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Radical Subjectivism and Austrian Economics

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Introduction*

In her vivid description of the conference held at South Royalton in 1974 to revitalise the Austrian tradition in the US, Karen Vaughn considers Ludwig Lachmann as "the odd man out" at the conference, mainly because he was the "only speaker who seemed to see much theoretical work still to be done in defining and developing an Austrian economics". It is by following the way in which Lachmann influenced the subsequent evolution of the Austrian thinking that Vaughn mainly reconstructs the Austrian paradigm in her recent book on *Austrian Economics in America: The Migration of a Tradition* (1994).¹

Vaughn proposes an exhaustive reconstruction of the traditional Austrian school of thought — ranging through Menger, Mises, Hayek and their followers — which mainly stresses those aspects of the Austrian approach which have remained outside neoclassical developments. Vaughn's view is that it is the re-discovery of those aspects of Austrian thinking eschewed by the mainstream that has brought about the emergence of an American tradition of Austrian economics. Vaughn's explicit purpose is thus to highlight those "American Austrians"² who have successfully managed to draw on that tradition of thought.

Vaughn's book is an important attempt to answer the question: what is Austrian economics? Needless to say, this is the kind of question one must address in trying to assess any paradigmatic alternative to the dominant corpus of the discipline. It is also the

* I wish to thank J. Birner, L. Moss and the editors for their comments on a previous draft of this paper.

¹ Throughout this paper, unless otherwise noted, the page numbers in parentheses refer to this book. The passage quoted in this paragraph is taken from page 108.

² The inverted commas are of course necessary because it is generally considered that one the most influential "American Austrian" scholars is Lachmann.

kind of question which often generates only negative heuristics (i.e. a set of methodological options which does not necessarily entail a clear positive analytic content).

The answer provided by Vaughn in her attempt to give analytic content to her definition of the Austrian paradigm is that if Austrian economics is to be something different from mainstream economics — a fact which is seen as essential for the survival of a separate tradition of economic thinking — then it must be founded on a continuous effort to develop a radically subjectivist approach. Vaughn contends that many fundamental concepts of Austrian economics such as the market process and spontaneous order can be consistently opposed to neoclassical equilibrium constructs only if they are based on an approach to individual choice which stresses not only the subjectivity of agents' preferences and decisions, but also the subjectivity of knowledge and expectations. Lachman's legacy is thus central to the whole of Vaughn's analysis, because of the way in which Lachmann forced the Austrians to deal with subjectivism. In fact, the overall purpose of the book is to define a more comprehensive concept of "order" which can take into account both Lachman's viewpoint and the traditional Austrian reference to co-ordinated patterns of behaviour.

In what follows I intend to argue that while one may agree with Vaughn's emphasis on the necessity of further developing the subjectivism proper to the Austrian tradition, it might be argued that the way in which this methodological option is implemented is unconvincing, at least with respect to one central issue. I will maintain that with respect to the analysis of economic institutions — which Vaughn considers essential for the notion of order she suggests — some distinguished Austrian arguments are not only critical of the mainstream but also inconclusive. This is mainly because these arguments are derived from an analysis of economic institutions which is limited to the usual comparison between decentralised and centralised economies, and devoid of appropriate reference to a number of interesting developments — generated within the mainstream, even if critical of the standard account of it — which try to deepen the understanding of the organisation of exchanges in decentralised economies. To be specific, I will argue that the Austrian attitude toward the mainstream sometimes shows little knowledge of the relevance of certain recent developments for a number of distinctive Austrian themes. In order to provide the background for my argument, I will give a preliminary account of the relationship between the Austrian approach and the mainstream, with specific regard to the question of how to deal with decisions under uncertainty. It is from this preliminary question that my argument will start.

Rational Ignorance

It is usual to find reconstructions of the Austrian tradition which emphasise a Kirznerian and a Lachmannian vein (for example, see O'Driscoll and Rizzo 1985). But the way in which Vaughn presents the former as a "supplement to neoclassical economics" and the latter as the only possible way to a meaningful "alternative conception of order" is uncommonly persuasive. The most prominent example can be found in the consideration of the analytical tools needed to deal effectively with uncertainty and the passage of time.

