

Hayek, the Mind, and Spontaneous Order: A Critique

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In an earlier essay in *Transactional Viewpoints*, I showed the connection between John Dewey's theory of knowledge and his view of democracy.² In this issue devoted to Hayek, it should become clear that Hayek and Dewey have a number of things in common—despite their differences in field, nationality, generation, and politics.³ Among these is the derivation of a comprehensive social, political, and economic theory from a theory about the structure or operation of the human brain, what I am calling “cognitive theory.” In the case of Dewey, a philosopher, one would be inclined to substitute “epistemology” for “cognitive theory” and in the case of Hayek, who dabbled in biology, one might substitute “cognitive science,” but the similarity is considerable and so the choice of a single term for both is warranted. Hayek, as well as Dewey, can be situated in a tradition that begins with Plato founding political theory on cognitive theory. My focus in this brief essay however is to show in detail how Hayek's cognitive theory relates to his notion of “spontaneous order.”

The Knowledge Problem and Central Planning

On a superficial analysis, Hayek's cog-

nitive theory consists of just two propositions, and both are empirical (inductive or observational) rather than theory-based. The first is that human knowledge is so widely distributed throughout the human population that no single person or agency (“central planner”) could acquire enough of it to allocate the society's resources efficiently. This is a result of the division of labor, which has been carried to an extreme in modern society and greatly increases efficiency by enabling specialization, but which has brought about, as an unavoidable byproduct of specialization, a narrowing (along with a deepening) of the knowledge possessed by any single individual. He knows more about less.

There is close convergence between Dewey and Hayek, both emphasizing the radical dispersion of knowledge across persons under the conditions of modernity. But they quickly diverge because Hayek, unlike Dewey (who was not an economist, as Hayek was), saw that the price system was a method, probably the best method and certainly a better method than central planning, of aggregating this dispersed knowledge. An individual may realize that a particular input that he needs in his business is likely to become scarce, so he buys up a large quantity and stores it. His action forces up the price of the input, which induces others to economize on its use and to adjust their own prices. Price thus operates as a method (Hayek would say the method) by which private information is diffused throughout the entire market.⁴

The second proposition of Hayek's cognitive theory is that private or local information (the sort of unsystematized

information possessed by an individual and illustrated in the preceding paragraph, as distinct from information that is codified in general principles stated in books or articles and thus is readily accessible) is impounded not only in price but also in rules.⁵ A firm adopts a new practice—it might be a new method of compensating its employees. The firm might have hit on the new practice by accident or by hunch rather than by explicit cost-benefit analysis or other conscious reflection on how best to fit means to ends. Suppose the practice, whatever brought it about, results in lower costs and higher profits for the firm. That is important information to which the firm is likely to respond by codifying the practice as a rule. The difference between a rule and a standard (“profit maximization,” for example) that requires fresh analysis in every case is that a rule singles out one or a small number of facts to be outcome determining. The person applying the rule doesn't have to know its purpose, or the net benefits of applying it in a particular case; all he has to know is whether the fact that triggers application of the rule is present or absent. Eventually the reason for the rule may be forgotten (and there may have been no reason, or at least no articulable reason), yet this may not matter; continued adherence to the rule will be a way of exploiting the information impounded in the rule without need for thought beyond what is necessary to determine whether the condition for the application of the rule is satisfied. Complying with a rule, like responding to a change in price, can be a method of utilizing knowledge without actually

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² See Richard A. Posner, “Dewey and Democracy: A Critique,” *Transactional Viewpoints*, Summer 2003, Vol. 1, no. 3, pp. 1–4.

³ For detail, see Richard A. Posner, *Law, Pragmatism, and Democracy*, Harvard University Press, 2003.

⁴ The clearest exposition of Hayek's theory of price is F. A. Hayek, “The Use of Knowledge in Society,” *American Economic Review*, 1945, Vol. 35.

⁵ See, for example, F. A. Hayek, *New Studies in Philosophy, Politics, Economics and the History of Ideas*, 1978, pp. 3, 7, 10; Hayek, “Rules, Perception, and Intelligibility,” in *Proceedings of the British Academy*, 1962, p. 321.

possessing knowledge.

