ECONOMIC SINGULARISM ☆

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There is something of an underground debate going on within Austrian economic circles over conferring the best synonym to this school of thought. Here, "best" is an attempt to uncover the most accurate description of the economic strain of analysis that stems from Menger (1871[1950]). That is the first purpose of the present paper, and our attempt to answer this is the burden of the first section. In the second section, we apply our choice for the appellation "singularism" to supply and demand, and in the third section to indifference. The fourth section is given over to a singularistic analysis of a challenge which has also led a subterranean existence, this time in the neoclassical division of the economics profession: the issue of why some people stand on escalators, allowing these contraptions to carry them upward or downward, while no one treats stairs in any such manner. Specifically, we maintain that it is illegitimate to even draw supply and demand curves, and that there are grave difficulties with indifference and the debate concerning walking up the escalator versus using the staircase.

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BEST NAME

Why all the fuss over labeling? Certainly it is a matter of relative unimportance what we call things; the substance of the matter is far more important. When matters are put forward in this manner, this claim can hardly be denied. However, nomenclature too is important, particularly if it speaks to the essence of the categorization of an enterprise. For example, while it is undoubtedly an exaggeration to say that biology consists of nothing but naming things and categorizing them, this is not exactly so. A great deal of biological science indeed focuses on nothing other than this. It is a matter of crucial importance whether a species is part of this or the other genera, class, or phylum, for example. Also, chemistry is no different: many of its insights depend intimately on the placement of a given substance in the periodic table of elements. These are "mere" matters of nomenclature, labeling, and categorization, but they are not to be dismissed by careful scientists. A similar point can also be made in economics. In the dismal science, too, scholars speak past each other if they mean different things by such terms as "capital," "interest," and "profit," etc.

So, what label should the Austrian School adopt? What term gets the closest to what it is all about? What one word or phrase comes closest to characterizing its essence? There are several obvious candidates. A prime example would be "The Praxeological School of Thought." Support for this option stems from the importance Austrians have placed on praxeology (Mises, 1998; Rothbard, 1951, 1962; Hoppe, 1988, 1992; Selgin, 1988, Fox, 1992). Another possibility is "The Market Process School of Thought."¹ Praxeologists have given a central role to the fact that the market is never in equilibrium, but always, and even necessarily, engaged in continual change; and change requires an examination of process (Kirzner, 1982; Lachmann, 1976, 1977; Boettke & Prychitko, 1994). We could hardly ignore "The Human Action School of Thought," which was, after all, the title of arguably Mises' most important book (1998). Other possibilities arise, for Austrianism is a many-splendored edifice that makes numerous contributions to the profession: for example, "The Subjectivist School of Thought" (Havek, 1979; Mises, 1998)² or the Methodological School of Thought" (Bostaph, 1976; Block, 1980; Hoppe, 1995; Kirzner, 1982; Lachmann, 1969; Machlup, 1978; Nozick, 1977; Rothbard, 1997), since Austrians place much more emphasis on methodology than any of its competitors. Other possibilities include "The Property Rights School of Thought" (Hoppe, 2004), "The Spontaneous Order School of Thought" (Klein, 2006), and the "The Information or Knowledge School of Thought" (Hayek, 1948; Kirzner, 1973; Hoppe, 2004). If we consider the contribution of an important article written by Hulsmann (2000), we can characterize Austrianism as "The Counterfactual Alternative School of Thought," or perhaps "The Either Success or Error School of Thought."³

As far as the "Property Rights School of Thought" title is considered, consider the following exchange (Hoppe, 2004):

Akkurt (To Hoppe): In some of your work, you emphasize that Hayek stresses the role of knowledge and ignores or neglects private property. Do you think Hayek deliberately ignored, and underemphasized the crucial place of private property? Would you describe your view of property and knowledge in an entrepreneurial economy briefly to our readers?

Hoppe: Hayek was indeed always, from his student years on, interested in psychology. He wrote an interesting book on it (*The sensory order*). This may explain his special emphasis on knowledge and his relative neglect of property. For instance, Hayek wrote a famous article on the "Use of Knowledge in Society." Mises never would have written an article with that title. His title would have been the "Use of Property in Society."

