

Praxeological Entrepreneurship

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Abstract

This paper describes a concept of the praxeological entrepreneur that is derived from Ludwig von Mises's prerequisites and properties of action. It is a response to a claim by Tyler Cowen that Austrian economics should seek inspiration for such a concept in poetry or, more specifically, in the writings of G. L. S. Shackle. The paper claims instead that Austrian economics should seek its inspiration in the writings of Mises. The paper presents a brief history of entrepreneurship in Austrian economics and then describes Cowen's views. This is followed by a discussion of Mises on the concepts of action, uncertainty, and modeling. The last two parts of the paper outline the concept of praxeological entrepreneurship as it has developed in the author's published works and works in progress. The paper ends with a brief discussion about the practice of Austrian economics today.

Praxeological Entrepreneurship

[I] recently attended a symposium on “Austrian Economics” at which few of the academic participants understood either the basic fine points of Misesian contributions or the value of his carefully selected terms and definitions...Some, unaware of the basic contributions of Mises, were eager to pass him by and use the terms, ideas and methodologies popular in our academic world to promote what they considered “Austrian” economics. Finding the teachings of Mises so poorly understood and appreciated, [I] was moved to exclaim, “You have to come up to Mises before you can go beyond him.” A few applauded, but the majority paid little heed. As our economic problems deepen, there is a growing interest in “Austrian” economics, but unfortunately few appreciate the heights to which Mises’ contributions have raised it (Percy Greaves in Mises, 1978a, p. li).

The purpose of this paper is to describe the concept of the praxeological entrepreneur and to tell something about its history. I take it that “praxeological entrepreneur” refers to a concept of entrepreneurship that captures what is distinct about human action under the conditions of the market economy. The article is partly a response to (or comment on, as one may wish) a recent paper in this review by Tyler Cowen (2003). The abstract of Cowen’s paper says that he is interested in the entrepreneur as a distinct category in economics and that he seeks inspiration for comprehending and elucidating this category in philosophical debates relating to aesthetics and in G. L. S. Shackle’s theory of choice. I believe that he should have looked elsewhere. Specifically, he should have looked at Ludwig von Mises. In this paper I explain why. In addition, I try to show how my efforts to expand Mises’s concept of the entrepreneur to make it more praxeological provide answers to the questions that Cowen raises about the current state of entrepreneur theory in Austrian economics. In addition, I assess other efforts to develop such a concept, particularly those of Mises himself and Israel Kirzner.

Part 1 of the paper puts the argument in context by presenting a critical partial history of the concept of the praxeological entrepreneur in Austrian economics. Part 2 summarizes the salient aspects of Cowen’s ideas on the subject. It focuses especially on his claim that the Austrian entrepreneur concept does not provide a clear escape from what he calls the “Walrasian box.” Part 3 shows that Mises sought to develop concepts of human action and entrepreneurship that are outside that box. Part 4 describes some of my work on the subject. Part 5 discusses the concepts of imagination, creativity, and inventiveness as they apply to entrepreneurship. Part 6 presents a brief conclusion.

1. THE ENTREPRENEUR IN AUSTRIAN ECONOMICS BRIEFLY

So far as I have been able to determine, the first economist in the Austrian tradition to suggest a praxeological concept of the entrepreneur was Herbert Davenport in his proposal that the proper way to conceive of the market economy is to take the “entrepreneur point of view”.¹ Although Davenport did not completely work this out because of his interest in other aspects of price theory, his meaning was that every concept that the economist uses in his descriptions of goods, factors of production, markets, competition, etc. ought to pass through the lens of the appraising, undertaking, and uncertainty-bearing entrepreneur. Thus, for example, when we say that “X” is a factor of production, we mean that someone acting in the role of the entrepreneur must have attached a positive money value to “X” in a production plan that he is uncertain will succeed. This idea is consistent with Carl Menger’s concept of a higher-order good, which requires someone who has knowledge of the causal connections, who can control its use, and who conceives of a want that can be satisfied with it.²

Austrians and neo-Austrians have largely ignored Davenport’s writings on entrepreneurship. The first Austrian writer to expound a concept of entrepreneurship that hints of being praxeological is Ludwig von Mises,³ who seems as if he wanted to develop a praxeological concept. For example, he wrote that the entrepreneur function is “inherent in every action and burdens every actor” and that the entrepreneur is not an ideal type but a functional category that is integrated with other functions.⁴

¹Davenport 1914. See Gunning (1998) for a review of Davenport’s ideas on entrepreneurship and their relationship to Austrian economics. The paper defends the view that Davenport was “in the Austrian tradition.”

²See Menger 1981: 52.

³Other Austrian writers who might be regarded as predecessors of Mises are Friedrich von Wieser (1927) and Hans Mayer (1928). However, nothing in the work of these writers suggests an appreciation for the praxeological concept, which seems only to have emerged after Mises worked his way through the “epistemological problems” of economics.

⁴See, respectively, Mises 1966: 253 and 61.

Moreover, Mises devoted more effort than any other economist to identifying the properties and qualities of distinctly human action. Nevertheless, he did not define entrepreneurship as the manifestation either of (1) all of the properties and qualities or (2) of any subset of these properties and qualities to the exclusion of psychological assumptions.

Mises mostly wrote about “promoters” who are more eager to earn profit, more venturesome, and have a “quicker eye than the crowd.”⁵ These appear to be psychological characteristics. His main use of the promoter concept was to help comprehend a market process the result of which he asserted would be an equilibrium if conditions did not change.⁶ In the following we refer to this concept as the “promoter entrepreneur.” It is not easy to distinguish between the specific action properties of the promoter entrepreneur and the psychological ones.⁷

When Mises referred to the entrepreneur function, he had in mind a system in which people who perform this function were integrated with landowners (farmers), capitalists and workers – as if

⁵*Ibid.*:254-5.