I said that the practice might have been hit upon by accident or by hunch. The first possibility would represent the operation of trial and error, the Popperian method of acquiring useful knowledge. The second belongs to the domain of “tacit knowledge.”⁶ People know how to do many things that they cannot explain in a communicable fashion. A person who knows how to ride a bicycle cannot convey that knowledge in words to another person in a way that a person who knows how to bake a cake can convey that knowledge by handing the other person a detailed recipe. Hayek sensibly believed that a great deal of knowledge, including a great deal of the knowledge utilized in business, is tacit, inarticulate, and therefore uncommunicable. (He believed this in part because he thought a complex system could be understood by only a more complex system, and hence the mind could never fully understand itself. I don’t know whether that makes any sense.) This belief strengthened his challenge to the feasibility of central planning. If much of the knowledge that is scattered across the millions of economically active persons in a society is tacit, then no matter how great the intellectual capacity of the central planner is, he (or it, if we speak more realistically of an agency rather than of an individual) will not be able to obtain all the information needed because much of it will be in uncommunicable form—uncommunicable except by pricing. The price system is the alternative to central planning, and to the extent that knowledge is tacit it would be a superior alternative even if the central planner had an unlimited capacity to absorb and analyze data.

Hayek—this is his most important contribution to economics, and it comes directly from his cognitive theory—thus offered a new rationale for the price (or market) system. The old rationale associated with classical or neoclassical economics (as distinct from “Austrian” economics, the economics of Hayek, his predecessors Karl Menger and Ludwig von Mises, and his

⁶ The modern philosopher most responsible for emphasizing the importance of tacit knowledge was Michael Polanyi. See, for example, “The Logic of Tacit Inference,” in Michael Polanyi, *Knowing and Being: Essays* (Marjorie Grene ed., 1969). The importance of tacit knowledge in Hayek’s cognitive and economic theory is emphasized in (among other places) Richard N. Langlois and Müfit M. Sabooglu, “Knowledge and Meliorism in the Evolutionary Theory of F. A. Hayek,” in *Evolutionary Economics: Program and Scope* (Kurt Dopfer ed., 2001). See also Steve Fleetwood, *Hayek’s Political Economy: The Socio-Economics of Order*, Routledge, 1995, Ch. 7, for a good discussion of Hayek’s theory of knowledge.

relatively few successors), was that the price system was the method of overcoming self-interest, of turning private vice into public virtue, of leading selfish individuals by an invisible hand to serve the public interest. People, according to this view, are rational not only in the sense of being committed to means-end reasoning but also in the sense of having a clear perception of the end, and of the costs and benefits of the alternative means to that end, but they are too self-interested, too deficient in altruism, to be trusted to use their knowledge for social ends and so the trick is to induce them to behave in a way that will maximize social welfare as a whole; and the price system is the trick. Hayek did not think the main problem of which the price system was the solution was self-interest and a resulting shortage of altruism; he thought that people needed the price system in order to overcome the deficits in their knowledge. The power of that insight was that it denied the feasibility of central planning, which at the time that Hayek began propounding his thesis, namely in the 1930s, the depression decade, was considered by most economists a viable and by many a more efficient method of allocating resources than the price system. Hayek was one of the first to see that, and more important to explain cogently why, this was incorrect.

Hayek’s second proposition, about the importance of rules as a method for dealing with the knowledge deficits that gave rise to his defense of the price system, belongs to the last part of his career, beginning in the 1960s. Whereas the first proposition undergirds Hayek’s defense of free markets, the second is the key to his political and legal theory. With knowledge dispersed and much of it tacit, there is no way a central authority, such as a legislature or a court, can gather and marshal the knowledge necessary for sensible decisions on issues of law or policy. The dispersed and tacit knowledge will, however, be found aggregated in rules that grow out of the practices of the relevant community. Such rules are customs. Each custom constitutes what Hayek calls a “spontaneous order,” though spontaneity has overtones of suddenness that are remote from Hayek’s intentions; for these custom-based rules are the product of evolution rather than of sudden inspiration. Since the relevant knowledge is impounded in them, the proper function of legislatures and courts is in the main merely to ascertain and enforce them. Hayek acknowledges that legislatures also have to pass tax and other laws relating to the operation of the government and that the courts have from time to time to tidy up the customary rules that they enforce.

But for the most part law and policy in his conception of the ideal state are the product of a decentralized system for aggregating and impounding information that is quite like the price system itself, the difference being that the information is impounded in and conveyed by rules rather than prices. Hayek had no faith in democracy. He regarded voters as hopelessly ignorant about political issues because such issues are not within the local knowledge of the voter. It follows that government should, so far as possible, be decentralized, since people are more knowledgeable about local than about regional or national affairs.