The present article may be viewed as an attempt to make the case, in this sweepstakes, for Austrianism, in addition to all these other candidates, as "The Singularism School of Thought." This is not to say we consider the other candidates improper, or inferior to our own. Rather, it is to emphasize the importance of this way of looking at economics, alongside the others. In our view, a crucially important aspect of Austrian economics is its emphasis on the fact that human action can and must be bifurcated into that which is chosen, and all of those other opportunities thereby foregone.

"Singularism" is the phrase employed by Mises (1998, p. 44).⁴ But perhaps a more accurate word describing what we are about would be "individuation." In an earlier version of this paper, we employed the term "binary economics," which is even more apt. However, it came to our attention that Louis Kelso had already employed this term in a completely different manner; thus, to avoid confusion we had to eschew it.⁵ Further complicating matters, "binary" is used much as in the manner in which it was previously employed by other writers and us.

The dismantling of "binarisms" – conceptual polarities that underlie our thinking on so many subjects – has been a salient effort of postmodern writers.... We regard such enigmatic passages as symptomatic of the confusion that results when writers conflate concepts that should be kept distinct. Some "binarisms" seem necessary for rational thought. (Copeland & Parsons, 2004, p. 9)

This has several important implications, which we will explore below.

SUPPLY AND DEMAND

The market process involves buyers and sellers. Most supply and demand theory begins by developing individual's demand curves for X and aggregating them to arrive at the market demand for X. Then the individual firm's supply curve is developed, and depending on the analysis, if necessary, these may be aggregated to obtain the market supply. It is a well-established mainstream theory that, save for a perfect competitor, no firm and, a fortiori, no industry, has a supply curve, but rather only supply points, each of which depends on the demand. That is, supply is not independent of demand, nor for that matter is demand independent of supply. In a simple, one resource (labor) model, in which a firm sells its output and buys its resource in non-perfectly competitive markets, and in which P is the inverse demand function for output and W the inverse demand function for labor, $P = W((1+(1/e))/(1+(1/E))/MP_{\rm L})$ and $W = P((1+(1/E))/(1+(1/e))MP_{\rm L})$ where E is the price elasticity of demand for the output and e is the price (wage) elasticity of demand for the resource (labor), and MP_I is the marginal product of labor. Assuming that there are such things as supply and demand functions, save in the imaginary world of perfect competition, they are interdependent. No sooner have we said this than are we compelled to take it all back: there is no such thing as a supply or a demand function. Rather, a demand curve, for example, is the maximum price someone will pay for a given quantity. But this implies an equal to or greater than relationship, not a function. The latter, in contrast, implies strict equality, as in Y = f(X). In contrast, $Y \ge f(X)$ is not a function. This point is obvious as soon as we consider "false" trades; that is, trades that occur at non-marketclearing prices and non-price rationing.

In any case, once the market demand and relevant supply curves are developed, the analysis of people's and firms'⁶ actions is conducted in terms of the interactions of supply and demand (S & D). Supply and demand are "mere" pedagogical devices. Economic reality consists only in the human actor preferring (in the revealed preference sense) A over some specific not-A, say B, or B over A. Supply and demand depend essentially on the ceteris paribus assumption, but individuals know that the very act of choosing puts paid to ceteris paribus. Although this pedagogy is very useful, it is only a pedagogical device. In the real world, economic action consists *solely* in preferring A to B or B to A. There are no such things as supply and demand curves, or supply and demand, for that matter. These are merely pedagogical tools/devices intended to help us grasp the underlying reality.