⁶See Mises 1966: 355-6. However, he also writes that these promoters are the agents of progress. Specifically, they accumulate capital by making use of saving and of technological advance, although the actual causal sequence is anything but clear. On the basis of Salerno’s interpretation, we might be inclined to say that the process begins with a change in time preference (Salerno 2001: 50). Next there is an increase in saving. Then the promoters use the saving to produce capital goods, which may yield technological advance but which would certainly elongate the structure of production. Support for this comes from Mises’s discussion of saving in relation to capital goods. Mises writes:

At the outset of every step forward on the road to a more plentiful existence is saving – the provisionment of products that makes it possible to prolong the average period of time elapsing between the beginning of the production process and its turning out of a product ready for use and consumption (Mises 1966: 260).

However, a change in time preference is not the only source of saving (*ibid.*: 515-6). Moreover, Mises does not always claim that increased saving leads to elongated production structures and, of course, there is no reason to expect this (*ibid.*: 495). Technological advance can be of many types.

⁷The point is that Mises made no effort to associate these promoter characteristics with what he had meticulously derived as the properties of action. It can be argued that “eagerness to profit” is the market equivalent of an isolated actor’s motivation to act, that venturesomeness means a willingness to act on that eagerness and to bear uncertainty, and that keenness of eye means an ability to imagine a future state that is better than some alternative possible state. The latter are, suitably understood, properties of action. One who thinks of them in this way would assume that Mises’s use of the promoter is mainly designed to add the assumption that people differ. This assumption is based on practical fact, not psychology. There are problems with this view, however. First, as mentioned, Mises himself does not make the connection. Second, the terms are not exact matches. “Eagerness” suggests more than just “desire.” Venturesome suggests more than just the necessity of bearing uncertainty. And keenness suggests more than just a capacity to imagine more suitability conditions. He also neglected what I call the qualities of entrepreneurship – imagination, creativity, and inventiveness (see below).

to say that the landowners, capitalists and workers do not perform the entrepreneur function.⁸ True, this is at odds with the notion that the entrepreneur function (earning profit and loss and bearing uncertainty) inheres in every action. The important point, however, is that he did not try to develop the idea that every actor is an entrepreneur. Why this is important will become clear in part 4.

Israel Kirzner, one of Mises's students and ardent followers, inherited the professional reputation as the Austrian expert on entrepreneurship. Kirzner's approach to the subject is, to me, largely a contradiction. On the hand, he has the very good sense to associate entrepreneurship, at the most fundamental level, with *homo agens* in contrast to *homo sapiens*. He uses this contrast to extract what he calls the "entrepreneurial element in individual human action" (1973: 31). Yet, he does not himself try to derive the properties of action and he does not try to connect this element to what Mises called the prerequisites and properties of the category of action (*ibid.*: 13-14; Chapter 4-6). Apparently because of this, he also ends up defining entrepreneurship at least partly as a psychological phenomenon – alertness to market opportunities. His prototype is the person who happens to see a ten dollar bill in the street and proceeds to pick it up. Somehow – Kirzner does not tell us how – we have reason to believe that people will be alert to the opportunity to gain by keeping a lookout and then seizing this opportunity.⁹ Another positive element of Kirzner's approach is his use of a model of maximizing performers of behavior as a kind of foil to help elucidate entrepreneurship.¹⁰ Yet he does not use the foil to help identify the distinctly human properties and qualities of action under the conditions of the market economy. He uses it to help define "alertness" in the market economy. Whereas "Robbinsian maximizers" proceed directly to the equilibrium prices and quantities, the interaction of real actors results in price differences. It is only by arbitrage, which is driven by the special quality of alertness to price differences, that the equilibrium can be

⁸*Ibid.*: 254 and elsewhere in *Human Action*.

⁹Kirzner 1973: 48.

¹⁰See Kirzner (*ibid.*: 33-37). Mises had written that the evenly rotating economy, or static equilibrium, is indispensable for comprehending entrepreneurship and profit and loss (Mises 1966: 248).

established. Just as the man on the street is somehow alert to the opportunity of seizing the ten dollar bill, individuals in a market economy are somehow alert to opportunities to gain from arbitrage when there are private property rights and free enterprise (Kirzner 1979: 149). These people who have a “propensity to be alert,” presumably possess some psychological quality that a modeler could not endow.¹¹

It is not surprising, of course, that Kirzner’s concept would be based on psychological assumptions. He writes in 1999 that he deliberately aimed to capture Mises’s idea that entrepreneurs have a quicker eye than the crowd.¹² At the same time, it is clear from his persistent efforts to defend his concept that he rejects this characterization. It appears that it is the eye of the beholder that judges whether alertness is a psychological characteristic. The basic problem, from the viewpoint of the concept of the praxeological entrepreneur presented in part 4, is Kirzner’s failure to carry out the more fundamental operations required to define alertness in a praxeological sense. What are the fundamental properties of action? one asks. Is alertness a property? Since alertness cannot be the only property of action, how is alertness related to the other properties?

It is beyond the scope of this paper to take up this problem in any depth. It is perhaps sufficient to note that Kirzner has persistently maintained that his concept of alertness is implicit in action. From these denials, it would seem that anyone who claims that his concept is psychological would have the burden of either pointing the reader to a definitive critique or of making that critique himself. Whatever one might conclude about this issue, I provisionally accept Cowen’s claim. Whether it true or false is not directly relevant to the goal of this paper. I assume that there has not been closure among the ranks of neo-Austrian economists regarding whether Kirzner’s term qualifies as a distinct category. Otherwise Cowen’s paper would not have been published.

¹¹Further discussion of Kirzner’s entrepreneur in relation to that of the concept presented below by the author is in Gunning 1997.

¹²See his quotation of Mises on p. 11.

2. COWEN ON ENTREPRENEURSHIP AND THE WALRASIAN BOX

Cowen presents the issue discussed here in terms of what he calls the “Walrasian box.” He asks whether Kirzner was able to produce a concept of entrepreneurship that breaks out of the Walrasian box, as Kirzner believed he had done. The Walrasian box is “a theoretical construct where all forms of behavior, and all economic outcomes, are explicable in terms of rational maximization and market equilibrium” (Cowen: 5). He argues that Kirzner did not succeed because his entrepreneurship is capable of being explained in this way. He writes, for example, that “[o]ptimizing search therefore can encompass what Kirzner calls alertness” (*ibid.*: 8). Another way of looking at the same issue is to note that “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” (*ibid.*: 13). Kirzner, according to Cowen, regards these opportunities as objectively out there. It follows, argues Cowen, that the discovery of them can be represented by a mechanical search model.