Hayek’s Theory of the Mind

So far I have described Hayek’s cognitive theory as a matter merely of observations about the locus (dispersed) and character (often tacit and hence uncommunicable in words) of knowledge. But there is more. There is a theory of mind in Hayek. The theory regards perceptions as the product of the interaction between sensory impressions—the impact of the external world on the organs of sense, such as sight and hearing—and a classificatory apparatus in the brain.⁷ This is a Kantian insight. In Kant’s epistemology, sensory impressions are made intelligible by being subjected to mind-generated categories such as causation and time. Hayek’s categories differ in two ways: the individual’s classificatory apparatus is the product of idiosyncratic factors of personality and culture rather than just of basic hard-wired features of the brain (presumably the capacity to perceive two events as cause and effect is hard wired) and thus differs across individuals; and the apparatus is not fixed but can be altered by experience. In other words, people see (literally and figuratively) things differently, and the way in which they see things changes in response to changes in the environment. The first point undercores the dispersal of knowledge, scattered as it is as a result of differences in perspective rather than just differences in raw information—and how is the central planner to correct for the possible distortions in

⁷ The fullest exposition of Hayek’s theory of mind is in F. A. Hayek, *The Sensory Order: An Inquiry into the Foundations of Theoretical Psychology*, 1952. This is a difficult work. For a helpful summary, see G. R. Steele, “Hayek’s *Sensory Order*,” *Theory and Psychology*, 2002, Vol. 12. The fullest effort that I am aware of to relate Hayek’s cognitive theory to his economic and political theories is Steven Horwitz, “From *The Sensory Order* to the Liberal Order: Hayek’s Non-Rationalist Liberalism,” *Review of Austrian Economics*, 2000, Vol. 13. Horwitz’s article also contains a lucid summary of Hayek’s cognitive theory.

his own perspective? The second point emphasizes the mutability of knowledge, another obstacle to the central planner, who is bound to encounter a long delay between collecting information and acting on it.

Is Hayek Relevant for a Mixed Economy?

Hayek's analysis of human cognition, both in emphasizing the dispersal and frequently the tacit character of knowledge and in relating these to the way in which the mind processes the impressions it receives from the outside world, makes an impressive theoretical case, now amply confirmed by experience, against central planning whether confined to the economy or extended across the entire range of public issues in a society. The limitation of his approach, however, is that with central planning and other forms of what Popper called utopian social engineering now so thoroughly discredited, it is unclear what if any significance Hayek's cognitive theory and the political-economic theory that he derived from it retain. This problem is central to the failure of post-Hayekian Austrian economics to enter the mainstream of economic and political thought.

Hayek is at pains to emphasize that he is comparing the price system to *economy-wide* central planning, and that he is comparing the spontaneous order created by custom to a *total* (usually a totalitarian) political-judicial system that imposes its own ideas of what is right on a citizenry that it does not consult. He is not evaluating a mixed system, in which there is a degree of personal freedom but also a degree of imposed order. A mixed system is what we and our peer nations have, and I have not been able to figure out what help Hayek offers for evaluating such a system. Consider an economist who shares Hayek's skepticism about the utility of the key concepts in neoclassical economics of maximization and equilibrium. Hayek is skeptical because both maximization and equilibrium imply positions, achieved by the firm or the individual, and by a market, respectively, from which any change would reduce welfare; and given constantly changing conditions and incomplete information, no one, and no market, is ever in such a position. Markets are never in equilibrium (even with completely up-to-the-date information, but imperfect foresight, the time required to translate the latest information into a new set of prices would prevent the achievement of equilibrium), and profit or welfare is never being maximized. Ronald Coase is such an economist. He shares Hayek's skepticism about maximization

and equilibrium. But he is also famous for (among other things) his theory of the firm, which proposes that economic activity will be brought inside a firm rather than conducted by means of contracts when the cost of directing economic activity by fiat (the employer telling his employees what to do and paying them a salary rather than buying their output from them) is lower than the cost of contracts, that is, of using the market. In other words, sometimes the price system is the more efficient way of organizing production and sometimes the command and control method of production within a firm is more efficient. But the command and control method of directing production is just central planning writ small. A firm that must decide whether to buy an input in the market or make it itself is not always mistaken when it opts for the former, any more than families are mistaken when they do not use prices to direct the household production of their members. Sometimes—in fact rather often—it is more efficient to aggregate information across the persons who possess it by communication in the form of words rather than in the form of prices. The pervasive role of the firm in modern economies shows that the price system is not always the most efficient method of aggregating the information that is relevant to some productive process.