There are two ways to interpret standard S & D analysis, one "objective" and one "subjective." Consider, first, the latter. In this case, the demand curve represents the different quantities of the relevant good that the buyers would be willing and able to purchase at various prices, ceteris paribus, as known by a (an omniscient) third party. The supply curve represents the different quantities of the relevant good that the sellers' would be willing and able to offer at various prices, ceteris paribus, also as known by a (an omniscient) third party. No matter how helpful in other regards, such analysis is also the source of important error because it results in treating certain costs to sellers as if they are not real costs at all. These costs are the implicit revenues sellers forego when they have to reduce the prices of their goods in order to sell a larger quantity, and the explicit costs sellers incur if they have to increase the prices of their resources in order to acquire a larger quantity. These costs appear, to the omniscient, not as costs because they "merely" represent a transfer of income from vendors to purchasers; that is, they are not viewed as costs of using resources. Taking this perspective leads many economists to treat these costs, which are real to sellers, as if they should be irrelevant to them.⁷ Therefore, when the sellers themselves do not treat them as irrelevant, but rather take them into account in resource allocation decisions, such economists refer to the decisions so taken as comprising "market failure" in the form of suboptimal resource allocations. Such thinking leads to the conclusion that governmental intervention into markets cannot be ruled out on principle, in virtually any case. That is, whenever either the demand curve for the good slopes downward, or the supply curve of one or more relevant resources slopes upward, or both, there is a potential candidate for governmental intervention, subject only, given that intervention itself is not costless, to cost-benefit analysis of the intervention itself.

The underlying rationale is the same as that which allows mainstream economists in discussing "deadweight loss" from monopoly (that is, downward sloping demand curves in cases where the price exceeds the average total cost over at least part of the domain of quantity) to treat the loss of profit and concomitant increase in consumers' surplus as a wash. An analogy is a case where a robber steals \$10 from a business and gives \$15 to a customer by adding \$5 of his own. The mainstream would treat this as a net gain of \$5 to the business and customer taken as a group. However, as soon as we consider the positions of the individuals, as we must as economists, we see that they are treating the \$10 of the \$15 increase in consumers' surplus that came at the expense of the business as a wash, and, of course, it is not so. Another way of seeing this is to consider the familiar equation for marginal revenue arrived at by taking the derivative of total revenue, PQ, with respect to Q, assuming a downward sloping demand curve, that is, MR = P + QdP/dQ. Rewriting this as P = MR - QdP/dQ, noting that $dP/dQ < 0 \Rightarrow -QdP/dQ > 0$, we see that the vertical distance between the demand curve is divided into two parts, MR and -QdP/dQ. We may think of these parts, respectively, as that portion of P that the firm gets as a result of selling one additional unit at P, and the portion of P that the firm must give up in the form of receiving a lower P for the inframarginal units because it had to lower P in order to sell the additional unit.

The second analysis, the subjective, is asymmetrical. Although standard supply and demand analysis has the appearance of being symmetrical in that it takes into account both the (planned) behavior of the buyers (demand) and the sellers (supply), upon reflection there is an asymmetry. In fact, whether it is with respect to the buyers' or the sellers' behavior, the perspective is that of the seller. The demand curve represents the sellers' anticipation/expectation of the different quantities of the relevant good the buyers would be willing and able to purchase at various prices, ceteris paribus. The supply curve represents the different quantities of the relevant good that the sellers would be willing and able to offer at various prices. ceteris paribus. That is, unlike the demand curve that represents sellers' anticipations/expectations regarding buyer behavior, the supply curve does not represent the buyers' anticipations/expectations regarding sellers' behavior. Consequently, the perspective from which both curves are viewed is that of the seller, and is, therefore, asymmetrical. This "market failure" consequent on monopsony in resource markets is analogous to that consequent on monopoly in output markets.

Symmetry requires, in addition to the standard supply and demand analysis of the market for a good, an additional non-standard supply and demand analysis of the same market, along the lines sketched out above. In this latter case, the supply curve would represent the buyers' anticipations/ expectations of the different quantities of the relevant good that the seller would be willing and able to offer at various prices, ceteris paribus. And, the demand curve would represent the different quantities of the relevant good that the buyers would be willing and able, that is, plan, to buy at various prices, ceteris paribus. In contrast, the monopsonistic "market failure" argument is very much alive, though not widely used, in mainstream economics. Here, we are criticizing the use of standard supply and demand as being either from God's perspective or that of the firm, and ignoring that of the individual buyer of outputs or seller of resources, without realizing that is what is being done. Neoclassical economists sometimes try using these analytical tools to describe the case of bilateral monopoly in the labor market, when a union is considered to be the monopolistic seller of labor to a monopsonistic firm as buyer of labor.

