Book Reviews

Anthropologizing Environmentalism

Risk and Culture: An Essay on the Selection of Technical and Environmental Dangers. By Mary Douglas and Aaron Wildavsky. Berkeley: University of California Press, 1982. Pp. ix, 221. \$14.95.

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Risk and Culture¹ by anthropologist Mary Douglas and political scientist Aaron Wildavsky proves that a whole is sometimes less than some of its parts. The book consists of two interwoven but separable parts: (1) an abstract theory of the relationship between risk and culture; and (2) an application of the theory to explain "the sudden, widespread, across-theboard concern about environmental pollution and personal contamination that has arisen in the Western world in general and with particular force in the United States"² (a phenomenon that I will call "environmentalism").

Most readers will be struck not by the abstract theory but by its application to the rise of environmentalism. This emphasis is unfortunate. The attempt to "explain" environmentalism makes a few good points, but on the whole this part of the book is crude, shortsighted, and snide.3 On the other hand, the sections that consider the relationship between risk and culture on a more fundamental level are sensitive and thoughtful.

Even at its best, Risk and Culture is not entirely successful at explaining the paradox of risk-the problem of managing the unknown-but parts of the book deserve to be read seriously by people interested in the problem of risk, including environmental lawyers.

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 1. M. DOUGLAS & A. WILDAVSKY, RISK AND CULTURE: AN ESSAY ON THE SELECTION OF TECH-NICAL AND ENVIRONMENTAL DANGERS (1982) [hereinafter cited by page number only].
- 3. See Winner, Pollution as Delusion, N.Y. Times, Aug. 8, 1982, § 7 (Book Review), at 8, 18 (accusing Douglas and Wildavsky of "ill-conceived polemic" and "a shabby political critique" of environmentalists).

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I.

One cannot adequately appreciate Douglas and Wildavsky's position from a mere recitation of their conclusions. The scope and texture of their argument must be set out at some length.

Risk and Culture begins with the proposition that "total knowledge" would be necessary for us to understand the risks we face. The number of possible dangers is infinite, and "[s]ince no one can attend to everything, some sort of priority must be established among dangers." Douglas and Wildavsky reason that "[o]nly social consent keeps an issue out of contention," and therefore that the perception of risk is itself a social process.6

Douglas and Wildavsky insist that their cultural theory of risk perception does not ignore the reality of the dangers. Their point is that "social principles" determine which "real dangers" we select for attention: "No doubt the water in fourteenth century Europe was a persistent health hazard, but a cultural theory of [risk] perception would point out that it became a public preoccupation only when it seemed plausible to accuse Tews of poisoning the wells."8

According to Douglas and Wildavsky, environmentalism is like the fear that Jews are poisoning the wells; it has been selected for public attention because it supports a certain kind of "social criticism." The reason that asbestos poisoning gets more attention than skin cancer caused by sunbathing, we are told, is that asbestos "justifies a particular anti-industrial criticism," whereas "there is no obvious way in which the incidence of skin cancer caused by leisure-time sunburn can be mobilized for criticism of industry, and so we hear less of it."10

According to Douglas and Wildavsky, environmentalism is caused by the rise of sectarianism, an outlook that emphasizes goodness, equality, and purity of heart and mind. 11 Sectarianism in turn is a response to the "problems of voluntary organization," the problems groups face trying to "hold their members together without coercion." Douglas and Wildavsky do not exactly portray environmentalism as a conspiracy, but they do contend that "[p]ollution ideas are an instrument of control."13 Like prim-

- 4. P. 3.
- 5. *Id*.6. P. 6.
- 7. P. 7.
- 8. Id.
- 9. Id.
- 10. Id. 11. P. 10.
- 12. P. 11.
- 13. P. 47.

itive tribes and religious sects, environmentalists use fear of attack or infiltration from an evil world outside to keep their followers in line. "Infiltration from the evil world appears as Satanism, witchcraft, or their modern equivalent—hidden technological contamination that invades the body of nature and of man."14