Of course the command and control method is not *always* more efficient than the price system, for if it were, then society-wide central planning would be feasible after all, and Hayek had shown that it is not. But *sometimes* it is the more efficient method, and the important question once the extremes are rejected is *when* is it more efficient; and on that question Hayek's analysis casts no light. And similarly with custom. Sometimes it makes sense for law to follow custom because custom may indeed impound the information relevant to the activity that the custom concerns. But often it makes no sense for law to follow custom because a custom may reflect conditions that have changed (custom, lacking central direction, tends to lag social and economic change) or may be the product of incentives that diverge from the socially desirable, as in the case of a custom of not compensating victims of an industry's noncost-justified pollution or careless injuries, or of refraining from price competition. And again, on the crucial question of *when* law should reject custom, Hayek casts no light. What is true is that customs can be tenacious, like habits, and thus be very costly to change; but that is a different point from presuming that customs are socially efficient.

Hayek thus is perhaps best seen as a man of his time, battling contemporary enemies—socialism in its various guises—with apt and powerful weapons, defeating them thoroughly, and earning in consequence an honored place in the history of political and economic thought, but not setting forth principles or methods that could be used to solve the problems of the next stage, the postsocialist stage, of economic and political ordering. He has a keen sense of how individuals coordinate their activities through contract and through custom; yet it's as if he had never heard of organizations.

Hayek's Legacy

It remains to consider briefly the significance of Hayek's cognitive theory for three current movements in social science: Austrian economics; the law and economics movement; and behavioral economics. Austrian economics is in part an attempt, considered by most modern economists distinctly marginal if not indeed a complete failure and dead end, to tease out the implications of Hayek's cognitive theory, and the critique of central planning that flows from it, for modern political and economic issues. That is not all there is to Austrian economics; there are theories about the business cycle, the monetary system, and capital formation, as well, but they are not relevant to the concerns of this paper. The endeavor of Hayek's successors that I am concerned with has foundered on his failure to have bequeathed to them any guidance on how to extend his approach to problems other than the problem of central planning. With central planning no longer on the political agenda of any major nation, the focus of the Austrian economists who follow in Hayek's footsteps has become the critique of neoclassical economics, viewed as the intellectual underpinning of central planning. (I do not regard as distinctive, except in vocabulary, efforts to extend the Austrian critique of central planning to government regulation in general—to "interventionism" as Ikeda calls it in an interesting Austrian-style book⁸—an extension that very largely merges Hayekian critique into the neoclassicists' public-choice theory.) The animating concern is that the belief in central planning had its source in the neoclassical economists' concept of man as a rational maximizer, a concept that implies such complete knowledge of the costs and benefits of alternative methods of satisfying human wants as to make the omniscient central planner a realistic aspiration. There was a

⁸ Sanford Ikeda, *Dynamics of the Mixed Economy: Toward a Theory of Interventionism*, Routledge, 1997.

time that many neoclassical economists believed this. The heyday of that belief was the 1930s, and so it is no surprise that Hayek and Coase should have associated core concepts of neoclassical economics, such as maximization and equilibrium, with central planning, which both of them detested.

But the belief in central planning was not organic to neoclassical economics and is not organic to the rational-choice model of economic behavior, which amplifies the neoclassical approach. The Austrian critique overlooks the difference between a model and a description. For some purposes the drastic simplification of reality that is found in a model of perfect competition (one assumption of which is complete information) is a harmless, indeed a beneficent, parsimony; for all its unrealism, the model can be used for example to generate quite accurate predictions of the effect on price of an excise tax. Its phenomenological, its psychological, spareness need no more invalidate its conclusions than the simplifications employed in models in the physical sciences. Even nonmentalistic models may be fruitful in economic analysis, as illustrated by Gary Becker's nonrational explanation for the Law of Demand (the principle that demand curves are downward sloping, i.e., that price and quantity are inverse) or economic models of animal behavior. Concepts such as equilibrium and maximization are of enormous analytic value even though, realistically, they describe tendencies or approximations rather than achieved goals of the economic system.