INDIFFERENCE

Indifference curves are ubiquitous in economics. It is probably no exaggeration to say that without them, one of the most important elements of the neoclassical armory would go missing. And, yet, sad to say, were singularism economics accorded its rightful place in the profession, they would all have to be eliminated, root and branch.

For indifference is logically incompatible with singularism economics. The vision emanating from the latter source is that when choosing, the actor must pick one thing, and set to the side all other alternatives. There is simply no room for any third option, such as indifference. Nor is there any way to demonstrate or reveal (Rothbard, 1997) any such concept.

Austrian economics consists essentially of deducing the consequences of the apodictic truth that individuals act purposefully; that each choice consists of preferring means A to means not-A, say means B, and this is true whether the actor views A and B as means to the same end, X, or as means to different ends, X and Y, respectively.

Regardless of which end the actor is pursuing, it cannot be denied that he may be wrong; for example, he may choose A over B as a means to X and he may come to think that it was a mistake – he should have chosen B, or perhaps some entirely other means, say C, or perhaps he should have chosen some other end, say Z, and the means he thinks would have been best suited to achieving that end, say D. Moreover, two individuals may both try to achieve X, yet choose different means because of differing evaluations of the efficacy thereof. Or, they may choose different means, although they agree on the relative efficacy of different means regarding differing ends, yet they prefer different ends.

But just because error is always possible in human action, it does not warrant recognition of indifference in technical economics. The two are entirely separate.

Let us try putting this in other terms. If A gives B an X for B's Z, and B gives A a Z for B's X, then as outside commentators, economists as it were, we are entitled to infer that A and B ranked the two goods, X and Z, in inverse order.⁸ When would we be able to make any such conclusion with regard to indifference? Never, that is when. Well, if we can never

deduce indifference from human action, it is as if, for economics at least, it does not exist.

Surely, there can be no mainstream intermediate microeconomics text that not only fails to mention this concept, but also does not make it a central organizing tool of its entire analysis. With all the use the neoclassical economists make of this supposed tool of economic analysis, it is somewhat surprising to see so little in terms of a defense of it, or rejoinders to critiques of it. Yes, there are entire forests of trees that have been felled to explain indifference curves, and to apply them to all sorts of problems, but rare indeed is an intellectual defense of them against the criticisms. The only such case we have been able to uncover written by an economist is Caplan (1999, 2001, 2003). This is neither the time nor the place to rehearse Austrian objections to the work of this particular economist.9 At present, we are concerned only with the critique of indifference based on singularism. And that consists of the fact that according to singularism, all of human action consists of choosing one option and setting aside all others. (Of course, the cost of the actor's choice is the value the actor thinks he is foregoing, in the form of the value he places on the next best alternative that he thinks he would have chosen in the absence of the actual choice). But indifference in effect sets itself up as a counter example to this necessary and essential part of the human experience. It claims that there can be two goods, A and B, such that the person involved in choosing between them neither prefers A to B, nor B to A. Instead, he is "indifferent" between them. But he has no way of *demonstrating* any such preference. If he selects A and ignores B, then he demonstrates a preference for A. If he selects B and ignores A, then he indicates in the only manner he can that he prefers B. What could he do to reveal an equal preference for both, other, perhaps, than "starve to death" à la Buridan's ass? He cannot select both, as by the terms of the experiment he can choose only one; in any case he can only do one thing at a time. If he ignores both, he again fails to signal an unambiguous equal preference. Rather, he indicates he places greater importance on selecting *neither* of them to either one.

THE ESCALATOR

Consider the following from an article in the online magazine *Slate* by a leading economist in a major research university economics department. Steve Landsburg and his colleagues at the University of Rochester found

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themselves obsessed with the question: "If people stand still on escalators, then why don't they stand still on stairs?"