Extending Mary Douglas' provocative earlier work on pollution beliefs, 15 Risk and Culture contends that "there is not much difference between modern times and ages past" when it comes to "selection and priority among real dangers."16 The book raises but rejects the distinction between modern and primitive ways of thought drawn by Lévy-Bruhl:

Alfter millennia . . . in which dangers were said to be caused by witchcraft and taboo-breaking, our distinctive achievement was to invent the idea of natural death and actually believe in it. The concept of the accident rate and of normal chances of incurring disease belongs to the modern, scientific way of thinking [T]he defining feature of primitive mentality is to try to nail a cause for every misfortune; and the defining feature of modernity, to forbear to ask.¹⁷

With the rise of environmentalism, this distinction between modern and primitive modes of thought has collapsed as people have stopped "forbearing to ask" why they die of cancer, heart disease, or old age. Douglas and Wildavsky see the new consciousness not as progress but as a return to premodernism. Lévy-Bruhl would be astonished, we are told, to behold "moderns using advanced technology and asking those famous primitive questions as if there were no such thing as natural death, no purely physical facts, no regular accident rates, no normal incidence of disease [W]e have joined the primitives in refusing to quench our concern."18 These changes in political attitudes have merely fostered an "institutionalized mistrust"19 and have enlarged "the scope of making someone pay for each misfortune we undergo."20

Douglas and Wildavsky compare our culture's concern about pollution with the "pollution beliefs" of the Hima, a nomadic tribe of northwestern Ankole. The reader is challenged to "discern differences between 'us' and 'them' in the way that dangers are selected for public concern."21 The

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14. Pp. 10-11 (emphasis added).
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^{15.} M. DOUGLAS, PURITY AND DANGER: AN ANALYSIS OF CONCEPTS OF POLLUTION AND TABOO (1966).

^{16.} P. 30. 17. P. 31. 18. P. 32. 19. P. 34.

^{20.} P. 33.

^{21.} P. 14.

Hima believe that cows, their primary source of food, will die if a person eats agricultural products within twelve hours after consuming milk.²² The Hima's pollution beliefs, like ours, are said to refer to "real dangers, for cows do die and get lost and their milk does dry up."23 Among the Hima, "reactionaries" use pollution to fight a "rearguard action against change," whereas in our society the "critics" use pollution to support their arguments against "immoral forms of economic and political power."24

The thesis that risk selection has a social or cultural component would be provocative enough, but Douglas and Wildavsky go beyond this thesis to argue that "[e]ach form of social life has its own typical risk portfolio. . . . [E]ach social arrangement elevates some risks to a high peak and depresses others below sight."25 According to Douglas and Wildavsky, the voluntary organizations to which we belong determine the views we hold:

The conditions of voluntary organization cause sectarians to invoke God and claim higher spiritual worth than the rest of the world. But it is not so much that they chose first to criticize the central institutions and therefore formed the sect. Rather it was the other way around: they combined voluntarily and, as a result of problems and strategies, they found the scope to criticize Inevitably they must see the risks in the world from a different perspective.²⁶

In the most stimulating part of their argument, Douglas and Wildavsky sketch connections between various forms of social organization and perceptions of risk. According to their typology, groups can be "border" or "center," and "sectarian" or "hierarchical." The "center" tends to ignore "long-term and low-probability" risks, while the "border" predicts "imminent disaster."27 Industrial corporations are "center" and "hierarchical," while environmental groups are "border" and either "sectarian" or "hierarchical."

Douglas and Wildavsky compare a series of "border" groups with different forms of organization: the Hutterites, the Amish, the Sierra Club, the Friends of the Earth, and the anti-nuclear Clamshell Alliance. They contend that "[t]he more that a public interest group is organized as a hierarchy, the more it believes there is time for reform. It seeks incremen-

^{22.} P. 42.

^{23.} P. 43.

^{24.} Pp. 46-47.