Granted, the explanation of many economic phenomena demand more complex models, including models more complex than the model of perfect competition. For example, since perfect competition implies that the price of a product is everywhere the same if the cost is everywhere the same, the model of perfect competition will not explain a dispersion of prices that is due to the existence of search costs. The gallon of gasoline for which I pay \$2 may be selling for \$1.50 a block away, yet if I and other consumers do not know this the disparity in price may persist. The existence of search costs and other information costs is now an established feature of rational-choice economics, and is immune to Hayekian criticisms of neoclassical economics. To say that neoclassical economics implies that economic actors "can never err" is to misunderstand neoclassical economics as it is practiced today. Austrian economics is attacking a *dirigiste* version of neoclassical economics that vanished long ago.

The rational-choice model is dominant in the economic analysis of law for reasons unrelated to insensitivity to costs of

information. Austrian economists misunderstand this and as a result criticize economic analysis of law for resting on an unrealistic concept of human behavior and as constituting indeed a form of central planning. The paradoxical reason that economic analysis of law emphasizes rational choice is that so much of the behavior it deals with is "noneconomic" in the sense of not taking place in explicit markets. Theft, murder, accidents, litigation, legislation, marriage and divorce, bequests, censorship, pollution, discrimination, and other staples of legal regulation are nonmarket activities in the sense of not being explicitly priced. But to the extent that the participants in these activities are rational, not in the sense of being fully informed but in the sense of responding to incentives, economic models can explain much of their behavior and provide guidance for improving its regulation. As most of these are areas that cannot be left to the governance of custom, there is no alternative to using conscious reflection in the design of legal rules.

Hayek never quite claimed that all knowledge is tacit, that there is no such thing as fruitful employment of instrumental reasoning, but the examples he offered of it were meager (his main example was engineering). And, paradoxically in so learned a man, there is a definite streak of what can only be called anti-intellectualism in his extreme skepticism about the utility of conscious reason as a tool of social understanding and improvement. Neither he nor his successors have offered convincing reasons for believing that instrumental reasoning guided by economic models can never improve government regulation, for example by selected measures of deregulation and privatization that Hayekians, as opponents of big government, should applaud. Nor are they able to distinguish satisfactorily between government and business bureaucracies, so that the logic of their critique is that society should aspire to restore the atomistic structure of the pre-Industrial Revolution economy.

I anticipate the response that the real disagreement between the Austrians and the neoclassicists is over the subjective theory of value, but I don't think they do disagree over this. Both agree that people derive different amounts of utility from the same goods and services; otherwise, indeed, there would be no gains from trade. And they agree that subjective evaluations are difficult to measure, which is one of the reasons that both schools of

thought favor markets. Where they differ is that the neoclassicists have greater faith than the Austrians in the ability of judges and other government officials to mimic markets in those situations, which are common, in which market transaction costs preclude value-maximizing exchanges. They believe that courts can do the kind of simple cost-benefit analysis that indicates, for example, that punishing careless drivers will increase social value. The disagreement between Austrians and neoclassicists is about the degree to which government regulation is doomed to failure because of inability to obtain the information necessary for ascertaining value. I find nothing in Hayek's cognitive theory that would resolve this disagreement.

Behavioral economics refers to the growing use of the insights of cognitive psychology to explain economic phenomena and guide economic policy. The behavioralists emphasize quirks in reasoning that prevent people from always thinking through a problem rationally and also dispositions such as a sense of fairness or of vengefulness that do not fit the model of rational self-interest employed in neoclassical economics. The behavioralists thus share with Hayek and his successors in Austrian economists a skepticism about the power of rational thought to guide behavior. But the particular quirks and dispositions that they emphasize do not play a role in his theories or that of his successors, and on the other hand the behavioralists do not share his interest in tacit knowledge, with the important exception of Gerd Gigerenzer and his associates. What some other behavioralists regard as quirks that interfere with rational thought Gigerenzer redescribes as useful heuristics—shortcuts that are often more efficient than the elaborate, but also costly and sometimes inaccurate or inconclusive, reasoning methods that the shortcuts replace. His work resembles that of psychologists and philosophers who emphasize the cognitive role of the emotions, also as shortcuts that frequently are more efficient than fully articulate reasoning methods. (It is more efficient to jump from the path of a speeding car without thought than it is to explicate the full decision tree which shows that jumping out of the way is indeed the optimal response.) Perhaps—to end on a constructive note—Austrian economics will be able to make use of the psychological literature on heuristics and emotions to enrich Hayek's cognitive theory.

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