective and objective components of entrepreneurship fit together. Kirzner, High (1986), Lachmann (1978), and Shackle (1973) have debated whether entrepreneurial opportunities are "objectively out there," or instead "imagined" or "created" by the entrepreneur. In the modern Austrian debates, those who postulate entrepreneurial opportunities as objective tend to view entrepreneurship as equilibrating. In their view, a set number of objective gaps stand between the real world and equilibrium, and entrepreneurship helps remedy these gaps, thereby driving the equilibrating process. Those commentators who stress the subjective nature of entrepreneurship argue that entrepreneurs imagine new possibilities, and act to bring those possibilities about, in a manner that is not well described by the notion of a tendency towards equilibrium.

This debate remains unresolved within the Austrian school, but we can see what a Kantian perspective might add. If we applied Kant's reasoning towards the aesthetic to the entrepreneurship problem, it would imply that entrepreneurial profit opportunities could not be completely objective in nature. If they were completely objective, the would-be entrepreneur would simply be tracking something that was already there, rather than engaging in the free play of creative faculties. Neither could the profit opportunities be purely subjective either, however, because then entrepreneurial activity could never be commonly recognized as such. The definition of an entrepreneur would be unique to each individual mind, which would violate our ability to form a common understanding of the concept. We thus would need some rapproachment, analogous to that found in Kant, of integrating the objective and subjective perspectives on entrepreneurship. Kant bases his rapproachment on the notion of a common understanding of beauty, found amongst all human beings, as discussed above. If we were to apply an analogous move to a theory of entrepreneurship, we would start with a common understanding of the creative economic act, based on the free play of imaginative faculties, which then become embodied in some economic structure or institution. This would give some objective basis for a notion of entrepreneurship, without suggesting that the entrepreneur is a mere "filler-in" of the gaps that lie between the real world and economic equilibrium.

Are Rules the Proper Organizing Concept?

Like Kirzner's theory of the entrepreneur, Kant's theory of aesthetics is open to serious objections. Just as entrepreneurship may be ultimately reducible to standard models of search and investment in information—that is, to rules—perhaps Kant's notion of the aesthetic is reducible in similar fashion. Kant may be correct in claiming that we cannot describe the reasons for our aesthetic approbation or disapprobation in very exact terms. But in reality, our reactions may be just as rule-driven as when we evaluate a fishing rod for the task of catching fish.

Kant's theory, as he presents it, may be observationally equivalent to the following. Works of art appeal to us because they follow certain complex principles. We cannot articulate these principles very well or very explicitly, but ultimately they are no less rule-driven and mechanistic than other forms of knowledge, including science. What differs is not the nature

of aesthetic judgments, but rather our understanding of how we form such judgments. To draw an analogy with economics, we might assert that all entrepreneurial behavior is driven by search, even if some observed outcomes are harder to predict in terms of a specific search model than others.

To push the point further, Kant's notion of "free play" arguably begs the question. Perhaps we have subconscious rules for recognizing what constitutes free play and what does not, and rules for recognizing what is the product of genius and what is not. Recent studies suggest, for instance, that individuals tend to find symmetric faces more beautiful than asymmetric faces, even though they cannot necessarily articulate the grounds for this preference. The question then arises whether these rules have not become the new rules for beauty, which would appear to knock down the Kantian theory.

Kant clearly stakes out the position that the difficulty in finding rules for beauty is more than epistemic. He (p. 75) notes: "There can be no objective rule of taste by which what is beautiful may be defined by means of concepts. For every judgment from that source is aesthetic, i.e. its determining ground is the feeling of the Subject, and not any concept of an Object. It is only throwing away labor to look for a principle of taste that affords a universal criterion of the beautiful by definite concepts; because what is sought is a thing impossible and inherently contradictory."