In an effort to identify a concept of the entrepreneur that is outside the Walrasian box, Cowen introduces a name familiar to neo-Austrians – Immanuel Kant. He conceives of Kant’s ideas in relation to the question of whether it is possible to escape from the Walrasian box (*ibid.*: 9). Of particular interest is the concept of genius. The genius, Cowen points out, lies outside the Walrasian box. This idea is in perfect agreement with Kant, he says, who defined genius in terms of “beauty and the aescetic” (*ibid.*: 10). Cowen associates the genius with Kant’s concept of “purposiveness without specific purpose (*ibid.*)” Cowen’s ultimate goal, however, is to connect the concept of genius to that of the entrepreneur. While admitting that the mapping of genius to entrepreneur is not one-to-one, particularly in light of Mises’s exclusion of the genius from the categories of human action, he points out that both may lie outside the Walrasian box (*ibid.*: 11).

Consideration of Kant, however, is just a stepping stone. It appears that Cowen uses Kant mainly to soften up readers who are not philosophically or aesthetically oriented. What he really wants to do is to link the concept of entrepreneurship with the writings of the early 18th century Italian philosopher Giambattista Vico. Unlike Kant, who at least kept one foot in the box, to continue the metaphor, Vico was totally outside the box. Vico searched for primeval wisdom in writings about myth and poetry. The suggestion is that if Austrian economists want a concept of the entrepreneur that is outside the box, they might seek inspiration from Vico.

However, this is not the end of the story. Cowen ultimately comes back to an economist who is well known to most neo-Austrians – G. L. S. Shackle. Shackle, he says, “comes closest to the perspective of Vico on the primacy of the aesthetic” (*ibid.*: 17). Cowen goes on to interpret Shackle’s image of the entrepreneur as one of “a creative chooser” (*ibid.*: 18). In Shackle, the presence of uncertainty of the outcome implies creativity and newness. He writes that “for Shackle the question is whether the skein of possible 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” (*ibid.*: 19).

This interpretation makes Shackle’s entrepreneur the antithesis of Kirzner’s. He compares a concept of “newness,” which he takes to represent a kind of Shackle paradigm with the concept of “alertness” which he associates with a Kirzner paradigm. “Shackle introduces “newness” into the system by postulating newly imagined states of the world which “need only exist in the subjective dimension of the aesthetic” (*ibid.*: 19). Its primary characteristic is imagination. Newness for Kirzner, however, is due to alertness, which in Cowen’s view, makes it part of a determined system associated with search.

In this paper, I want to emphasize that the idea of a praxeological concept of entrepreneurship does not occur to Cowen. He looks for an out-of-the-Walrasian box concept of entrepreneurship but discovers one that, in my view, is out of the Austrian “ball park.” This ball park was built by Menger and then reformulated by Mises. But Mises did not employ a praxeological concept. What economics

needs is a praxeological concept of the entrepreneur that Mises seemingly recognized but which he did not develop. Before I can proceed to present my contribution to this enterprise, I need to establish the praxeological foundation. The best way to do this is to refer to Mises's discussions of action, uncertainty and modeling.

3. MISES ON ACTION, UNCERTAINTY, AND MODELING

That Mises believed entrepreneurship to be outside the Walrasian box cannot easily be determined from his discussions of the promoter or the functional entrepreneur. It can, however, be determined by examining the association he made between uncertainty and entrepreneurship and by reviewing his discussion of the prospect for modeling economic action. We begin with uncertainty.

Uncertainty, Entrepreneurship, and Action

The claim that Mises's entrepreneur is an action category and therefore that it, or its outcomes are not "explicable in terms of rational maximization and market equilibrium" can be supported from his effort to bind the concept of entrepreneurship to uncertainty and action. He states that "[t]he term entrepreneur as used by catallactic theory means: acting man exclusively seen from the aspect of the uncertainty inherent in every action" (Mises 1966: 253). This statement comes directly after his pointing out that "[e]conomics, in speaking of entrepreneurs, has in view not men, but a definite function. This function is...inherent in every action and burdens every actor. In embodying this function in an imaginary figure, we resort to a methodological makeshift..." (*ibid.*: 252-3). If the function is inherent in every action, then it must be inherent in every market economy actor. Every actor must be an entrepreneur. The entrepreneurial function must be an inseparable part of action in the market economy. And since entrepreneur means viewing man exclusively from the

aspect of uncertainty in action, we can conclude that Mises aimed to bind these three concepts together.

The Bond Between Uncertainty, Action, and the Study of Action

It is useful to examine the bond between uncertainty and action in greater detail. For Mises:

The uncertainty of the future is already implied in the very notion of action. That man acts and that the future is uncertain are by no means two independent matters. They are only two different modes of establishing one thing (*ibid.*: 105).

It is very difficult to imagine that Mises, having said this, would associate himself with an economics that models action under the assumption that human beings do not face uncertainty. Nevertheless, it is a fact that modern economists have tried to model uncertainty. However, they have not tried to model uncertainty in the sense that Mises uses that term.¹³ That this is so is evident from Mises's definition of uncertainty. Consider the following statement, which occurs later in the "uncertainty" chapter.

...We may believe we know the motives of the acting men, the ends they are aiming at, and the means they plan to apply for the attainment of these ends. We have a definite opinion with regard to the effects to be expected from the operation of these factors. But this knowledge is defective. We cannot exclude beforehand the possibility that we have erred in the appraisal of their influence or have failed to take into consideration some factors whose interference we did not foresee at all, or not in a correct way (*ibid.*: 113).

In short, in studying and describing human action, the economist must leave something outside the Walrasian box. The economist has no choice. The reason is that one actor – the economist – cannot determine with certainty the action that another actor will take. She faces a problem of "intersubjective uncertainty."