^{25.} P. 8.
26. P. 121. Thus, Douglas and Wildavsky go beyond the familiar point that the problems of
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26. P. 121. Thus, Douglas and Wildavsky go beyond the familiar point that the problems of
26. P. 121. Thus, Douglas and Wildavsky go beyond the familiar point that the problems of forming and holding voluntary organizations together explain why people with particular views succeed in forming politically effective groups. See Wilson, Introduction to 'THE POLITICS OF REGULA-TION at vii-xii (J.Q. Wilson ed. 1980); cf. M. OLSON, THE LOGIC OF COLLECTIVE ACTION (rev. ed. 1971) (theoretical description of problems of organizing voluntary groups).

^{27.} P. 122.

tal changes and speaks frankly for its own perceived interests."28 Thus, they assert (without supporting evidence) that unlike the sectarian Friends of the Earth, the hierarchical Sierra Club has always been prepared to make "compromises with economic demands."29

In their final chapter, Douglas and Wildavsky widen their focus to consider the implications of their view of risk as a "collective construct."30 Although they insist that their position is not relativistic, Douglas and Wildavsky do see knowledge as only

the changing product of social activity . . . an open-ended communal enterprise . . . a ship voyaging to an unknown destination but never arriving and never dropping anchor. It [knowledge] is like a manysided conversation in which being ultimately right or wrong is not at issue. What matters is that the conversation continue with new definitions and solutions and terms made deep enough to hold the meanings being tried.81

Reflecting their notion that right and wrong are not what "matters," Douglas and Wildavsky insist that the opinions of experts are not entitled to special weight on risk issues. Risk is not "a straightforward consequence of the dangers inherent in the physical situation."32 It is the product of "shared beliefs and values."88

II.

Douglas and Wildavsky's account of environmentalism is unsatisfactory for a number of reasons, but two in particular stand out: It reduces culture to a theory of the structure of environmental groups; and it fails to give proper weight to rational factors, such as science and economics, in explaining the increased attention policymakers have given to the environment.

Culture as Group Structure

Douglas and Wildavsky promise a cultural theory of risk perception that will explain the sudden increase in public concern about environmental pollution. They end up with a theory that reduces culture to a single factor: the organizational structure of groups. Douglas and Wildavsky further restrict their vision by applying their organizational theories only

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28. P. 126.
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^{29.} P. 137.

^{30.} P. 186. 31. Pp. 192-93. 32. P. 193.

^{33.} P. 194.

to environmental groups. One might expect the family, education, religion, government, and the press—none of which they discuss—to be far more influential than environmental groups in shaping our perceptions of risks.³⁴

Even taking Douglas and Wildavsky's argument on its own terms, there are major difficulties. Suppose that the Sierra Club does behave as they claim. The relationship between the structure of environmental groups and the positions they advocate might make a worthwhile topic. But it is a far cry from the problem that Douglas and Wildavsky purport to address—the dramatic increase in public concern about environmental pollution.

The structure of environmental groups cannot explain the sudden outpouring of public support for legal control of environmental pollutants, since only a tiny fraction of the population has ever formally belonged to an environmental group.³⁵ A cultural theory of risk selection should not aspire to tell us why environmental groups struck the particular notes they did, but why those notes resonated with such force through the culture.

Douglas and Wildavsky offer little enlightenment on the crucial question of why society embraced the positions advocated by "border" environmental groups. They tick off a series of banal political explanations that range from a tradition of "political sectarianism" in American culture³⁶ to tax exemptions for public interest groups.³⁷ These explanations are hard to square with the fact that environmentalism was also on the rise in other industrialized nations where the conditions Douglas and Wildavsky emphasize did not exist.³⁸ Douglas and Wildavsky do not discuss environ-

34. As one illustration of the kinds of cultural influences that Douglas and Wildavsky overlook, consider literary critic Stephen Greenblatt's observation:

[I]n the West, since the onset of the early modern period, the archetypal rules, the earliest and most systematic to which the child is exposed and in which he is trained are those governing the definition and control of wastes. The behavior manuals of the fifteenth through the eighteenth centuries return again and again to codes elaborated for the management of the body's products: urine, feces, mucus, saliva and wind.

Greenblatt, Filthy Rites, DAEDALUS, Summer 1982, at 1, 2. The analogy between human body and world is one of the most powerful and persistent images in our culture. See L. BARKAN, NATURE'S WORK OF ART: THE HUMAN BODY AS IMAGE OF THE WORLD (1975).