Yet Kant does not present a clearly defined notion of the free play of the imaginative faculties. Kant never sorts out how much a judgment of free play is empirical and how much it is transcendental. Nor does he adequately distinguish the outside perspective of the philosopher from the reactions of the individual perceiving the beauty. Kant does emphasize that judgments of creative free play are distinct from finding pleasure in an object, and thus distinct from the notion of interest. But this is telling what the free play faculty is not, rather than what it is.⁹

Under one reading of Kant, the very nature of free play makes it impossible to pin down and identify in advance. Free play, after all, represents something not reducible to formal rules or concepts of formulae. Perhaps we can ask what makes individuals identify certain objects as beautiful, but then we have no more than an empirical illustration of taste, an exemplary instance, rather than a formal rule. This attempted escape from the problem, however, begs the question by assuming a well-defined distinction between a "rule" and an empirical example or exemplary instance. If the found qualities in the object have, in the predictive sense, the ability to induce feelings of beauty, arguably that is enough to claim we have a rule. What else, in fact, could a rule for beauty mean? Kant implicitly operates with an essentialist account of a rule as a notion that transcends empirical prediction, but he never outlines or defends such an account. So we have no reason to reject this empirical account of rules, as principles that predict behavior, as an account of the aesthetic.

Kant's unwillingness to explicate the concept of rule is a serious weakness of his work on the aesthetic. This point, of course, mirrors the later discussion of Wittgenstein on what it would mean to follow a rule (see Kripke 1982). To provide a simple example, if I drive erratically, am I obeying a rule? On one account I am not, since the car is swerving across the street rather than remaining within the lines. On another account I am following a rule, namely the rule to imbibe large quantities of alcohol, put my foot on the gas pedal, and close my eyes. A quick perusal of examples like this suggests that the concept of rule is relative

to human purpose, and relative to an associated conceptual scheme, rather than being found "out there" in the world in some essentialist fashion. Just about any form of behavior, or any object, can be interpreted in terms of rules, if we specify those rules in a particular way.

Or consider another example from macroeconomics, which commonly specifies a distinction between "rules" and "discretion." A rule might say "increase the money supply three percent a year no matter what," whereas discretion might say "keep the money supply constant in good times but gently inflate as unemployment threatens to rise." The latter set of instructions we typically call discretion, but it differs from a rule by degree only. It specifies two potential responses to two possible world-states, where the strict rule specifies one response to all world-states. We can draw lines between more and less complex forms of instruction for the central banker, but any line we draw will be based on analytical convenience. It will not be a hard line rooted in strictly logical categories. Again, the concept of a rule becomes relative to what is useful for a particular discussion or a particular theory. We need not throw the idea of a rule away, but surely we have relativized it and thus relativized Kant's notion of beauty and the aesthetic.

Once we move to such a relativist notion of rule, Kant's approach falls apart, at least as stated by Kant. Whether the beautiful and the aesthetic are "governed by rules" is then no longer objectively given by the scheme of things, but rather depends on the conceptual scheme in which we are operating, or on the purposes of a concrete discussion.

This critique of Kant in fact is consistent with some later Austrian insights. The Austrians insist that non-rule-governed behavior operates in every sphere of life, as a general category of human action. Suddenly aesthetics (in the Kantian sense) is no longer a separate sphere for investigation but rather is found in all areas of human activity. Insofar as we accept the notion of non-rule-governed behavior as meaningful at all, the Austrian view would appear to be correct. This undercuts the Kantian project of trying to identify non-rule-governed behavior exclusively with the aesthetic, and undercuts the Kantian attempt to draw a sharp line between the aesthetic and science.

Can Kantian Aesthetics be Saved?

Saving Kant's aesthetics, or some aspects of it, requires us to carve up explanatory categories in a different way. The extreme nature of Kant's method placed a burden on his theory. Across his three critiques he sought to place the entirety of natural and spiritual existence under the heading of "reason." He had to modify the Enlightenment concept of reason for this endeavor to succeed in his eyes, but his program is monistic, totalizing, and comprehensive in scope. All parts of the system should be tied together and each should have its proper sphere. Kant was enamored of constructing schema, as a reading of *Critique of Pure Reason* indicates. In his final philosophic scheme, aesthetics needed to stand independently of other aspects of human existence, and to have its own sphere of operation.