The observation that Mises makes in the previous quotation applies not only to the economist who studies action but also to the actor himself. If the sociologist or economist wishes to depict action as it really is, she must assume that every actor faces uncertainty about other actors – uncertainty about which the sociologist or economist must herself remain uncertain.

¹³More correctly, they have not succeeded in modeling it due to its "complexity." Game theorists have tried to model uncertainty in simple interaction but never with complete success. However, they have not attempted to model it under the conditions of the market economy with any success at all.

How to Judge Whether the Misesian Entrepreneur Is Praxeological

Our question, however, is not about what Mises asserts or implies the economist must do. It is about whether Mises himself employed a concept of the entrepreneur that is praxeological and therefore, by definition, outside the Walrsian box. To achieve this, he would have had to build an image that satisfies two conditions. First, his entrepreneur would have to embody the uncertainty about fellow actors. Second, it would have to imply the economist's uncertainty about the entrepreneur's action. To use a concept that is consistent with the assumption that "entrepreneur represents man exclusively seen from the aspect of uncertainty" (as quoted above), Mises would have to use an image that satisfies these two conditions simultaneously.

This is not the end of the matter, however. For the concept to be praxeological, it must not only represent uncertainty, it must also represent the other properties of the a priori category of action. In spite of Mises's focus on uncertainty in his introduction to the entrepreneur, it is clear from his writing about action that uncertainty is not its only property. We first consider whether his concept of the entrepreneur represents uncertainty. Then we take up the issue of the other properties.

Did the Misesian Entrepreneur Represent Uncertainty?

We have already noted that Mises used two concepts of the entrepreneur: the promoter entrepreneur and the functional entrepreneur. Regarding the promoting entrepreneur, he meant to emphasize differences in eagerness to profit and quickness of eye and mind. If this concept implies uncertainty, it does so only in a roundabout way. One could first associate uncertainty with profit and then profit with the assumption of eagerness to profit. However, in describing this concept, Mises refers not to eagerness to profit itself but to differences among men in their eagerness to profit. In light of this, it seem sensible to reject this the promoter entrepreneur as a praxeological concept.

Regarding the functional entrepreneur, it is clear that Mises wanted this concept to refer to the uncertainty present in action. However, by distinguishing it in a functional sense from the landowners (farmers), capitalists and workers; he appears to have been recommending the use of an

imaginary construct in which the latter feel and bear no uncertainty. It is possible that such an imaginary construct will be useful. However, Mises does not explain how. He does not address the issue of why the concept of the functional entrepreneur, as the embodiment of uncertainty, is useful to the economist. Moreover, as mentioned, his descriptions usually employed the promoter concept.

Mises was not insensitive to the problem that his use of the two concepts of the entrepreneur might cause confusion. This appears to be the reason why he introduced the concept of the “speculator” to accompany his statements about the promoting entrepreneur in some of his discussions. In his chapter on uncertainty, he wrote:

In the real world acting man is faced with the fact that there are fellow men acting on their own behalf as he himself acts. The necessity to adjust his actions to other people's actions makes him a speculator for whom success and failure depend on his greater or lesser ability to understand the future. Every action is speculation. There is in the course of human events no stability and consequently no safety (*ibid.*: 113).

And he wrote that in order to elucidate speculation, we use the model of robots:

[W]e need to comprehend in what respects the conditions of a living world in which there is action differ from those of a rigid world. This we can discover only by the *argumentum a contrario* provided by the image of a rigid economy. Thus we are led to the insight that dealing with the uncertain conditions of the unknown future--that is, speculation--is inherent in every action, and that profit and loss are necessary features of acting which cannot be conjured away by any wishful thinking...[T]he individual speculator aims not at the establishment of the evenly rotating economy but at profiting from an action which adjusts the conduct of affairs better to the attainment of the ends sought by acting, the best possible removal of uneasiness (*ibid.*: 250).

With respect to the narrowness of the concept of the promoting entrepreneur, he promised to dispel any doubt about the meaning in later chapters by using the term “promoter” when he was referring to the narrower concept (*ibid.*: 255). However, his passages on entrepreneurs and promoters leave the reader in a quandary over whether he fulfills this promise. I have read through the relevant descriptions of entrepreneur in the market economy many times and I cannot conclude unequivocally that he was consistent in his usage of these terms.

Other Necessary Properties of the Praxeological Concept of the Entrepreneur

Now we can turn to the other properties and qualities. In his introduction to the meaning of action, Mises notes what he calls the prerequisites of human action. He writes that the actor feels

uneasiness, “he imagines conditions which suit him better, and his action aims at bringing about this desired state” (*ibid.*: 13). In addition, he must imagine “that purposeful behavior has the power to remove or at least to alleviate the felt uneasiness” (*ibid.*: 14) We can represent these by saying that the properties of action include deliberation and an act of will that the actor expects to cause the expected effects. Later, Mises presents three chapters on the properties of action in which he discusses ends and means, time, and uncertainty as essential characteristics. Since the concept of ends and means is captured by deliberation and an act of will and since uncertainty implies time, we can say that there are three properties of action (1) deliberation, (2) an act of will, and (3) uncertainty bearing. I define a concept of entrepreneurship as praxeological only if it embodies, or captures, all of these properties.

It is clear that Mises’s functional entrepreneur, as he describes the concept, possesses only one of these properties. In his discussions, he often assumed deliberation and the act of will. For example, he writes that “[t]he specific entrepreneurial function consists in determining the employment of the factors of production” (*ibid.*: 290-1). This certainly implies an act of will. And he certainly assumes at various times that entrepreneurs have expectations and that they make appraisals. However, he does not try to capture these aspects of entrepreneurship in a single definition of the entrepreneur.

The Impression That the Misesian Entrepreneur Is Not Praxeological

Suffice it to say that he managed to leave enough confusion that one can sympathize with a reader who neglects the praxeological character of Mises’s entrepreneur. For readers who doubt that this is true, the appendix describes Mises’s most important references to the entrepreneur. Specifically, we have reason to understand why Cowen and others would not have been able to ascertain the praxeological character of Mises’s entrepreneur. Nevertheless, it is clear that a praxeological concept can be built on the foundations that Mises built, as I show in part 4.