It was observed early on that if you stand still on stairs, you'll never get anywhere. But for reasons I can no longer entirely reconstruct, that explanation was dismissed as overly simplistic.

[...]

In other words, a step either is or is not worth the effort, and whatever calculation tells you to walk (or not) on the escalator should tell you to do exactly the same thing on the stairs.

And so one of the world's top economics departments entered a state of near paralysis. Theories were presented, considered, and rejected; I will spare their inventors (including myself) the embarrassment of having those theories recounted here. Suffice it to say that each theory centered around one or another cockamamie reason why "marginal analysis"—the weighing of costs and benefits associated with taking a single step—might not apply in this situation.

[...]

My colleague Mark Bils figured out a way to rephrase this so that even an economist can understand it. Every producer knows that workers should spend less time with inferior machinery. Compared to an escalator, a staircase is an inferior machine, so the "workers"—that is, the people who use the stairs—should try to minimize their time there. The way to limit your time on a staircase is to keep walking until you get to the end.

The same a-gument proves, incidentally, that even if you choose to walk on the escalator, you should always walk even faster on the stairs. If you're planning to write and tell me that in fact you walk at the same speed in both venues, I'd really rather not hear about it right now.

So what's the moral of the story? To me, the moral is that we should take seriously what we tell our students: Marginal analysis really works. If it seems not to be working, the right question is not, "Why doesn't the marginal analysis work?" Instead, the right question is, "How am I failing to understand the marginal analysis?" or, more succinctly, "In what way am I being stupid?" (Landsburg, 2002)

In fact, the whole issue is tailor-made for a singularism analysis. Landsburg and his colleagues framed the problem incorrectly.¹⁰ There are two totally unrelated cases: being on the stairs, and being on an escalator. In the former case, one has to make a choice between two alternatives, walking on the stairs and reaching one's destination or standing still on the stairs and never getting to one's destination. Let us go out on a limb here and assume that the purpose of being on the stairs in the first place is to reach one's

destination. Therefore, as the only way to accomplish one's purpose on the stairs is to exert the effort to walk, one always exerts the effort and walks on the stairs. In the latter case, one has to make a choice between not one but *two* alternatives, walking on the escalator and, assuming, as it seems reasonable, that if one walks on an escalator one walks in the direction that the escalator is carrying one, and reaching one's destination more quickly, or standing still on the escalator and reaching one's destination less quickly. Therefore, one will walk on the escalator only in those particular situations in which he values the time saved by walking more than the effort saved by not walking. In either case, he gets where he is going, which is naturally assumed to be the primary objective.

Therefore, we see that people "always" walk on stairs, else they won't arrive at their destinations, whereas people on an escalator always arrive at their destinations whether or not they walk, so that they only walk if and when the effort is worth it for them in order to arrive at their destination sooner. And all it took was a correct understanding and application of the concept of opportunity cost.

How does singularism come into the analysis? It contributes in several ways. First, this concept focuses our attention on the fact that human action can be reduced to a binary choice: either we do x, or we do y (that is, non-x), and if y is the next best opportunity foregone to x, why then y is the opportunity cost of x, and x is our preferred choice. As can be readily seen when employing these concepts, when on a flight of steps, the only alternative to walking is to stand and to get nowhere. (We abstract from cases where this is a goal. For example, someone is resting or the steps, or two people are having a conversation on the stairs because this is the only place they can have privacy.) In sharp contrast, while ensconced on the moving steps of an escalator, a man again has the *choice* of two options, walking or standing still, but in this case *both* of which will move him to the next level.