An alternative tradition in Western thought, represented by such figures as Giambattista Vico, gives poetry a role that is both looser and more important. To return to Plato's question about the quarrel between philosophy and poetry, Vico awards the leading honors to poetry. He saw the aesthetic as arising in many contexts, including in historical data and myth, and indeed in political and communal life itself. Kant put the aesthetic on a par with instrumental

reasoning, and claimed a kind of shared draw between poetry and philosophy, but Vico elevates the aesthetic over scientific and historical knowledge. For Vico, the deepest and most enduring truths about human existence are to be found through a study of myth and art. Consistent with this hypothesis, Vico's major work, the *New Science*, opens with a plate of art, which he takes to illustrate the central themes of the work. Throughout the work, he attempts to divine truths about history and politics by studying the content of myth and poetry, most of all the works of Homer, which Vico takes as an Urtext of sorts.¹¹

Vico's perspective on aesthetics might salvage some of the claims of the Austrian school. More specifically, we could think of Austrian and neoclassical economics as two separate spheres of knowledge. Austrian truths do not detract from neoclassical truths, any more than aesthetic truths detract from scientific or historical truths in the scheme of Vico. Nonetheless the aesthetic truths, or in this case the Austrian truths, stand higher or somehow rank as more fundamental. This attitude would imply that Austrian economics comes closer to giving us real insight into the nature of the world, whatever its drawbacks from the point of view of scientific method. In this view, Austrian economics would contain a kind of "primeval wisdom" about the market economy, just as Vico thought that the works of Homer contained primeval wisdom about the origins of man, society, the state, and violence. That being said, Vico did not see the Homeric truths as somehow substituting for the truths of science.

Vico's schema, if applied to the questions at hand, may prove a mixed blessing for Austrian economics. On one hand, Austrian economists may welcome the "elevation" of their truths over those of the neoclassical economists. They believe in studying truths that are somehow deeper, more profound, or more fundamental than what other schools of thought provide.

This elevation, however, comes at a price. Precisely because it is concerned with deep and primeval truths about a market economy, it becomes harder to imagine Austrian economics as a progressive research program, or as a competitor to neoclassical economics. The very elevation of Austrian economics would remove it from the realm of science as traditionally understood. Austrian economics might in fact end up with a status similar to Homer's poetry. The Austrian texts would be seen as extremely profound works, of vital importance to understanding the world, but more like texts to be studied than as works demanding a modern sequel. In some regards this picture is closer to what the critics say about Austrian economics, rather than what its defenders might like to hear. We need not oppose the idea of writing sequels to Homer, and in this regard Austrian economics may not be totally dead, but we should not expect good sequels to be frequent either. 12

This perspective, if correct, would help us understand the current dilemma of the Austrian school. The Austrians would indeed possess profound truths, and feel neglected by the broader profession, just as those who study the classics (e.g., Homer, or Kant and Vico for that matter) feel neglected by the modern outside world. It predicts that most Austrians would devote great attention to history of thought and economic method, which is indeed the case. And it predicts that Austrian economics does not, and never would, form a strongly progressive research paradigm, at least not of the kind that would be required to displace neoclassical economics. The Austrian economists themselves would be frustrated and torn between two perspectives. They would hold one desire to achieve higher professional status

and spread their profound truths to the outside world, and would hold another, conflicting desire to remain true to the study of classic texts, as the nature of their enterprise dictates.

IV. G.L.S. Shackle

I read G.L.S. Shackle as the economist who comes closest to the perspective of Vico on the primacy of the aesthetic. Shackle outlines a vision of the individual human being in the broader economic order, especially in his 1973 *Epistemics and Economics* and his 1979 *Imagination and the Nature of Choice*. I view his work as constructing a poetry of individual choice. Shackle emphasizes the "Unknowledge" behind choices, which he distinguishes from probabilistic uncertainty or ignorance. It is up to the chooser to imagine the future, thus making history by bringing about new and previously unforeseen states of affairs. We do not draw from known lists of possible outcomes, but rather create new skeins with our imaginations.