Modeling

That Mises aimed to keep his praxeological economics outside the Walrasian box is evident from his discussions of mathematical modeling. To represent Mises's ideas about modeling, we look at his passages on mathematics and statistics. First, he writes that

[t]he mathematical economists...do not notice the individual speculator...They stress exclusively the imaginary state of equilibrium which the whole complex of all such actions would attain in the absence of any further change in the data. They describe this imaginary equilibrium by sets of simultaneous differential equations. They fail to recognize that the state of affairs they are dealing with is a state in which there is no longer any action but only a succession of events provoked by a mystical prime mover. They devote all their efforts to describing, in mathematical symbols, various "equilibria," that is, states of rest and the absence of action. They deal with equilibrium as if it were a real entity and not a limiting notion, a mere mental tool. What they are doing is vain playing with mathematical symbols, a pastime not suited to convey any knowledge (*ibid.*: 250).

Clearly, Mises believes that action is outside this Walrasian box. His reasoning says that it disregards speculation. One assumes that he means that it neglects intersubjective uncertainty.

Later in his text, Mises writes about mathematical economists who

are openly and consciously intent upon solving catallactic problems without any reference to the market process. Their ideal is to construct an economic theory according to the pattern of mechanics. They again and again resort to analogies with classical mechanics which in their opinion is the unique and absolute model of scientific inquiry (*ibid.*: 353-4).

He dismisses these economists out of hand by referring to an earlier discussion about why the analogy is superficial and misleading and about "in what respects purposive human action radically differs from motion, the subject matter of mechanics" (*ibid.*: 354).¹⁴ He goes on to discuss mathematical representations of equilibrium.

Both the logical and the mathematical economists assert that human action ultimately aims at the establishment of such a state of equilibrium and would reach it if all further changes in data were to cease. But the logical economist knows much more than that. He shows how the activities of enterprising men, the promoters and speculators, eager to profit from discrepancies in the price structure, tend toward eradicating such discrepancies and thereby also toward blotting out the sources of entrepreneurial profit and loss. He shows how this process would finally result in the establishment of the evenly rotating economy. This is the task of economic theory. The mathematical description of various states of equilibrium is mere play. The problem is the analysis of the market process (*ibid.*: 355-6).

His use of the term "promoter" here and "changes in the data" can be misleading. But Mises leaves no doubt that he believes that his conception of the market process lies outside the Walrasian box. For

¹⁴It is possible that he is referring here to his discussion of mechanicalism (*ibid.*: 23-27).

he writes that the equations and formulas of mathematical economics “are limited to the description of states of equilibrium and *nonacting*” (*ibid.*: 356, italics added). And his closing paragraph on the subject is as follows:

Economics is not about goods and services, it is about the actions of living men. Its goal is not to dwell upon imaginary constructions such as equilibrium. These constructions are only tools of reasoning. The sole task of economics is analysis of the actions of men, is the analysis of processes (*ibid.*: 357).

What we must recognize is that the modeling and the Walrasian box are creatures of the economist. The economist’s aim is prediction of others’ action and he builds a model to help him do this. Yet he cannot possibly capture action in the model because of the problem of intersubjective uncertainty. The economist, too, must be a speculator. It is this inability of the economist to fully predict that, in Mises’s view, places action outside the box.¹⁵

4. ENTREPRENEURSHIP AS DISTINCTLY HUMAN ACTION

For Mises, action is clearly outside the Walrasian box. Our discussion in part 3 showed this. It also showed that he believed that his concept of entrepreneurship, or at least that of the functional entrepreneur, was outside the Walrasian box. It is also true, however, that he did not present an entirely persuasive proof of this. The problem is twofold. First, his use of the two entrepreneur concepts – the functional entrepreneur and the promoter entrepreneur – could easily confuse the non-discerning reader about the meaning of uncertainty and its significance in helping the economist “escape from the box.” Second, he did not directly connect entrepreneurship to other properties of the category of action, namely, deliberation and the act of will that accompanies actual decision-making. Instead of developing the entrepreneur concept along these lines, he apparently burned to employ the

¹⁵Kirzner’s failure to state this point clearly is why we cannot tell for sure whether he has produced a concept of the entrepreneurship that is outside the Walrasian box in the same sense as Mises believed he had done.

easily recognizable promoter concept, relying on his insertion of the term “speculator” here and there to remind the reader that the market process cannot be successfully modeled. In this part of the paper and the next, I would like to draw the reader’s attention to my efforts to develop the concept of entrepreneurship as distinctly human action further by using the method that Mises recommended yet did not himself use.

In attempting to define entrepreneurship as distinctly human action under the conditions of the market economy, one must ask how the properties and characteristics of action get manifest under the conditions of the market economy. In my 1991 book, I used the method of imaginary constructions to show how the properties of action (ends and means, decision-making, time, causality, uncertainty) in the market economy could be elucidated by means of the rigid construction of the evenly rotating economy (ERE). The ERE is a timeless model with no action or actors, like the general equilibrium model in the contemporary economics textbooks. It contains no distinctly human action yet represents suppliers of factors, producers, consumers and savers. It also contains a relationship between the prices of different orders of goods. Given these properties, it stands to reason that one can use it as a counterfactual to elucidate the properties of action in relation to the prices of the goods and factors of production.¹⁶

Although this can be done, the procedure for doing so is not a simple one. One must proceed step by step. Here I divide the procedure into three the isolated production-consumption action, (2)

¹⁶This procedure was also used by Kirzner in his 1973 book, albeit with different results. He provides an neoAustrian spin of it in his commentary on criticism of his theory by Martin Ricketts. He writes:

In order to understand market processes that arise in real-world disequilibrium, we focus precisely on those entrepreneurial (i.e., uncertainty-driven) elements that have *no* place in the equilibrium models. In order to highlight these entrepreneurial elements we generally conceive the *non*entrepreneurial elements in the real world as if these were in fact *purely* nonentrepreneurial. But in so doing we are, inconsistently, conflating an equilibrium picture with a disequilibrium picture. For purpose of conceptualizing the dynamic market process such a conflation does no harm. This conflation is designed to focus analytical attention on one real world element – the key element that drives the market process; it does so with greater impact by deliberately imagining away certain real world aspects of the resource owner and consumer roles. In this context, resource owner incomes appear as purely Robbinisian, purely nonentrepreneurial incomes (1992: 100).

