A Review Essay

About Knowledge and Decisions

William Havender

Hose of us who take part in the regulatory debate find ourselves forced by the sheer vastness and complexity of federal regulation to carve out small niches to work in. Like the blind men exploring the elephant, each of us gains detailed familiarity with only a fragment of the whole ungainly beast. Our ignorance of the rest of it tends to keep us from making generalizations that possess broad explanatory power and political impact, and also from striking strategically effective alliances.

All the reason, then, to appreciate Thomas Sowell's *Knowledge and Decisions* (Basic Books, 1980, 422 pp., \$18.50). It is a powerful work that in the course of a wide-ranging examination of institutional decision making vividly illuminates many recurrent characteristics of regulatory action. No matter how different our specialties as students of regulation may be, these characteristics will elicit flashes of common recognition.

Sowell's argument builds on a seminal, though not widely known, essay published nearly four decades ago by Nobel laureate economist F. A. Hayek, entitled *The Use of Knowledge in Society*. Hayek maintained that William R. Havender is a research biochemist at the University of California at Berkeley, working on environmental carcinogens.

economically useful knowledge consists not merely of rationalistic or "articulated" knowledge (that which could be set down on paper in a step-by-step development), but also of knowledge of local circumstances, subjective preferences, fleeting opportunities, and on-the-spot costs. This kind of transient and localized "knowledge" necessarily exists only in a dispersed form and, said Hayek, some economic systems are far better than others at mobilizing, coordinating, and disseminating it. In particular, an unconstrained price system efficiently transmits to all economic participants the current body of knowledge, however dispersed and evanescent, concerning the best use of a given resource. No one at the "center" need take an inventory of all possible sources of supply, all substitutes, or all alternative uses of a good in order to calculate the most efficient way to allocate it. A potential user need only respond to the structure of relative prices (indeed, he ignores this structure at his peril). In this way, the price system economizes on the knowledge any user must acquire in order to make a socially integrated decision—a useful outcome, since knowledge is not free. And a smooth allocation of limited resources among competing uses is accomplished without any single person having to understand the overall picture or will the specific result.

It is this notion—of inquiring into how social institutions mobilize and coordinate information and transmit it in the form of galvanizing incentives to decision makers—that Sowell applies so fruitfully in analyzing the actions of Congress, the courts, and the regulatory agencies. Such governmental bodies, argues Sowell, should be analyzed as though they "choose courses of action designed to maximize their own well-being under the particular incentives and constraints of their respective situations." From this point of view, they are as self-seeking as any business decision maker. Sowell stresses this point in order to take issue with the conventional wisdom, which readily "recognizes nongovernmental activities as self-interested but arbitrarily treats any governmental activity as axiomatic proof of an objective social need for such activity." Sowell examines these incentives to explain many otherwise puzzling institutional behaviors, and to show how biased and inaccurate information is transmitted from the rest of the society.

For example, the administrator of a regulatory agency can prosper, just as a businessman can, by discovering new "needs" for his "product"—regulation—and by fending off any changes that might make his "product" obsolete. Instances of agency action consistent with

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this motive are common, although of course a veil of "public interest," however fragile, is always advanced to mask the self-interest at work. The emergence of trucking as a competitor to railroads might have led, since it ended the monopoly that was the original justification for railroad regulation, to the withering away of the Interstate Commerce Commission. Instead, trucking was accused of skimming the most profitable business from the railroads and thus undermining the system of cross-subsidization that regulated monopolies often engage in. So the ICC's powers were expanded to cover trucking as well. Similarly, the Federal Communications Commission, using the excuse of protecting "free" TV, extended its regulation to cable TV, even though cable did not use the airways and indeed undercut the original monopoly element of broadcasting. Taking an example from my own field, the Occupational Safety and Health Administration set its "generic" policy on occupational carcinogens so as to settle all disputed scientific issues on the side of "prudence." This ostensibly was meant to provide maximum protection to workers, but it also happened to maximize the number of situations where OSHA's guidance would be necessary. And the Food and Drug Administration's obsession with saccharin, which was inexplicable as a reaction to demonstrated public harm, makes splendid sense when viewed as a test case that, if won in this instance where the evidence of human hazard was so hypothetical, would support FDA intervention in numerous other instances with slightly more substance. In other words, saccharin assumed importance because it—like the urine-marks a dog makes to define its territory—delimited a roomy perimeter for FDA action.