Like Kant's notion of the aesthetic, Shackle considers choices that are not bound by generalizable rules or formulas. For Shackle, the individual choice is marked by surprise, uniqueness, and its irreducibility to formulae of mathematical probability. The individual literally creates the choices before him, through the use of imagination. In a letter, Shackle once presented the essence of his choice theory:

- 1. "The right word is not uncertainty but *Unknowledge*. We know a little about the texture of the material, but nothing about how history will cut the garment.
- 2. Knowledge of the texture can perhaps tell us what can be made to seem possible by specified use of specified resources, on condition of exposing us to what misfortune. The right question for the enterprise-investor to ask is: *At best*, and *at worst*, what *can* the sequel be if I do this, or this?
- 3. If, in the elemental sense, history is made by human decisions (that is to say, if a decision can be in some respects an uncaused cause) the sequels of specified action will be in principle (and not merely in practice) *unlistable*.
- 4. If so, the claim of any hypothetical sequel to be taken seriously, its *epistemic standing*, cannot be appropriately expressed as a *share of certainty*, for this share will be affected by the number of rival hypotheses, which number (we are assuming) can increase without limit. We therefore cannot say that any given list of them is completely, nor that it is completeable. Instead, my scheme requires imagined sequels to be judged possible or not possible. Then by taking *disbelief* instead of belief, as the expression of epistemic standing, we express perfect (subjective) possibility as *zero disbelief*. This is a non-distributive variable and enables the highest level of epistemic standing to be assigned to each of an unlimited number of hypotheses.
- 5. *Disbelief* can be given an emotional interpretation (a meaning in terms of feeling, so as to be deemed capable of different intensities) and thus made quantifiable, by identifying it with potential surprise. If we wish, we can then refine in some sense the notion of 'best' and 'worst' imagined sequels amongst those deemed *possible*, by referring instead to the bet and worst *not too difficult* to envisage as coming true."¹³

Not surprisingly, Shackle's message has had little impact on neoclassical economics. Shackle partisans tend to be found among either the Austrian or the post-Keynesian schools of thought, which are more amenable to abandoning formal modes of reasoning for a more discursive analysis of choice.

Unlike Kirzner, who implicitly subordinates poetry to philosophy, Shackle self-consciously sides with poetry. *Imagination and the Nature of Choice* is arguably Shackle's most aesthetic work. In that book (1979:60) he sums up his view: "The business of choice, I am maintaining, is the business of imagination. The business of historiography, therefore, is the effort to penetrate one man's imagination by another's. Evidently, such art of historiography will be precarious and unsure, it will be 'poetry'. The Greeks believed it was the poet who could get nearest the truth." Shackle made clear a similar attachment to the aesthetic in private correspondence: "I should have wished to write a poem, but not being a poet, I have had to be content with a sort of New Arabian Nights of disreputable adventures in an intellectual shadow world." *Epistemics and Economics* continually refers to the aesthetic tradition, and the opening paragraph of the preface even presents a short poem to summarize the point of the work.¹⁴

Not surprisingly, Shackle distinguishes his views from Kirzner's theory of entrepreneurship, albeit in passing. He (1988:205) refers to Kirzner, who "regards the entrepreneur as alert rather than himself creative." Shackle thus stands closer to the tradition of Schumpeter, although Shackle portrays the entrepreneur as a choosing human being, in contrast to Schumpeter's emphasis on innovation and business activity.

Shackle's writings make little direct reference to philosophy, but his ideas have a notable philosophic bent. Shackle does not acknowledge Kant or Kant's third critique (or Vico) as a possible inspiration, and we can only guess about Shackle's familiarity with the book. Shackle (1979:1) does, however, cite Descartes as an epistemological foundation for his work. He cites the Cartesian view that we experience our own thoughts and their transience, rather than having direct knowledge of the outside world. Shackle sees this epistemology as a background justification for his emphasis on Unknowledge, presumably not accepting Descartes's ascent into knowledge through the invocation of an external Deity. Shackle can be read as Proustian in this regard, although we see no textual evidence of a familiarity with Proust. ¹⁵

Many of the Austrians interpret Shackle through the eyes of Ludwig Lachmann and his post-Keynesian tendencies. Lachmann is well-known for arguing in Austrian circles that the market economy does not have a systematic tendency to equilibrate; he sees no reason why we should believe that the equilibrating forces are stronger than the disequilibrating forces. Shackle, with his emphasis on the lone choosing individual, is seen as providing an even more nihilistic account.