In my view, Kirzner moved too quickly to associate entrepreneurship with alertness.

creating the image of a pure entrepreneur economy, and (3) linking the pure entrepreneur economy to a “real” market economy. We discuss each in turn.

Defining the Isolated Production-Consumption Action

The first step is to define the prerequisites and properties of action in general for the more restricted action of producing a good for one’s own consumption. This is necessary because we want to incorporate into our science the focus on consumer want satisfaction that marks the subjective value theory revolution in economics that occurred during the latter part of the 18th century. The economists who bought into the new theory were compelled to define well being not from the viewpoint of kings, nations, capitalist classes, or some personal conception, but from the viewpoint of individuals in the role of the consumers.¹⁷

Producing a good for one’s consumption entails the acts or sub-acts of supplying factors, producing, and consuming. In order to incorporate the role of time – i.e., the decision of whether to

¹⁷ This revolution can be regarded as the culmination of one stage in the progress of liberalism. It ushered in a new criterion for judging government policies. It was adopted by practically all, regardless of ideology, who aimed to make and evaluate arguments for and against market intervention. Practically everyone who proposed a new policy or getting rid of an old one defended it by referring the well being of ordinary people. In the subjective value theory of economics, these are the people who act in what the new theory designated as consumer role.

Although the ethical antecedent of the subjective value theory was utilitarianism, Mises marked this break by designating economics as a value free science that evaluates the policy proposals put forth by non-ascetic ideologies (Mises 1966: 178-81). What he seemed to have in mind were the ideologies of socialism, interventionism and liberalism, which he assumed defended their arguments by saying that they would satisfy earthly ends. This point is not understood by modern neo-Austrians and, more importantly, by non-Austrians who often rely on misguided neo-Austrians for direction. Many neo-Austrians see Mises’s focus on consumer satisfaction as utilitarian. However, to employ subjective value theory in the evaluation of interventionist arguments is to employ the theory that proponents of practically all ideologies and practically all arguments for and against market intervention nowadays use. Thus one can safely assume that someone who makes an argument in favor of some form of market intervention uses consumer satisfaction (utilitarianism) as his criterion (or at least one of his criteria) for judging its success. One than can ask whether the form of intervention proposed is a suitable means for achieving this end. By this means, one can keep the science of economics value free (*ibid.*: 882-85). The suggestion that one can follow Mises’s so called “utilitarian economics” or, as an alternative, Rothbard’s “libertarian economics” or his “revealed preference” economics is distracting and destructive to the science of value-free economics that Mises sought to build (Gunning 2005a, 2005b).

It would be possible to develop a praxeological theory of market interaction for which the starting point is not the well-being of individuals in the role of the consumer. One who subscribes to a value system based on Marxian alienation, for example, may want a science in which people feel as attached to their work as specialists as the primitive, largely self-sufficient hunters, gatherers and farmers. But such a theory would not be relevant to the task of evaluating arguments that used consumer well being as the (or a) criterion for judging whether a policy is good or bad.

aim for their satisfaction sooner or later (Mises 1966: 483-4) – we also make saving a characteristic of a production-consumption action.

Because we aim to build a science of economics that is a branch of praxeology we must distinguish between the (1) *behaviors* of supplying factors, producing, consuming, and saving and (2) the distinctly human action that causes the behaviors to occur. We know about animals that perform behaviors that we label factor-supplying, producing, consuming, and saving. And we can build robots that would exhibit these behaviors. To infuse the production-consumption act with distinctly human action, we must assume that in causing each of the behaviors to be performed, individuals possess the properties of action. We carry over, as it were, the properties of action in general into the production-consumption act of the isolated actor. This means, as described above, that each action must contain deliberation (identification and evaluation of the factors of production), decision-making (the act of will that causes a mental plan to become a behavior), and uncertainty-bearing. A good name for these is *properties of the production-consumption action*. It is important to separate these from what I called the *essential functions* of factor supply, producing, consuming, and saving. The reason is that these behaviors are not distinctly human action. This becomes important when we try to comprehend distinctly human action under the conditions of the market economy and the effects of that interaction.

Finally, we subscribe to the principle of intersubjective uncertainty.¹⁸ We assume that the actor may have knowledge and abilities that about which we, as outsiders, are uncertain. In more fundamental terms, the actor may, in his deliberations, perceive means and ends that we cannot perceive.

¹⁸In other words, we must adopt the principle of subjectivism, or subjective interpretation.

Creating the Image of the Pure Entrepreneur Economy

The second step is to find a correspondence between the production-consumption act of the isolated actor and production and consumption acts in a specialized market economy. To deal with the complexity of the problem of completing this step requires the use of the imaginary construction of an economy containing a mix of pure entrepreneurs and robots. We call this the pure entrepreneur economy.¹⁹

The pure entrepreneurs represent the properties of the consumption-production action while the robots represent the essential functions. However, we must transform the properties of the consumption-production action in order to adapt them to their new purpose. We must change the deliberation of the isolated producer-consumer into money appraisal of the factors of production. We must change decision-making into undertaking, which we define as the act of will that causes factors to be employed in specific ways to produce a product. And we must change uncertainty-bearing into the provision of guaranty for loans. The pure entrepreneur uses none of her own money to finance the purchase of factors. She must borrow all the financing from robots who bear no uncertainty. To assure that the robots bear no uncertainty, we must stipulate that the pure entrepreneurs possess all the guaranty needed to assure that the loan will be repaid even if the production project it helps to finance is unprofitable. In addition, for simplicity, we assume that each pure entrepreneur produces a single good from start to finish. We can change these assumptions later but our initial goal is to build the simplest possible image we can. In order to represent competition, we assume that each pure entrepreneur has both special abilities to direct the production of a specific good but that he also has abilities to produce other goods. His choice of which good to produce depends on his expectations of profit and loss.