To extrapolate to an entirely different mode of vertical travel, consider the elevator. Why do people push the buttons to a different floor when they enter into this conveyance?¹¹ To get to the desired floor, of course. They too have a second choice: to stand in the elevator and do nothing. (Again, in saying this, we ignore several possible counterexamples, concerning contemplation in the elevators, catching one's breath there, seizing a moment of privacy, as on the stairs, and, also, peculiar to the elevator is programmed to go back down to the ground floor when not otherwise engaged.) Why do the denizens of elevators typically not act

1	2	3	4
2		Walk	Don't walk
3	Stairs	Attain desired end	Do not attain desired end
4	Escalator	Attain desired end more quickly	Attain desired end less quickly
5	Elevator	Attain desired end equally quickly	Attain desired end equally quickly

Table 1. To Walk or Not to Walk?

so passively, but rather assertively push a button? Because it is their goal to ascend or descend to a different floor. This is *precisely* the story of the staircase.

Had Landsburg and his colleagues compared and considered action in an elevator with that on an escalator and stairs, perhaps they might have asked why one does not sometimes walk in elevators. This might have forced them to think in terms of singularism and arrive at the correct result. In Table 1, the initial choice is among the rows 3-5 in column 1 and the subsequent choice is among the columns 3-4 in row 2.¹²

Certainly, this conclusion would have been obvious had they framed the issue correctly. Before one has chosen the mode of ascending, there are two levels of choice: the mode and whether to stand still or not on/in the chosen mode. The first act/choice is to choose one mode of ascending and set the other aside. The second consists in walking or not walking. Had they concentrated on the actual individual choices/actions, they would not have compared walking or not walking on stairs with walking or not walking on escalators. They would have seen that from the point of view of economics such a comparison is ambiguous.

Second, the solution to the stairs versus escalator problem is *not* marginalism, as per Landsburg. It is rather, wait for it, singularism. Now, no Austrian can fail to appreciate marginalism. It was after all, a praxeological economist, Menger (1871[1950]), who is widely credited, along with non-Austrians Walras (1874) and Jevons (1871[1965]), for solving the diamonds-water paradox, or the paradox of value that had eluded everyone¹³ before that time including the likes of Smith (1776[1979]). They did so with the insights of marginalism, a valuable tool in the armament of economics, to be sure. But marginalism need not and cannot solve *every* problem. In the present case, the solution is to recognize that when on a staircase, immobility of the feet will not accomplish the desired transportation, while when on an escalator, it *will*. It is only in the latter of these two cases that this alternative or opportunity cost even arises.

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Having dealt with the major fallacy of Landsburg and his cohorts, let us now focus on some of their peripheral mistakes. The stairs are *not* an inferior machine to the escalator; "superiority" and "inferiority" depend, crucially, on the subjective preferences of those who use them. Possibly, this is the ranking that most people, but not all, would place on these two items. Just as there are those who eschew the elevator for the stairs in order to burn calories, there are others who would make a similar determination when it comes to the stairs versus the escalator.

There is a second reason for rejecting this "solution." As we have seen, it is the stairs and the elevator on the one hand, that present the Landsburg "problem," and the escalator, on the other hand, that does not. Remember, this economist is trying to account for why people on stairs always walk on them, while those on escalators sometimes do and sometimes do not. Well, no one can deny that the elevator is at least the advanced technical marvel that the escalator is. Let us put this into other words, so that there can be no confusion about the issue. Landsburg attempts to explain different behavior on the two modes of vertical transportation on the ground that "Compared to an escalator, a staircase is an inferior machine." This account fails, in our view, because the *elevator*, easily the technological equivalent of the escalator, also presents this identical "problem." Yes, the escalator was invented later than the elevator, but it is by no means commonly considered an "inferior machine." If all escalators suddenly disappeared and for some reason could not be replaced, this would be an inconvenience. We would either have to climb stairs, or take elevators for short vertical trips. In sharp contrast, if all elevators were banished, high-rise buildings, almost all of them, would become unusable. This would have dire impacts on settlement patterns, real estate values, and, indeed, on our overall economy.

It is simply not true that "whatever calculation tells you to walk (or not) on the escalator should tell you to do exactly the same thing on the stairs." On the escalator, you are presented with a binary choice; the singularistic insight tells us you are limited to one or the other of these: standing and arriving at your destination more slowly, or walking and reaching it more quickly. On the stairs also, you are presented with a binary choice; the singularistic insight tells us you are limited to one or the other of these. But here, the options are very different: walking and achieving your goal, or digging in your heels and not doing so.