I view Shackle's contribution in different terms. Shackle, in addition to his work on choice, has produced several contributions to mainstream economics, some of which are quite orthodox in nature (see Carter and Ford 1972 for a survey). These other contributions do not square with the Lachmannian reading of Shackle, and would force us to postulate an "early" vs. "late" Shackle. Yet Shackle repeats many of his earlier contributions in his later writings, which suggests he never repudiated them. Shackle refers to economic science as a "great and remarkable achievement" (1973:49), leading to "broad intelligibility and visible

structure." Without economics, the world would appear as "a mere chaos of proliferating and unintelligible detail, reasonable and orderly only in the small." It is hard to imagine a clearer rejection of analytic nihilism.

Many Austrians read Shackle as a Lachmannian nihilist because their conceptual scheme does not recognize a distinction between philosophy and poetry. In their eyes Shackle's work on choice must somehow "overturn" neoclassical economics and cannot comfortably coexist with it. I am suggesting that this tension is illusory, no more real than the tension between Homer and Galileo, or between James Joyce and Einstein.

Shackle's own writings show a strong and recurring concern with the relative scope of economic science. From the first chapter of *Epistemics and Economics*, he is virtually obsessed with this methodological question, and the question of how different approaches or sciences might fit together or coexist in differing spheres. Many of Shackle's remarks in this regard may seem ordinary, but in fact they are central to understanding his contribution. Shackle stresses the importance of non-economic dimensions for understanding the human condition. He writes that "the practice of treating economics as a self-subsistent science would be astounding to a Renaissance scholar," (p. 39), and calls this view a "mutilation of the General Human Affair." (p. 39). His program is to escape the Walrasian box, not by overturning neoclassical economic theory, but rather by developing alternative sources of insight, most of all his own poetic accounts of the uniqueness of individual choice in the local situation of an individual.

Shackle is careful not to fall into the traps that bedeviled Kant. For Kant, the aesthetic needs to be a separately carved out dimension, reflecting Kant's concern with establishing the independence of aesthetic judgment. Shackle reads as closer to a modern pluralist or pragmatist. Frameworks for understanding the world invariably overlap and spill over into each other, while each remains incomplete. The different ways of viewing reality are useful, and shed light on the human condition. But we should not expect the sum of all available approaches to provide a comprehensive account of reality. Shackle thus need not defend any particular criteria of demarcation for his theory of choice or for the aesthetic. This perspective is a liberating one, and in fact renders nugatory some of the strongest criticisms of Kant's theory.

Shackle's perspective also allows us to sidestep the problems with the inherently relativistic or context-dependent notion of a rule (a central problem in Kant's approach, see above). Shackle neither emphasizes nor defends a distinction between rule-governed and non-rule-governed behavior. Instead, for Shackle the question is whether the skein of possibe outcomes can be enumerated in advance. If not, then the choosing human mind is engaged in creative activity, thus breaking what I have called the Walrasian box. Shackle introduces "newness" into the system by postulating newly imagined states of the world, rather than making the Kirznerian move of invoking alertness.

Note how Shackleian newness differs from its Kirznerian counterpart. For Kirzner, the newness must be defined *in the terms of the model*. That is, the implicit model of the economy must postulate some source of new knowledge, namely alertness, which does not enter the model in terms of optimizing search. For Shackle, the newness need only exist in the subjective dimension of the aesthetic, in the poetic grasp of the individual human mind.

Just as Kirznerian alertness tends to collapse into search, Shackleian individual choice might be subsumed under the category of Bayesian probabilities, in terms of an *ex post* reconstruction of individual choice. Shackle, however, takes great care to avoid such a reduction. Most importantly, man is seen as creating his own history (a theme also prominent in Vico, I might add). We therefore can always imagine a longer or shorter list of possible rival skeins for the future. By taking the imaginative individual decision, and individual free will, as a choice variable (at least in methodological terms), Shackle defies any attempt to express this process in terms of probabilistic reasoning. We do not choose in light of a given set of probabilities. Rather we, through our choices and acts of imagination, decide what the possibilities are going to be. For Shackle, the phenomenological description of how such imaginative acts are made is prior to any theory of probability or expected utility.