¹⁹In other words, we begin with an image like that which Mises seemed to regard as insignificant – the image of an economy with a class of pure entrepreneurs (*ibid.*: 256). A difference is that we do not assume a stationary economy, as Mises did.

The pure entrepreneur economy is an image of a class of competing pure entrepreneurs who act under the assumption of free enterprise and private property rights. Their actions, direct all of the production, consumption, saving, and factor supply behavior in the economy. Such a construct has many uses but our interest here is in its contribution to the problem of producing a concept of the entrepreneur that lies outside the Walrasian box.

Linking the Pure Entrepreneur Economy to a “Real” Market Economy

The third step consists of linking these conceptions of the pure entrepreneur and the pure entrepreneur economy to entrepreneurship in a “real” market economy. This is accomplished by following through relentlessly the idea that every actor in the market economy is an entrepreneur. When we turn to the problem of describing interaction among real actors in the market economy, our task is to decide how much detail to add. Obviously, we can never build an image of the entrepreneurship that is present in every actor in even a small market economy. There is too much knowledge of particular circumstances of time and place (Hayek 1945) or, more simply, too many specialists. We make our choices on the basis of the problem with which we are interested in dealing. For example, if our goal is to describe how competition benefits people in their role as consumers, it is sufficient to employ the imaginary construction of the pure entrepreneur economy. We need not go any further. But suppose that our goal is to show how land market speculation benefits people in their role as consumers. Then we must show at a minimum how entrepreneurship gets manifest in the actions of the land speculator and in those whose incomes are likely to be raised and lowered by the speculator’s activities.

5. IMAGINATION, CREATIVITY, AND INVENTIVENESS

It is possible to carry the procedure of identifying entrepreneurship one step further. Besides identifying the prerequisites and properties of action, we can ask first how human beings in isolation would differ in their satisfaction of wants from non-human animals and from images we might build of computerized robots. Second, we can ask how that difference gets manifest under the conditions of the pure market economy. In answering this question, we aim to stay outside the Walrasian box, as it were. So we are not looking for biology-based or psychology-based answers.²⁰ It is in this endeavor that the ideas of Shackle and of every other serious thinker about these differences play a role. We invent terms like “imagination” and “creativity” to refer to both (1) what the human actor employs in order to produce goods and (2) what is lacking – besides deliberation, decision-making, and uncertainty bearing – among the non-human animals and robots. Regarding the latter, we can produce a robot that manifests some characteristic that we might be inclined to call imagination or creativity. But as soon as we call them that, we establish in ourselves a mode of imagination or creativity that is not possessed by the robot. In short, human actors differ from robots because they create the robots and images of them. Robots do not create human actors. And if what we previously called a robot ever succeeded in creating a human actor, we would no longer be justified in calling the creator a robot. He would have become an actor.

So we can say with confidence that human actors possess imagination and creativity.²¹ But these alone are not related to economics. They must result in some invention of a good, factor of production, or method of production. So we add a third modifier – inventiveness. In short we can, by

²⁰This is not to deny that these fields help us formulate the problem of identifying distinctly human action. The purpose is only to distinguish economics as the study of distinctly human action from these fields. Economics and praxeology seek answers to their question not only in the sciences but also in the aspects of human action that cannot be comprehended with the methods of biology and psychology.

²¹It is true that the creativity we derived from a comparison of *homo agens* with animals and robots does not possess the apodictic certainty that characterizes the properties of action. We can imagine action occurring without creativity. However, that it is a quality of action is evident, as countless observers have noted.

means of contrast with animals and robots, endow human actors with the qualities of imagination, creativity, and inventiveness. To do this, it is not necessary to study beauty, the genius, poetry or myth. We can do so within the paradigm bequeathed to us by Mises. We contrast action with non-action.

This approach enables us to at least conceive of a foundation for writings about creativity, such as those of Randall Holcombe (2003), that is more praxeological. Holcombe's theory is mere stipulation. He stipulates a process that begins with a creative invention that was presumably unplanned.²² Then he stipulates a series of other interventions, apparently assuming that the individual who produces the first is unable to exploit all of the opportunities that the invention produces. Although this process describes reality, there is nothing distinctly praxeological about it. Stipulated creativity is not praxeological creativity.

What is needed is a theory of how the specific conditions of the market economy trigger this quality, so to speak. How is it triggered by private property, free enterprise, and the use of money? What difference between non-economic interaction and interaction under market economy conditions triggers the kind of invention series that Holcombe describes occurring in reality. Or, if such creativity is present in all interaction, what triggers it in general?

Consider one possible answer: keeping up with the Jones's. Imagine an equilibrium of perfect equality in the eyes of everyone. (It does not matter that such a situation could never exist. Assuming it is merely a simple starting point for the story of which numerous other starting points would lead to the same result.) Then Peter Jones makes an invention and, correspondingly, earns higher income. Everybody else now strives to keep up with Peter. Paul Jones is the first. Using his creativity, he makes an invention also. But now people have two Jones's to strive to keep up with. And it would

²²Actually, he also considers a case in which the invention is a consequence of research. The entrepreneur-researcher invests in research not knowing what the exact outcome will be but expecting or hoping that it will generate a new invention. But such a starting point is still stipulated since he must now tell how the entrepreneur-researcher came to believe that his research action might result in an invention. The answer must be some kind of stipulated creativity. The ultimate question of how such creativity is "triggered" (see below) remains to be answered.

only be chance that Peter and Paul's inventions would lead them to have identical incomes. So one of them would have an incentive to try to keep up with the other. Moreover, Paul's invention is likely to alter Peter's income situation in some way. It is easy to see how such a social psychological assumption could combine with the praxeological quality of creativity to lead to a continuous flow of inventions.²³ But do we really need such strong psychological assumptions as "keeping up with the Jones's"? In any event, it seems to me that neo-Austrians could produce a more praxeologically-based theory than one that merely stipulates creativity.