- 35. A comprehensive analysis of public opinion polls for the early 1970's by the then-White House adviser responsible for environmental issues, J. WHITAKER, STRIKING A BALANCE: ENVIRON-MENTAL AND NATURAL RESOURCES POLICY IN THE NIXON-FORD YEARS 2-16 (1976), concluded that the "unprecedented speed and urgency" with which environmental issues burst into the American consciousness was "[a] miracle of public opinion," id. at 16; see A. MARCUS, PROMISE AND PERFORMANCE: CHOOSING AND IMPLEMENTING AN ENVIRONMENTAL POLICY 19 (1980).
 - 36. Pp. 152-57.
 - 37. Pp. 165-67.
- 38. See, e.g., Currie, Air Pollution Control in West Germany, 49 U. CHI. L. REV. 355, 391-93 (1982) (describing "enormous similarities" between American and West German air pollution laws despite "quite disparate legal traditions"); D. Vogel, Coercion Versus Consultation: A Comparison of

mentalism in any other industrialized Western cultures—a serious omission in a book that treats culture as the primary determinant of attitudes toward risk.

In losing sight of culture and focusing on environmental groups, Douglas and Wildavsky mistake a few of the dancers for the dance.

B. Science, Economics, and the "Real Dangers" Fallacy

There is a relatively straightforward explanation for the simultaneous rise of environmentalism in a number of industrialized Western cultures. These countries share a concept of the state that leads to governmental action in response to scientific evidence that environmental pollution damages public health and economic information that control is practicable.

Science, with its potential to identify causes of natural events, is one factor that distinguishes contemporary "pollution beliefs" from magic and witchcraft in primitive cultures. The difference between science and superstition has sometimes been exaggerated:39 Science does not eliminate judgment and disagreement, nor does it establish immutable truths. 40 But it is also misleading to treat pollution beliefs based on science and those based on superstition as equivalent.

Douglas and Wildavsky obscure important differences betweeen science and superstition by describing pollution beliefs in both modern and primitive cultures as equally based on "real dangers." The dangers are not real in the same way. The Hima's cows die all right, but not because their owners have eaten agricultural products. The Hima conception of pollution rests on a false supposition about a causal link between events. On the other hand, asbestos really does cause diseases that kill workers.

There is an important difference between a society that uses false consciousness and one that uses science as the basis for its pollution beliefs. 42

Environmental Protection Policy in the United States and Great Britain 5 (Sept. 1980) (paper presented to Am. Political Science Ass'n Annual Convention) (describing substantial disparities between environmental policies in U.S. and Britain despite fact that "the politics of contemporary British and American environmental movements have been remarkably similar").

^{39.} See J. Frazer, The Golden Bough: A Study in Magic and Religion 825-27 (abridged ed. 1950). Frazer, one of the leading cultural anthropologists of an earlier generation, used mankind's progression from magic, to religion, to science as the central organizing idea for his work. Douglas sarcastically characterizes Frazer's attitude toward magic: "Magic resulted from early man's inability to distinguish between his own subjective associations and external objective reality. Its origin was based on a mistake. No doubt about it, the savage was a credulous fool." M. DOUGLAS, supra note 15, at 23. She concludes: "It is hard to forgive Frazer for his complacency and undisguised contempt of primitive society." Id. at 24.

40. See T. KUHN, THE STRUCTURE OF SCIENTIFIC REVOLUTIONS 111-35 (2d ed. 1970).

^{41.} Compare p. 7 (cultural theory of risk does not deny reality of dangers) with p. 43 (Hima's beliefs based on "real dangers").

^{42.} Cf. Calabresi, Concerning Cause and the Law of Torts: An Essay for Harry Kalven, Jr., 43 U. CHI. L. REV. 69, 105 (1976) ("[T]he 'cause' of a disease would depend on how, at any given time, it could be most easily controlled.").