Furthermore, the Bayesian maneouvre, even if it succeeds, only eliminates newness in terms of one particular model. In the realm of the aesthetic, the unique poetic creation of individual choice, the continual supply of newness remains strong. Individuals imagine futures that they had not thought of before, and help bring those futures into being. The world contains continual newness just as the works of Homer, Shakespeare, and Tolstoy bring the new. The newness of those works, in the aesthetic perspective, is not vitiated by the fact that these authors may have followed a cost-benefit calculus when writing.

We might even look to this conception of newness as a potential distinguishing feature between philosophy and poetry. Philosophy in the broad sense, which includes the subdiscipline of economics and rational choice, attempts to explain the newness in the world in terms of more basic categories and models, thus fettering this newness within a conceptual schema. In this regard Kant was a philosopher par excellence, most of all in his theory of aesthetics. Poetry, in contrast, does not try to "explain" anything, but rather revels in the ongoing creation and enjoyment of this newness in the aesthetic plane of human existence.

V. Concluding Remarks

I have only surveyed a smattering of writing from the aesthetic tradition. A deeper and more thorough investigation would have to consider such thinkers as Shaftesbury, Artur Schopenhauer, Dewey, Heidegger, and the modern philosopher Arthur Danto, among many others. Each of these writers ask questions similar to those considered in this paper and propose unique answers. Their insights might add some weight to an Austrian theory of entrepreneurship.¹⁷

I also have neglected a particular favorite of mine, namely Plutarch. I view Plutarch as one of the most insightful writers on both entrepreneurship and the relationship between philosophy and poetry. Plutarch tries to revise Plato's quarrel and restructure the entire categories of philosophy, religion, and poetry. Plato, at least under one reading, presents philosophy as opposed to and separate from both the public life (i.e., politics) and poetry. Plutarch's writings try to show that a true Platonism integrates wisdom, the political life, entrepreneurship, poetry, and revelation in one consistent package. Central to Plutarch's ouevre is the notion of the moral entrepreneur, the individual who chooses a virtuous lifestyle, leads in innovative fashion, and combines the best of poetry, philosophy, and

revelation. I hope, however, to consider the philosophy of Plutarch in more detail in separate writings, so I have largely left his ideas aside in this paper.

For the time being, we are left with two doctrines, Kant's theory of aesthetics and the Austrian theory of the entrepreneur. Each can learn something from the other, but each also pokes some holes in the other. The confrontation between these two views, however, leaves us with something stronger—we can now ask more interesting questions than before.

Acknowledgments

The author wishes to thank Peter Boettke, Bryan Caplan, and Daniel Klein for useful comments and discussions.

Notes

- 1. Harvey Leibenstein's (1970) theory of X-inefficiency constitutes another attempt to break the Walrasian box. Klein (1999), in his very important essay on the "Deepself," derives newness from the interaction between multiple selves in a single individual. I view this approach as more promising than Kirzner's.
- Kirzner does sometimes claim, inconsistently in my view, that entrepreneurship varies with incentives; Klein (1999:48–49) discusses the relevant Kirznerian texts. Demsetz (1983) charges that Kirznerian alertness is no more than "dumb luck."
- 3. On Kant more generally, I have also found Hoeffe (1994) and Guyer (1979) to be useful.
- 4. Oddly, the Austrians have neglected Kant's third critique. Commentators frequently note that Ludwig von Mises was a neo-Kantian in his philosophy, yet the deeper connections between Kant and the Austrian school are rarely drawn. Mises is associated almost exclusively with Kant's notion of the synthetic a priori in his *Critique of Pure Reason*, neglecting the other linkages.
- 5. On this earlier context of other aesthetic theories, see Cassirer (1981, chapter VI) and Zammito (1992). Kant, however, stops short of the later German romantic view that the aesthetic spontaneity of fantasy, as rooted in the genius idea, is a founding principle for all judgment. The sphere of genius remains restricted to the aesthetic realm, which Kant, unlike the later romantics, circumscribes severely from the realms of morality and science. The moral law still remains supreme, although the free play of the imagination is still given its own autonomous realm. On this contrast between Kant and the romantics, see the useful remarks of Cassirer (1981:323–324).
- 6. Kant's own exposition on these points is more muddled, and difficult to follow, than the rather simpler argument I present in this paragraph.
- 7. In this paper I neglect Kant's theory of the sublime, although it is important to his thought. In eighteenth century, the notion of the sublime marked a kind of limit to empiricism. The sublime, as represented by the "horrors" of immense nature, such as a mighty ocean wave or a large mountain, ruptured the ability of the empirical faculty to conceive of the world in terms of smooth and pure repetitions of known basic patterns. See the remarks of Mazzotta (1999:60).
- 8. See the remarks of Beiner (1983) on Kant and Polanyi in this regard.
- 9. On these criticisms, see Zammito (1992:116).
- $10. \ \ On \ this \ reading \ of \ Kant, \ which \ I \ find \ plausible, see \ Zammito \ (1992:118-119).$
- 11. Vico (1688–1744), an eighteenth century rhetoric professor from Naples, often receives scant attention in the Anglo-American world. His elliptic and partly poetic style of writing contributes to the difficulty of interpreting him. Vico nonetheless has exerted a wide and profound, though uneven, pattern of influence. He is arguably the most significant and influential eighteenth century Continental thinker after Montesquieu and Kant. James Joyce's Finnegans Wake is patterned after Vico's New Science. Amongst modern political philosophers, Isaiah Berlin (1992) has done the most to stimulate interest in Vico's work. Berlin reads Vico as a historicist, a romantic, and a precursor of the later Counter-Enlightenment. Berlin's reading is by no