Vaughn argues that Kirzner has been successful in providing an analysis of the process through which competitive markets may reach equilibrium. His notion of the alert entrepreneur is a definite step forward in the appreciation of the role of those economic agents who "notice opportunities that others miss and act upon that knowledge to bring markets closer to equilibrium" (165). But when real time and genuine uncertainty are taken into account there is no longer any reason to argue that each entrepreneur is "correct" in his action, and thus no reason for expecting their joint actions to be equilibrating, as Kirzner assumes. This is why any attempt to formalise the entrepreneurial behaviour as a problem of constrained maximisation under uncertainty is bound to be unproductive. Genuine uncertainty must imply that the entrepreneur cannot anticipate all possible future consequences of his action. Therefore equilibrium cannot be considered an *ex ante* reference point for analysis.

Lachman's contribution, on the other hand, takes stock of the traditional Austrian emphasis on heterogeneous and incomplete knowledge and comes to the conclusion that only those descriptions of economic activities which consider endogenous and unpredictable change are apt to understand agents' behaviour. The market process driven by individuals whose acting is "undetermined creative choice" (152) is necessarily an open-ended process. Not just the possibility of anticipating it *ex ante*, but the very notion of equilibrium is called into question.

The main point of disagreement between the two alternative views of Kirzner and Lachmann not only originated in a different attitude toward the modelling of individual behaviour, but also in the explanation of what the achievable aggregate outcomes are. They both recognise that the question is not so much that of incorrectly perceived opportunities by individual agents — which is usually dealt with in neoclassical economics — as that of unperceived opportunities. Still, Kirzner admits that equilibrating actions can be consistently defined, thus sticking implicitly to a (perhaps generalised) constrained optimisation approach in the Robbinsian tradition. As Vaughn contends, "he has improved upon a model of market behaviour that still fails to capture the central problem of human action" (150). In fact, "he rejects the notion that entrepreneurs create anything *ex nihilo*, instead arguing that by discovering opportunities already 'there' to be

discovered, they are introducing genuine novelty into the system" (148). Thus it would seem that, from Vaughn's viewpoint, "genuine novelty" and unperceived opportunities are distinct.

In contrast, Lachmann thinks that, if equilibrium is no longer a useful tool, then the notion of equilibrating action is unintelligible. Therefore he argues for an entirely different approach. Following Shackle, Lachmann maintains that it is the undetermined nature of the future that explains why the consequences of creative choice are unpredictable. "Genuine novelty" rests in the fact that "no two minds are alike" (153), so that neither individual choices nor their outcome can be fully predicted. As a consequence, economic theory must draw on the notion of a plan "to make world intelligible in terms of human action". But the passage of time accounts for the fact that "revision of plans is the norm rather than the exception" (154), thus rendering coordination almost unachievable as a state of the economy. Lachmann's suggested solution, Vaughn contends, is then to be sought in the study of those institutions which can favour order even in the face of uncoordinated patterns of behaviour. But, as regards the possibility of having a formal theory of economic decisions, we are only left with a series of negative statements. In Vaughn's words "Lachmann, in an attempt to take radical subjectivism and real time seriously in his interpretation of economic action, tries to devise an alternative to equilibrium theorising but fails to produce the kind of overall theoretical structure that would seriously challenge the neoclassical hegemony" (161). In particular, one might add, Lachmann does not provide any description of the characteristics of the domain encompassing not only unperceived but also inconceivable opportunities.

The fact that the modelling of individual behaviour is crucial to the whole of Vaughn's reassessment of the Austrian tradition is demonstrated in her attempt to summarise what aspects can be considered as "hard core" Austrian. She points to a widely agreed opinion on the assumption of perfect knowledge used in neo-classical economics as heading the list of commonly shared beliefs among Austrian scholars.

"Austrians agree with neoclassical economics that human beings attempt to act rationally to achieve their purposes. However, because human action always takes place in time and always under conditions of partial ignorance about the present and total ignorance about the future, a theory of market processes can be neither static in nature nor based on the assumption of perfect knowledge. *Nor is rational ignorance a promising assumption for Austrians who deny that all the relevant future states of the world are listable by the choosing agent*" (163, my italics).