Water from wells in medieval Europe may have been a "real danger," but not because Jews were poisoning the wells. A pogrom to kill Jews would not have reduced the "real dangers," but regulations that decrease the levels of toxic pollutants such as heavy metals or carcinogens will.⁴⁸

There is more to the process of risk selection in societies like ours than causal knowledge regarding harm. Douglas and Wildavsky correctly point out that attention to environmental risks involves a choice to devote less time and fewer resources to other dangers like war, poverty, and racial injustice, but this is hardly a new insight. Both environmentalists⁴⁴ and lawyer-economists⁴⁵ recognize that scarcity requires tradeoffs with other worthy causes.

In view of their concern with alternative uses of resources, it is ironic that Douglas and Wildasky dismiss economics. They do not see that the cost side of a cost-benefit comparison is a measure (albeit rough and imperfect) of the alternative uses to which resources might be put. What counts for society's risk selection decision is the comparison of what can be done about a risk with what it takes to do it; the absolute magnitude of risks is irrelevant. Thus, even if decisionmakers reject formal cost-benefit analysis, they cannot escape making alternative allocations of scarce resources.

Moreover, Douglas and Wildavsky reject cost-benefit analysis as biased.⁴⁷ They fail to realize that the biases are not random: Cost-benefit analysis systematically understates the relative attractiveness of pollution control programs as compared with alternative uses of resources.⁴⁸ Thus, cost-benefit analysis can be a useful tool when it demonstrates that an environmental program is justified (although admittedly it is not necessa-

- 43. This is not to say that every environmental regulation is based on "good science," but only that when they are, they can reach actual causes of harm. Cf. Crandall & Lave, Introduction and Summary, in THE SCIENTIFIC BASIS OF HEALTH AND SAFETY REGULATIONS 1, 16 (R. Crandall & L. Lave eds. 1981) (in five cases of health and safety regulation studied, technical "data and analysis [were] not the sole basis for setting standards; indeed, they often do not serve as an important resource").
- 44. See Commoner, Environment Is Not a Motherhood Issue, N.Y. Times, Dec. 7, 1971, at 47, col. 1 ("Pursued to its source, every environmental issue generates a confrontation with the grave, unsolved, intensely contested issues of the world—war, poverty, hunger and racial antagonism.").
- 45. See G. CALABRESI & P. BOBBITT, TRAGIC CHOICES 18 (1978) ("tragic choices" involved when scarcity requires a distribution of goods that results in suffering or death).
- 46. Pp. 67-82. But see Wildavsky, The Political Economy of Efficiency: Cost-Benefit Analysis, Systems Analysis, and Program Budgeting, in POLITICAL SCIENCE AND PUBLIC POLICY 55, 63-64 (A. Ranney ed. 1968) (despite shortcomings, cost-benefit analysis tells "decision-makers something about what they will be giving up if they follow alternative policies").
 - 47. Pp. 69-70.
- 48. Articles by environmentalists criticizing cost-benefit analysis for systematically understating the attractiveness of environmental regulations are legion. See, e.g., Baram, Cost Benefit Analysis: An Inadequate Basis for Health, Safety, and Environmental Regulatory Decisionmaking, 8 ECOLOGY L.Q. 473 (1980); Epstein, Cost-Benefit Analysis: Inspired by Rational Economics or a Protectionist Philosophy?, AMICUS J., Spring 1982, at 41.

rily valid when it reaches the opposite conclusion).

. Unlike Douglas and Wildavsky, lawyers have traditionally understood environmental law as an amalgam of law, science, and economics. 49 Wildavsky has criticized this approach for ignoring anthropology and for failing to recognize that for environmentalists "the symbolic level is the real one."50 Rather than add anthropology and symbolism to the mix of factors that explains our society's selection of technological risks, Douglas and Wildavsky fail to recognize anything but symbolism in environmental decisions.

III.

Douglas and Wildavsky make a provocative and, I believe, an original point when they call attention to risk selection as a social process. Knowledge alone cannot explain social decisions about risks. Information about the kind of risks we confront in complex technological societies may be beyond our capacity to assimilate, and in any event, no normal person has a taste for such dismal information in quantity. Organizations certainly do channel and simplify information that individuals receive.⁵¹ Douglas and Wildavsky, however, never support the assumption implicit in their focus on the structure of environmental groups: that such groups are the primary channels that select and relay information about environmental risks. Douglas and Wildavsky's own selection of source materials tends to belie their assumption. In providing "illustrative episodes" of decisions about technological and environmental dangers, they turn to reports of governmental regulatory proceedings in the popular press.⁵⁸ Their example suggests that press reports about governmental proceedings may shape our view of technological and environmental risks.