- means universally accepted. The literature on Vico offers multiple interpretations; I prefer Mazzotta (1999) of all the extant treatments. The German romantics, such as Schelling and the Schlegels, are other prominent representatives of the aesthetic tradition in the history of Western thought. See Cowen (2001, chapter one) for more on this topic, and see Gould (1990) on the history of the long quarrel between philosophy and poetry.
- 12. Blaug (1992) is one critic who stresses the non-progressive nature of the Austrian research program.
- 13. Personal correspondence of Shackle, to Frowen, reproduced in Earl and Frowen (2000:xviii). See also the treatment of Shackle in Buchanan and Vanberg (1991), who explicitly contrast Shackle with Kirzner.
- 14. Cited in Littlechild (2000:323), the letter is from 1974.
- 15. On the link between Shackle and Descartes, see the remarks of Parsons (2000, especially pp. 125–126). Parsons (p. 139) offers some brief remarks on Shackle and Kant as well, though he considers only *Critique of Pure Reason*, not *Critique of Judgment*. Shackle's "General Thought Schemes and the Economist" (reprinted in Shackle 1990) has the general flavor of Kantian epistemology, with its emphasis on the need for mental schema, but does not cite Kant directly.
- Caplan (1998a, 1998b) suggests that the Knightian theory of uncertainty, embraced by Kirzner and the Austrians, suffers from this problem.
- 17. Schaeffer (2000) provides an insightful survey of many other aesthetic writings.

References

Alchian, A. [1977 (1968)] "Cost," International Encyclopedia of the Social Sciences, vol. 3, pp. 404–415. Reprinted in Armen A. Alchian (Ed.) Economic Forces at Work. Indianapolis, Indiana: Liberty Press.

Beiner, R. (1983) Political Judgment. Chicago: University of Chicago Press.

Berlin, I. (1992) Vico and Herder: Two Studies in the History of Ideas. London: Hogarth.

Blaug, M. (1992) The Methodology of Economics, or, How Economists Explain. Cambridge, England: Cambridge University Press.

Boudreaux, D. J. (1994) "Schumpeter and Kirzner on Competition and Equilibrium." Edited by Peter J. Boettke and David Prychitko, Edward Elgar.

Buchanan, J. M. and Vanberg, V. J. (1991) "The Market as a Creative Process." Economics and Philosophy, 7: 167–186

Caplan, B. (1999) "The Austrian Search for Realistic Foundations." Southern Economic Journal, 64(4): 823–838.
Caplan, B. "Why I Am Not an Austrian Economist." At: http://www.gmu.edu/departments/economics/bcaplan/whyaust.htm, 1999b.

Carter, C. F. and Ford, J. L. (1972) Uncertainty and Expectations in Economics: Essays in Honour of G.L.S. Shackle. New Jersey: Augustus M. Kelley.