In this cynical view, emergencies and catastrophes can be seen to serve bureaucratic ambitions. The need to respond to such crises justifies the growth of agency authority, and much more important—the need to prevent recurrences justifies the agency's retaining its new powers even after the crisis has passed. The view that crises compel a shy and reluctant government agency to expand simply ignores, writes Sowell, "the possibility that there are political incentives . . . to use episodic emergencies as a reason for creating enduring governmental institutions." The history of regulatory growth is, of course, littered with such examples: Love Canal spawned the toxic waste "superfund" legislation, and the Depression produced a rich crop of economic regulation that is with us yet.

IF, THEN, THE PEOPLE who run regulatory agencies respond rationally to incentives, how well and forcefully do these incentives transmit to decision makers knowledge that is needed for producing socially optimal decisions? It is not simply a matter, argues Sowell, of

how well-informed the initial decision was, but how effectively feedback controls subsequent modifications, regardless of whether or not the decision makers want to change. Effective social knowledge . . . forces decision makers to adjust accordingly, both initially and subsequently, just as effective economic knowledge forces a business to adjust to consumer preferences under threat of bankruptcy. . .

Feedback which can be safely ignored by decision makers is not socially effective knowledge.

Sowell shows that there is a formidable array of obstacles that impede this transmission and seclude agency decision makers from forceful feedback.

Regulatory agencies with appointive personnel (the arrangement on the federal level) are not of course directly accountable to voters. as politicians must be, or to consumers, as a business must be. This is so despite formal requirements that agencies hold public hearings, since typically only those who are highly motivated can afford to travel to hearings and prepare testimony. So it is mostly "special interests" that take part in such hearings—industry representatives with a financial stake in the outcome and politically motivated activist groups (many with only tenuous accountability to their alleged constituency).

Special interests by their very nature, argues Sowell, bias the information flow to agencies. They not only grind their own financial or political axes at hearings, but also represent only the incumbents in the situation. Thus, it is the existing truckers or broadcasters that show up at ICC or FCC hearings, not those that might enter the industry in the future. People already occupying apartments are the ones who attend rent control hearings, not the people who may move to town next year. Occupational licensing boards tend to be run by current practitioners, not by their potential (still unlicensed) competitors.

Another reason for bad decisions, according to Sowell, is that agencies tend to apply rules categorically, rather than adjust them incrementally to specific circumstances. Even as simple a rule as the proscription of premeditated killing can lead to diminishing (and arguably negative) social returns in extreme cases such as "pulling the plug" on brain-dead patients, or executions. Regulatory rulings, about which there is far less consensus, can fall victim to the law of diminishing returns more readily. The Delaney clause, for instance, while perhaps laudable as a sentiment, would obviously cause social harm if it led to the banning of a food additive that had no substitute, that was a very weak carcinogen, and that had a large health benefit. (Just this argument was used to defend saccharin and nitrites.) Because any rule can run into situations where its enforcement is absurd, agencies should be willing to use their discretion to modify a rule's implementation in light of the informational feedback they get. Unfortunately, agencies also have countervailing motivations: they want to avoid the appearance of arbitrariness, they prefer simple to complex decision processes, and they are often anxious about the precedent that an exemption will create.

The fact that regulatory issues are legally and technically complex makes it difficult and costly to acquire the knowledge to understand them. This gives the agencies a forensic advan-

tage, since they already possess up-to-date information on the issue; and it effectively bars large segments of the public from the debate, since they can easily be discredited over trifles. "Experts," writes Sowell, "can often devastate critics by exposing the latter's misunderstanding of ... details ... and technicalities—none of which may be crucial . . . but all of which . . . enable them to dismiss critics as 'uninformed.'" When the FDA commissioner announces the technical finding that in (socalled valid) high-dose animal tests nitrites cause cancer, or when a scientist working for the EPA finds that seepages from Love Canal damage chromosomes, or when the secretary of HEW endorses the belief that occupational exposures account for nearly 40 percent of all human cancer, there is no way that laymen can counter the claim. Only other scientists can. But having them review the data and perhaps carry out new studies will take months-or years. Often regulatory decisions, budget approvals, or legislative actions are pending and cannot wait while further information is developed. And while Sowell does not make the point, it is obvious that control over the timing of the release of new, policy-relevant technical information—or as a sour skeptic would say, the release of a new hare to chase—can itself affect the outcome of a pending decision.