Given that perfect knowledge is obviously not a common assumption in most modern economic theory, the real meaning of rational ignorance deserves closer investigation. Austrian economics, Vaughn stresses, "cannot usefully be considered

merely a variation on the economics of rationality and constrained maximisation" (162). This statement accounts for her position, which is critical of Kirner's ideas and supportive of Lachmann's. But the main question which the analysis of the two different positions leaves open is the following: what does rational ignorance really mean?

If one looks at the theory of decision adopted by mainstream economic theory for the last forty years, things appear to be plain. The theory of economic decisions has been based — starting from Savage's definition of states of nature — on Bayesian decision theory, which requires that the possible events must be "listable" and that their (subjective) probability of realisation add up to unity. Indeed, the basic assumption of decision theory under uncertainty is that economic agents know with certainty the domain of their uncertainty. This is of course not a theoretically appealing assumption if one is interested, as the Austrians are, in "themes such as the importance of dynamic growth and development, the generation and function of knowledge in economic action, the uncertainties associated with processes in time and the pivotal importance of diversity and heterogeneity in economic life" (162).

But one should notice that in recent years some perceptive mainstream theorists have shown that they share with Austrians the same discomfort. The difficulties in representing formally how the knowledge of individual agents changes — which is the upshot of Lachmann's insistence on the subjective nature of knowledge — has troubled many neoclassical economists. More and more of them have increasingly acknowledged these difficulties. This is apparent in the evolution of the notion of equilibrium toward a more dynamic conception, as in the works of Hahn (1973) and Fisher (1983).³

What is more important with respect to the Austrian themes is that there is now an increasing number of attempts to explicitly deal with the question from a choice theoretic perspective (among others, see Kreps 1992 and Hahn 1995a). Let us take as an example Kreps's analysis of unforeseen contingencies. In an effort to give choice theoretic foundations to Williamson's contention that many of the forms of contractual arrangements one can observe in markets and organizations are to be attributed to the need to adapt to contingencies which cannot be anticipated at the date of the signature of the contract, Kreps provides a model of choice in which the individual agent is aware, at the outset, that unforeseen contingencies may arise — in other words, the individual agent might not have been able to imagine at an earlier date an event which he now has to face up to. The analytical trick is to leave room for a state of nature which can be called "none of the other states", whose content is not conceivable *ex ante*. In this way one can imagine

³ In their examination of the models provided by Hahn and Fisher, Currie and Steedman (1990: 215) find it "striking that much recent work has more in common ... with Lachmann's conception of market processes than it does with the Arrow-Debreu economy". Their opinion is relevant with respect to my argument because their analysis of economists who have dealt with the behaviour of economies over time highlights the importance of Shackle's and Lachmann's contributions.

different degrees of flexibility preserved by agents for future decisions about possibly new events (Kreps 1992, 259-61).⁴ One can also refer to the related, and probably more powerful, notion of unawareness presented in Modica and Rustichini (1994), where the discussion involves unforeseeable contingencies — in other words, the individual agent might have been unable not only to think of the event but even to understand it before its realisation. It is also worth stressing that this kind of approach hints at a departure from traditional choice theory which is not in principle limited to exogenous uncertainty, as indicated by Hahn's conjecture (1995a) about the possibility of introducing endogenous uncertainty into equilibrium theory via the notion of unawareness. I believe that the notion of unawareness can account for certain aspects of Vaughn's idea of "genuine novelty".

The aspects of decision theory just mentioned do not represent an isolated contention by certain leading authors. The astonishing increase in studies concerned with informational asymmetries, incomplete contracts, non-additive probability theory and so on do not simply entail a major extension of formal exercises in constrained maximisation. They indicate the attitude of modern economic theory toward the question of rational ignorance. The traditional formulation of the problem of decision under uncertainty is still dominant, above all because of the central role assigned to utility maximising individuals; but an increasing number of papers are devoted to alternative ways of formalising uncertainty. The literature on incomplete contracts is a notable example. The argument for signing incomplete contract conceives fully rational agents who decide not to spend time in describing states which in principle can be described (for instance, because they are not easily observed from outside by a judge, as suggested in Hart and Holmstrom 1987). In this instance agents may form beliefs which can be represented as probabilities over the set of unexplored states.