Cassirer, E. (1981) Kant's Life and Thought. New Haven: Yale University Press.

Demsetz, H. "The Neglect of the Entrepreneur." In: Ronen, J. (Ed.) *Entrepreneurship*, pp. 271–180. Lexington, MA: D.C. Heath and Co.

Earl, P. E. and Frowen, S. F. (2000) "Introduction." In Economics as an Art of Thought: Essays in Memory of G.L.S. Shackle, pp. xiii–xxvi. New York: Routledge.

Gould, T. (1990) The Ancient Quarrel Between Poetry and Philosophy. Princeton: Princeton University Press.

Guyer, P. (1979) Kant and The Claims of Taste. Cambridge: Harvard University Press.

High, J. (1986) "Equilibration and Disequilibration in the Market Process." In: Kirzner, I. (Ed.) Subjectivism, intelligibility, and economic understanding: essays in honor of Ludwig M. Lachmann on his eightieth birthday, pp. 111–121 New York: New York University Press.

Hoeffe, O. (1992) Immanuel Kant. Albany: State University of New York Press.

Kant, I. [1954 (1790)] The Critique of Judgement, translated by James Creed Meredith. Oxford: At the Clarendon Press.

Kirzner, I. (1973) Competition and Entrepreneurship. Chicago: University of Chicago Press.

Kirzner, I. (1978) "Economics and Error." In: Spadaro, L. M. (Ed.) New Directions in Austrian Economics. Kansas City: Sheed Andrews and McMeel.

Klein, D. (1999) "Discovery and the Deepself." Review of Austrian Economics, 11: 47–76.

- Kripke, S. (1982) Wittgenstein on Rules and Private Language: An Elementary Exposition. Cambridge, MA: Harvard University Press.
- Lachmann, L. M. (1977) Capital, Expectations, and the Market Process: Essays on the Theory of the Market Economy. Kansas City: Sheed Andrews and McMeel.
- Leibenstein, H. Beyond Economic Man: A New Foundation for Microeconomics. Cambridge, MA: Harvard University Press, 1976.
- Littlechild, S. C. (2000) "Disreputable Adventures: The Shackle Papers at Cambridge." In: *Economics as an Art of Thought: Essays in Memory of G. L. S. Shackle*, pp. 323–367. New York: Routledge.
- Mazzotta, G. (1999) *The New Map of the World: The Poetic Philosophy of Giambattista Vico*. Princeton: Princeton University Press.
- Parsons, S. D. (2000) "Shackle and the Project of the Enlightenment: Reason, Time, and the Imagination" In: *Economics as an Art of Thought: Essays in Memory of G. L. S. Shackle*, pp. 124–148. New York: Routledge.
- Polanyi, M. (1962) Personal Knowledge: Towards a Post-Critical Philosophy. Chicago: University of Chicago Press.
- Reder, M. W. (1982) "Chicago Economics: Permanence and Change." *Journal of Economic Literature*, 20(1): 1–38.
- Schaeffer, J.-M. (2000) Art of the Modern Age: Philosophy of Art from Kant to Heidegger. Princeton: Princeton University Press.
- Shackle, G. L. S. (1972) *Epistemics & Economics: A Critique of Economic Doctrines*. Cambridge, England: Cambridge University Press.
- Shackle, G. L. S. (1979) Imagination and the Nature of Choice. Edinburgh: Edinburgh University Press.
- Shackle, G. L. S. (1988) "Business, Time and Thought: Selected Papers of G.L.S. Shackle." edited by Stephen F. Frowen. New York: New York University Press.
- Shackle, G. L. S. (1990) "Time, Expectations, and Economics: Selected Essays of G.L.S. Shackle." edited by J. L. Ford, pp. 179–194. Aldershot: Edward Elgar.
- Vico, G. New Science. The first edition was originally published in 1725. The very different second and third editions date from 1730 and 1744, respectively.
- von Mises, L. Human Action: A Treatise on Economics. New Haven, Ct.: Yale University Press.
- Zammito, J. H. (1992) The Genesis of Kant's Critique of Judgment. Chicago: University of Chicago Press.