Administrative agencies are also insulated from feedback because the division of authority originally envisioned in the Constitution as a brake on governmental arbitrariness has been seriously eroded. For example, regulations have the force of law, but they require neither congressional nor presidential approval; they take effect simply on publication in the *Federal* Register. And agencies in fact create more "law" in this way than does Congress! Also, the traditional constitutional and legal constraints on punishment are bypassed in the case of the many agency sanctions that take the form of the denial of benefits (revenue-sharing funds, subsidies, tax exemptions, grants, and contracts) rather than the imposition of penalties, making it possible to extract compliance without triggering the defenses built in against willfulness in criminal proceedings. The burden of proof, for example, is often placed on the defendant. Though agencies are formally subject to congressional oversight and judicial challenge, few agency actions in practice ever summon the focused public concern necessary to motivate Congress (saccharin was a rare exception); and action through the courts is slow, expensive, and uncertain. These factors tend to shield agencies from effective feedback (and what there is comes, as noted, disproportionately from special interests), and hence permit them a wide scope for free-wheeling action.

Another source of bias arises from the process by which offered knowledge gets "authenticated," that is, sifted into "effective" and disregardable components. Generally, "articulated" information (arguments put into a scientific academic format) has much more effect than experiential testimony—which, however extensive, is easily dismissed as anecdotal and subjective. Again I find the saccharin case illustrative. There, the FDA received more letters than ever before—tens of thousands—from consumers objecting to the proposed ban (a case of feedback, if ever there was one). Yet the agency discounted this mass of personal testimony in favor of the frail "expert" evidence that had established only the hypothetical possibility of harm to humans, and no more than a very low maximum risk at that. As Sowell writes, "rationalism" at its extreme "exalts the most trivial or tendentious study by experts into policy, forcibly overriding the preferences and convictions of millions of people"—which is not an inapt description of the saccharin episode. As an instance of comparative institutional responsiveness, Congress, which also received a flood of letters but which faced the different incentive of having to account to the voters, speedily acted to postpone a ban.

In discussing the exaggerated role of "articulation" in authenticating evidence, Sowell provocatively observes that this role serves the interests of intellectuals. By placing the crown of objectivity, facts, and science on their own heads, they can discredit competing sources of decision making. Thus, corporations can be dismissed as biased, and consumers as ignorant or slaves of advertising. Requiring that articulated information be the only sort allowed into regulatory arenas increases the demand for those most adept at articulation, which just happens to be, land o' goshen, members of the intellectual class.

Sowell relates in this connection a brief history of IQ tests, whose advocates had a clear professional interest in discovering and promoting politically "relevant" applications for these tests, such as the screening of immigrants and military recruits, or the devising of government policies to improve the population through eugenics. The first of these tactics succeeded, in large part because of the claim that the views of IQ tests' proponents were quantitative, objective, inescapable scientific facts, quite distinct from the mere sentiment and baseless opinion of their opponents. That these victories enhanced the status, access to funds, and influence of the proponents was, we were to suppose, merely incidental.

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What makes this tale particularly unsettling to me is that the modern regulatory state also has supplied pathways to public influence for specialists in normally obscure scientific disciplines. One need only recall the public role of cytologists, pathologists, and geneticists, all of them claiming the halo of scientific objectivity and concern for public safety, in the debates on Love Canal, nitrates, saccharin, aspartame, and malathion (the Medfly spray).

Sowell's range of concern in this book is extremely broad. He makes his points with examples from many fields, including antitrust, minimum wage laws, wage and price controls, agricultural price supports, interest rate ceilings, rush-hour "pricing" for airports and expressways, restrictions on jitneys, import controls, the regulation of utilities, and many more. Also, although I have emphasized regulatory agencies here, he examines—as noted—legislatures and the courts for their effectiveness in transmitting knowledge from the broader society to decision makers. In sum, his rich book should be a real eye opener to those in the trenches of regulatory warfare. It supplies us with the broad generalizations and theoretical depth we need for devising coordinated strategies and pursuing our individual battles with conviction.