It might be argued that there are different, and much more convincing, reasons for justifying an analysis of ignorance, as argued in the Austrian tradition. But it is difficult to understand why one should not take stock of the effort of "erroneously" justified analyses. If the main analytical point is the one which concerns the possibility of listing the future events, it is counterproductive to deny that there are many studies seriously confronting it.

One possible objection to my point might be that it is difficult to say which contributions can be labelled as part of the mainstream and which not. Of course, Williamson is not a typical neoclassical representative. But his contribution draws on opportunistic behaviour at least as much as other neoclassical work. If the crucial point is whether or not we are dealing with utility maximizers, all the studies I have made mentioned can be considered mainstream. It might also be argued that these studies do not

⁴ A previous attempt is Loomes and Sudgen 1986. It is worth noting, however, that the predictive power which is usually attributed to the Bayesian process of updating beliefs seems bound to be lost in Kreps's representation.

constitute a coherent entity. For instance, Krep's formalisation holds only if the "sure-thing principle" is assumed, while studies in non-additive probability theory are based precisely on its denial, which emerges from the Ellsberg paradox (for example see Machina 1987, and Camerer and Weber 1992). But that does not change the substance of the argument: the question of how to formalise decision making under uncertainty is central in much of modern economic theory, and the suggested solutions cannot be simply considered variations in constrained optimisation.⁵

To sum up on this question of rational ignorance: my point is that the comparison between neoclassical theory and alternative paradigms, such as the Austrian, should take into account the multiple aspects of neoclassical theory. It is unhelpful to compare the Austrian insights on knowledge and time with a mere travesty of neoclassical theory. Even if one points at the efforts of general equilibrium theorists, it can be shown that they are now involved in accounting for endogenous uncertainty and information asymmetries. The standard framework is one of missing markets and impossibility of complete insurance against future events. Indeterminacy of equilibria, that is multicplity, is regarded as the norm; Pareto-constrained efficiency of equilibria is not guaranteed (Hahn 1995b).

We have seen that while she considers Kirzner's analysis too closely linked to the mainstream, Vaughn finds it difficult to clarify the Lachmannian alternative. Of course, Lachmann's attitude toward what other Austrian scholars have characterised as "theoretical nihilism" leaves economic theory without a clear path to follow, at least as regards the study of individual behaviour. As we shall see in a moment, Vaughn's viewpoint is that the solution to this problem can be found in an elaboration of the notion of order which takes the role of institutions into due account.

But the attitude that denies the possibility of any solution at the individual level is unconvincing. Moreover, it is fruitless in the comparison between Austrian insights and the mainstream, because it makes it difficult to understand whether the mainstream has actually understood the Austrian message. To take an example, in the Austrian literature the influences of Hayek's work on the economics of information are often noted, as Vaughn points out (165). But the unanimous conclusion by the Austrians is that Hayek's profound insights have been misunderstood and not properly dealt with. It is worth noting that non-Austrian theorists show an opposite attitude on this historiografic matter. Hahn (1990) has recently contended that a typical Hayekian theme such as that prices may reflect the different expectations of agents and thus reveal information has been carried well beyond Hayek's vague remarks, and "fully absorbed" in neoclassical economics, only

⁵ A recent interpretation of the approach of non-additive utility theory points to the fact that while Bayesian decision theory is unable to deal with the influence that choices can have on future states of nature, a main point in the agenda of the non-additive utility theory approach is to address the issue of the degree of irreversibility which characterises the consequences of sequential actions (Vercelli 1995).

by virtue of the literature on revelation of information prompted by Radner (1979) and Grossman (1989). Milgrom and Roberts (1990, ch. 4) consider Hayek's notion of personal knowledge central but insufficient on its own for the comparative analysis of organizations and the market. Similar viewpoints can be found in Arrow (1994), with respect to the notion of personal knowledge as compared to that of technological knowledge, and in Bowles and Gintis (1993) and Stiglitz (1994), with respect to those functions performed by the market which are not simply allocative. I have argued elsewhere that an attitude different from Vaughn's with respect to the relationships between Hayek's insights and modern attempts to deal with asymmetries of information may be more fruitful (Zappia 1995). I shall now turn to this issue.