6. CONCLUSION

I believe that I have written enough to show that, in his paper, Cowen has taken his readers on an unnecessary journey away from Mises, one of the giants of 20th century Austrian economics, and toward an outsider (Shackle) who Cowen suggests finds his inspiration not in distinctly human action, which is the subject to which Carl Menger's writings pointed, but in poetry (Cowen: 17). Mises criticized the mathematical economists for engaging in pure play. One who follows Cowen to Shackle embarks on a journey which, in my opinion, will result in something similar. A different game, to be sure, but a game nonetheless. Mises regarded economics as serious business: the value-free evaluation of arguments for and against market intervention (Mises 1966: 882-4). He saw ignorance in the making of such arguments as the greatest threat to the peoples' well being (*ibid.*: 885). Neo-Austrians will not succeed in heading off the "enemies of capitalism" and the unreasoning proponents of interventionism by playing.

²³Another psychological assumption is the so-called "culture of entrepreneurship."

APPENDIX

MISES'S DISTINCTION BETWEEN THE FUNCTIONAL ENTREPRENEUR
AND THE PROMOTING ENTREPRENEUR

The aim of this appendix is to tell how Mises used the terms “entrepreneur” “promoter,” and “speculator” in *Human Action*. The result, it seems, is a great deal of confusion. The core economic chapters of *Human Action* – that is, the chapters in which he develops the concept of the entrepreneur – are his methodology chapter and his chapters on markets and prices. These are chapters 14, 15, and 16. It is easy to identify his various uses of the terms in question by searching these chapters. There is a slight hazard in using only statements from these chapters because he only introduces *time* later in the book. At this stage, his presentation is within the the confines of the imaginary construction of the stationary economy.²⁴ This would be a greater problem if, in a later chapter, he dealt with economic growth. Since he does not, the statements in these chapters are representative of his use of the words in question.

I begin with my search of the term “speculat.” This search leads me to make the following remarks. In chapter 14, he seems to introduce one way of dealing with the distinction between the promoting entrepreneur and functional entrepreneur – pairing the terms entrepreneur and speculator. Presumably, he means this combination to refer to entrepreneurship in the functional sense, as opposed to the promoting entrepreneur (*ibid.*: 252, 253). Since he does this before he introduces the distinction, however, there is no way to tell whether this pairing constitutes his ultimate procedure. In chapter 15, he writes that the “entrepreneur is always a speculator” (*ibid.*: 290). Here he seems to be writing about the functional entrepreneur in order to emphasize the connection between functional entrepreneurship and speculation. Later he writes that “the main function of the promoter and

²⁴It is true that he also writes of entrepreneurship in the progressing economy (*ibid.*: 294-300). However, his image of the progressing economy (unlike that of Frank Knight) contain no entrepreneur-initiated growth. Growth is due only to a change in saving.

speculator” is the [a]djustment of production to the best possible...” This seems to suggest that he is employing the term “speculator” to tell the reader that he is now writing of the functional entrepreneur. In chapter 16, he writes that “[t]he concatenation of the market is an outcome of the activities of entrepreneurs, promoters, speculators, and dealers in futures and in arbitrage” (*ibid.*: 327). Here he mixes entrepreneur, promoter, and speculator, with yet a fourth class that he has not yet clearly defined.

Now I turn to a search of the term “promot.” Regarding the promoter, we have already indicated some uses of this term. We now identify other relevant uses. In chapter 14, Mises writes that “[t]he futures market can relieve a promoter of a part of his entrepreneurial function” (*ibid.*: 255). This implies that part of the promoter’s “function” is to bear uncertainty. But he has not previously said anything about the promoter’s *function*. He has only written that it refers to psychological characteristics of eagerness to profit and quickness of eye and mind. Nevertheless, one outcome of this image of a stationary economy in which the dealers in futures bear all the uncertainty is the apparent clarity it brings to the concept of the functional entrepreneur. For he writes that “[i]n such an imaginary construction the entrepreneurial function is fully separated from all other functions. There emerges a class of pure entrepreneurs” (*ibid.*: 256). He does not, however, go on to discuss the remaining function of the promoter concept.²⁵ Indeed, the remarks that follow suggest that he does not regard such a construction as particularly significant. Next, in chapter 15, he seems to write that the entire section on “entrepreneurial profit and loss” refers only to the promoter and not to the speculator. He writes that “[a]t this point we are dealing with the promoters' entrepreneurial profit

²⁵For example, he could have gone on to suggest an imaginary construction in which the promoters’ function is (1) to appraise factors of production, (2) to borrow money from savers while perfectly hedging their bets in futures markets, thereby avoiding all uncertainty for both savers and promoters, and (3) to make undertaking decisions involving the allocation of factors of production and the actual production and sale of goods. One might expect that, by doing this, he would have been led down a path that is identical to that described in part 4 of this paper. Indeed, he would have been led to recognize that his earlier description of the promoter entrepreneur is narrower than the concept of the entrepreneur that is derived by this method. Moreover, he may have recognized that his earlier promoter entrepreneur refers to something that is categorically different, namely, the embodiment of assumptions of psychological differences among individuals in their appraisal, decision-making, and willingness to bear uncertainty.

and loss” (*ibid.*: 290). Next, he pairs the promoter with the innovator, who he had not defined. He writes: “In...a stationary world, there is no need for innovators and promoters” (*ibid.*: 308). He goes on to write that “the entrepreneurs and promoters [do not] form an integrated social class” (*ibid.*: 312-3). He apparently means to refer to the functional entrepreneur. In chapter 16, Mises writes that “[t]he operation of [the market for the factors of production] is actuated and kept in motion by the exertion of the promoting entrepreneurs” (*ibid.*: 334). He pairs promoter, speculator, and entrepreneur in the following statement: “The mentality of the promoters, speculators, and entrepreneurs is not different from that of their fellow men. They are merely superior to the masses in mental power and energy. They are the leaders on the way toward material progress” (*ibid.*: 336). Exactly how this applies to the speculators is unclear. Indeed, this statement appears to obliterate whatever distinction he sought to establish in Chapter 14 between the functional entrepreneur and the promoting entrepreneur. Finally, in discussing the limitation of mathematical models, he writes that the mathematical economists disregard “promoters and speculators” (*ibid.*: 355), implying that they disregard the functional entrepreneur.

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