The specter of numerous economists at what are considered top-flight, research-university economics departments not being able to grasp these rather basic concepts underlying the choices available on staircases and escalators underscores even more the importance of common sense or Austrian economics, and on an important aspect of this school of thought, namely, singularism.

CONCLUSION

Singularism economics may not be a household word even within the Austrian camp, but we have demonstrated the importance of looking at matters through this perspective. We claim it sheds light on supply and demand, indifference, and the escalator versus staircase issues in a manner not available to us without this viewpoint. But there is more to it. Our argument is that this insight permeates economics, *all* of economics. It is a primordial fact that at any given time, the individual can only do A, or not A (for example, B). Those are his *only* choices. If he engages in any one activity, he necessarily eschews his next best opportunity, B, and, a fortiori, all others. We maintain that were economists to more fully incorporate this into their analytical framework, it would become a much-improved one.

As important as we think is this concept, we do not claim more for singularism than it warrants. We claim only that it is a neglected part of our discipline that deserves greater attention than has so far been given to it, and that it can indeed shed light on issues such as the three discussed above.

NOTES

1. Some Austrians thought this element so central to their concerns that they launched a journal, unfortunately no longer published, entitled *Journal of Market Process*.

2. "And it is probably no exaggeration to say that every important advance in economic theory during the last hundred years was a further step in the consistent application of subjectivism" (Hayek, 1979, pp. 52–53).

3. Alternative characterizations of Austrian economics in this vein include "The Either/or School of Thought," "The No Third Choice School of Thought," and "The (0,1) School of Thought." States Hulsmann (2000, p. 3): "We will argue that human choice involves a dichotomy...." We are not serious about any of these alternative characterizations of Austrian nomenclature. However, these alternatives do seem to us to encapsulate the "spirit" of what praxeology is all about.

4. One referee asked whether singularism was "a-historical" and whether there were "others who have observed this (singularist) feature of economic theory in the past?" Our answer is that a literature search turns up very little in this regard. Mises mentions the concept on several occasions; to the best of our knowledge, the only others are Gordon (2003) and Heinrich (2004).

5. See Ashford and Shakespeare (1999) for a review of Kelso's "binary economics" paradigm and its subsequent development.

6. Of course, only individuals can act. Here we use the colloquialism, when we mean that some individual member of the firm acts.

7. A referee has asked us to acknowledge a reference to an economist who makes this claim, so although we argue that it applies to all of mainstream or neoclassical economics, based on the use it makes of the familiar diagram explaining the "market failure" of "monopoly," we offer the following: Bork (1978, p. 107).

8. For Hoppe (1995), this is a matter of praxeological necessity.

9. For Austrian replies to Caplan, attacking the concept of indifference, and the misbegotten curves they have given rise to, see Hulsmann, (1999), Block (1999, 2003), and van Dun (2003). There is one other case that deserves mention in this regard. The philosopher Robert Nozick (1977) also weighs in on the side of indifference. For a rejoinder to him, see Block (1980).

10. A literature review search of this issue fails to reveal any scholarly peerreviewed economics journal that has addressed this issue. Rather, the discussion has been dominated by physiometricians and physiologists concerned about caloric usage in the two modes of transportation (See the Google search on the topic available at http://tinyurl.com/2arh6g).

11. Remember, we are not the first ones to ask this question: Landsburg initiated the discussion. We are only trying to pick up the pieces.

12. The concept of action is often interpreted as preferring A to B in a situation where C, or C, D... are also viable possibilities. While making a choice, we prefer A to B and A to C, and A to D, etc. However, the cost of choosing A is "only" the value of B, assuming that we value B more than any of the other alternatives to A. That is, singularism has to do with *cost*, and only indirectly, through cost, with choice.

13. The late scholastics of the School of Salamanca are an exception to this claim; see Woods (2005) and Chafuen (1986).

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