Economic Order and Economic Institutions

The most important of Vaughn's recurrent themes is the necessity for current Austrian economics to consistently develop an analysis of economic institutions in the direction indicated by Menger and Hayek. Her book is written under the firm, and clearly argued, belief that the unorthodox component of Menger as a founder of the neoclassical paradigm — his theory of economic institutions — is the cornerstone of the Austrian approach. Thus although equilibrium is the dominant organising principle in most economic theory, the Austrians, especially since Hayek's reconsideration of Menger's theory of the origin of economic institutions, have turned their attention to the more general notion of social order. The ultimate goal of this shift of focus is not, as the evolution of Hayek's thought might suggest, the search for a qualitative notion of equilibrium to counterbalance the quantitative notion of the mainstream. (This has been argued even recently in Donzelli 1993, and Moss 1994). In fact, Vaughn maintains, it is in the way order is conceived, as "a system of rules established to enable individuals to achieve their own objectives"(123), that the impact of Hayek's work (especially *Law, Legislation and Liberty*) can best be appreciated. A corollary of this view of order is that the objectives of individuals and the specific action they set in motion "depend upon their [the individuals] perception of opportunities ..., but the process for taking these actions depends upon the legal and informal rules structure in which they operate, a rules structure that includes rules of business trading as well as of cultural norms and legal prescriptions" (124-5).

Vaughn's view is that Hayek's insistence on the heterogeneous and dispersed nature of market knowledge not only implies a vision of the market order as a discovery procedure, "a means of inducing individuals to learn more about the opportunities available to them and to create new products and new methods of production". It also

allows an "evolutionary theory of social institutions wherein those that survived only did so because they better helped individuals within a society to achieve their goals. ... It is indisputable", Vaughn concludes, "that [Hayek's] theory of social evolution helped to point Austrian economists toward the study of economic institutions and evolutionary orders in a systematic way" (126-7). The Austrian alternative to conventional equilibrium theorising is thus to be found in the development of an evolutionary theory of institutions.

The implicit assumption in Vaughn's reading of Hayek and the subsequent evolution of the Austrian paradigm is that a specific analysis of individual behaviour no longer matters once the methodological implications of Hayek's work are correctly drawn. The Hayekian notion of spontaneous order is not to be interpreted simply as a fundamental shift in thinking about the meaning of the type of coordination that is conceptualised by general equilibrium (as in Moss 1994). Neither can it be interpreted as a qualitative equilibrium construct within which formal economic theory can help in clarifying the phases of plan co-ordination. On the contrary, it is a definite step toward an understanding of economics largely as "a study of economic institutions within a nonequilibrium context" (127). This is why Kirzner's approach to individual behaviour is regarded merely as a variation in constrained optimisation. As for Lachmann, his inability to give analytic content to his insights on the inherently continuous revision of individuals' plans is deemed unimportant in comparison to the alternatives to conventional equilibrium theorising suggested in his work. One might even argue that Vaughn's assessment of Lachmann's role in the development of Austrian thought points to the "beneficial" influences of Lachmann's belief that no formal theory of individual decision making can be arrived at.

Vaughn's proposal then is to follow the implications of her reading of Hayek's abandonment of general equilibrium analysis, that is to investigate a different notion of order. But the notion of spontaneous order in itself cannot accomplish this task. For Vaughn's contention about the impossibility of giving formal support to the analysis of individual behaviour when new knowledge is prompted by the passage of time implies that the market tendency toward a spontaneous order is not guaranteed. Here Lachmann makes his contribution; he improves on Hayek's idea of spontaneous order by pointing out "that markets are subject to both disequilibrating and equilibrating tendencies" and that pure economic theory cannot help in showing "which kind of tendencies dominate the system" (160). Lachmann's most fruitful suggestion is thus to abandon the search for alternative equilibrium constructs, and to pursue the analysis of those institutional settings which favour the market's order. But Lachmann's drawback is that he failed to provide a "clearly articulated theory of institutions" (157). As a consequence, in order to move forward in the development of an Austrian alternative to the mainstream, it is necessary to address the

question of how institutions can evolve, persist and justify the desirability — if not the efficiency — of the market order.⁶

The upshot of Vaughn's assessment of the Austrian paradigm is clearly summarised in the following sentence:

"Economics is a social science that by definition is concerned with understanding order in human society. As human beings we recognise many recurrent patterns of behaviour that result in orderly social processes — customs, manners, laws, institutions and relationships. In addition, often what seems disorderly and chaotic at first glance, upon further investigation, can be shown to reflect some deeper unsuspected principles of order, usually some purposeful response to perceived constraints. The question is, how do we explain this social order that goes beyond our immediate perceptions while remaining true to our recognition that humans act not only to make themselves better off, but they do so in a world of limited resources, incomplete knowledge and radical uncertainty?" (164)

In their continuous search for an alternative theoretical structure that would provide a better explanation of economic order than neoclassical economics, the Austrians have provided a number of interesting equilibrium constructs, including Mises's notion of an evenly rotating economy, Hayek's notion of plan co-ordination and O'Driscoll and Rizzo's notion of pattern coordination. These three notions are all carefully examined by Vaughn, but the one she seems most supportive of is O'Driscoll and Rizzo's. Their approach is an attempt to develop a definition of co-ordination that is intended to describe an economic system in which new endogenous knowledge is fostered by the actions of individual agents and thus to accommodate endogenous and unpredictable change.

But even though pattern coordination has its attraction for Vaughn, the major component of a satisfying notion of order is still missing. Economic institutions can be considered as "points of orientation" for individual agents and thus favour pattern co-ordination — that is coordination among the typical, recurrent features of individual actions — even if specific aspects of individual actions "fail to mesh", as O'Driscoll and Rizzo contend. On the other hand, even those specific aspects of human action which do turn out to be uncoordinated are relevant for the endogenous change of prevailing institutions. What the Austrian tradition has hinted at, but not dealt with as much as it should, is the fact that "errors that constitute part of the market process should be construed as both integral and beneficial". Therefore, the proper approach to learning is "how can mistakes and error be channeled into productive knowledge" (173). At this

⁶ Vaughn mentions, but does not discuss, Lachmann's explicit retreat (1986) from the institutional issue.

point, Vaughn abruptly concludes that a cogent explanation of the market process as a process of trial and error thus requires an evolutionary theory of institutions, where experimentation and learning which lead to "new modes of human interaction" can explain "the origin, persistence or failure of human institutions, those regular observable patterns of action that lend stability and predictability to human life" (175).

So Vaughn seems to be supporting a definitive withdrawal from the traditional ways of economic theorising, by arguing in favour of a shift of focus from spontaneous to social order, and for almost the same reasons that prompted Hayek's withdrawal from equilibrium toward spontaneous order. But Vaughn's discussion of those institutions that "permit the use of new knowledge in human action" (174) is not very satisfying. She only refers to the tradition of those economists, notably Nelson and Winter, who have attempted to adapt evolutionary reasoning to economic processes, and to the similarities between certain features of evolutionary theory and the Austrian viewpoint, as represented by Witt (1992) and Horwitz (1992). She also concedes, "there is much work to be done" (175). Indeed, the need for the Austrian research programme to abandon the equilibrium metaphor and to elaborate an evolutionary notion of social order is supported only by a few suggestions for future research. This inevitably leaves the reader feeling discontented, for Vaughn does not even discuss the difficulties to reconcile methodological individualism with group selection processes on which the evolutionary approach hinges. Moreover, it seems to imply that the analytic content of the Austrian paradigm is yet to be developed.

The future relevance of Austrian economics might probably depend on the viability of Vaughn's suggestions, although current Austrian researchers are still divided on the research strategies to be followed in order to avoid the sidelining of Austrian economics (for example see Rizzo's (1992) and White's (1992) sharply differentiated positions). Although it is not an aim of my paper to make conjectures about the future Austrian impact on economic research, let me conclude by making some remarks on a different implication of Vaughn's proposal.

One issue Vaughn leaves undiscussed is why the analysis of economic institutions cannot be based on the study of individual behaviour, as it is traditional in the Austrian approach. She argues that "people carry out their projects and plans within a variety of social institutions, all of which have both tacit and explicit rules of behaviour. Indeed, an agreement between two people to engage in a recurrent pattern of behaviour vis à vis each other is also a form of 'institution' or typical behaviour" (171). But here Vaughn neglects to refer to the fact that a leading interpretation of the recent developments in the economics of information is that if opportunistic behaviour is properly taken into account, then the typical contract between two asymmetrically informed agents can be interpreted as the outcome of tacit rules of behaviour (for a summary, see Bowles and Gintis 1993). A

more thorough inspection of the market as an institution reveals that many aspects of economic activity such as repeated interaction for exchange purposes do not necessarily involve the emergence of organisations, but can be explained instead as the emergence of conventional behaviour among distinct market participants, and that this can be interpreted as "a form of 'institution'". This view is consistent with the Austrian view of the market as represented by Hayek. Hayek's conception of the superiority of the market over alternative organisational settings is not exclusively linked to the impersonal working of the price system and its efficiency in diffusing existing knowledge and creating the incentives for discovering new knowledge. It also emphasises the role of those forces of competition, such as imitative behaviour, rules and traditions, which were excluded by the Walrasian interpretation of competition. The view that the exchange of information which is dispersed throughout the system is achieved through a process which is more complex than the Walrasian process of impersonal allocation through prices is not only compatible with Austrian thought, but has also been strongly supported by Hayek (1948 and 1968). I have argued elsewhere (Zappia 1995) that a superficial denial of the relevance of many recent microeconomic developments to understanding the market as an institution is inconsistent with Hayek's insights into the matter.⁷

Here a paradox seems to emerge: following Vaughn's reconstruction of Austrian thought, it might be argued (as in Bowles and Gintis 1993) that new developments of what Vaughn considers neoclassical theory have done more than the Austrians for providing an individualistically-based explanation of those elements — such as habits and customary business procedures — which characterise economic institutions. But this is of course untrue, as Vaughn herself stresses in her reassessment of Hayek's theory of knowledge and the related efforts by O'Driscoll and Rizzo to develop an economics of time and ignorance in which "the existence of private and tacit knowledge implies that nonprice signal can contain important market information" (136).

A similar issue arises as regards the application of game theory to the explanation of spontaneous orders (see Sudgen 1989) and the evolution of institutions. The Austrian explanation of economic institutions is essentially a causal-genetic theory, taking Menger's theory of money as exemplar. This explanation describes the development of institutions as the outcome of a sequence of actions by individual agents, where the aggregate outcome of these actions is not necessarily the intended outcome. Indeed, what distinguishes Austrian theory from the "pure" methodological individualism of neoclassical theory is that it necessarily involves the explanation of a composition principle. It might thus be argued that to represent the process of composing the effects of distinct individual plans by means of the theory of games is a valuable complement to the

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But see also the "Austrian rationale" for the existence of organizations provided by Minkler 1993.

evolutionary theory of institutions (see Langlois 1992 and Bianchi 1994). Furthermore, this approach attributes a primary role to the decisions of individuals, which is contrary to the interpretation suggested by Vaughn.

Concluding remarks

In this assessment of Karen Vaughn's *Austrian Economics in America*, I have stressed her's call for a definitive shift in Austrian thought away from the search for equilibrium constructs and towards the analysis of those institutions which favour ordered outcomes of the market process, is not justified by the inability of pure economic theory to deal with rational ignorance. In fact, most Austrians seems to use this argument to avoid discussing the inevitable withdrawal from methodological individualism which is implicit in the endorsement of an evolutionary approach to economic theory.

My aim here has not been to argue that future developments in Austrian economics should not follow this line of research, but rather to point out that a withdrawal from equilibrium theorising _ which seems contradictory both to traditional Austrian thought in general and to Hayek's theory in particular _ cannot be based on an inaccurate representation of recent developments in orthodox microeconomic.

Furthermore, a critical, but positive, attitude towards the attempts to formalise rational ignorance might suggest that the Austrian tradition may actually influence future research rather than merely constitute an optional supplement to it. As I have argued, the kind of formal representation of decision making under uncertainty one finds in recent developments in microeconomic theory is not intended to describe agents "striving to formulate the correct vision of the future as if the future were something already implicit in the data and one's only problem is to guess correctly what the future will be" (147). On the contrary, it recognises as a starting point for research the view that ignorance is an inherent feature of every decision regarding future events. In this, it resembles the Shackleian _ and Lachmannian _ assertion that the future is the unpredictable consequence of creative choices made by individual agents. And it seems to point towards a re-elaboration of the notion of equilibrium which is compatible at least with Hayek's, if not with the whole Austrian, tradition.

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