In other areas of the law, the courts and the other parts of the legal system are often portrayed as playing a role in shaping culture.⁵⁴ There is reason to believe, however, that the legal system is not performing its educational function well in the environmental area. One symptom is the

^{49.} See B. Ackerman, S. Rose-Ackerman, J. Sawyer & D. Henderson, The Uncertain SEARCH FOR ENVIRONMENTAL QUALITY 1-2, passim (1974).

^{50.} Wildavsky, Economy and Environment/Rationality and Ritual (Book Review), 29 STAN. L. Rev. 183, 193-94 (1976).

^{51.} See H. SIMON, ADMINISTRATIVE BEHAVIOR: A STUDY OF DECISION-MAKING PROCESSES IN ADMINISTRATIVE ORGANIZATION 108-09 (3d ed. 1976).

^{52.} P. 50.

^{53.} Pp. 49-66.
54. In this spirit, Eugene Rostow once referred to United States Supreme Court Justices as "teachers in a vital national seminar." Rostow, The Democratic Character of Judicial Review, 66 HARV. L. REV. 193, 208 (1952); see also D. KONIG, LAW AND SOCIETY IN PURITAN MASSACHUSETTS: ESSEX COUNTY, 1629-1692, at 188-89 (1979) (describing colonial courts as arenas for development of public norms).

widespread—and erroneous—belief among the American public that "everything causes cancer." Another is the fear many communities have about the transportation of nuclear wastes, while they readily accept shipments of other, more hazardous cargoes. The list of inconsistent public attitudes toward technological and environmental risks is a long one.

Many cultural factors may be important in understanding patterns of public fear, but I want to focus on one aspect of the social process that is particularly relevant to lawyers and that helps to explain the widespread confusion and paranoia about technological risks. I believe that only part of the message about what transpires in courts and regulatory agencies dealing with environmental risks is getting through to the public.

My evidence is only impressionistic, but the press seems to report clearly and dramatically the charges and fears expressed in government proceedings on environmental hazards. Final decisions by responsible officials do not usually receive comparable attention. Final decisions generally resolve problems by implementing measures to deal with a risk or by explaining why the claims of risk have been discounted. A bias in the flow of information in favor of charges and against outcomes could tend to accentuate public fears about the risks of technology.

The structure and incentives of the press may contribute to this imbalance.⁵⁷ At least part of the fault, however, lies with environmental institutions, which do not justify their decisions in a way that is even minimally accessible to the press and public.⁵⁸ It is not surprising, therefore, that in *Risk and Culture* Douglas and Wildavsky never once refer to a primary source like agency decisions reported in the *Federal Register*.

There are undoubtedly many reasons why environmental agencies express themselves in a way that makes it nearly impossible for them to perform their educational function well. I want to focus on one aspect of administrative law to illustrate why agencies may have no incentive to explain their decisions clearly. There may even be incentives for them to obfuscate.

When the basic principles of administrative law were formulated, the drafters of the 1946 Administrative Procedure Act (APA)⁵⁹ did provide that a "concise general statement" of "basis and purpose" must accom-

^{55.} See S. EPSTEIN, THE POLITICS OF CANCER 32-33 (rev. ed. 1979).

^{56.} See Mills & Mills, Moving A-Waste, N.Y. Times, Jan. 29, 1983, at A23, col. 4.

^{57.} See Yoder, From Mud to Mudslides, Wash. Post, Aug. 7, 1983, at C7, col. 1 (chemical waste and nuclear power stories with "EPA men in their rubber suits" make "better pictures" for television news than do stories about abstract issues such as budget deficits).

^{58.} See Ackerman & Elliott, Air Pollution 'Rights,' N.Y. Times, Sept. 11, 1982, at A23, col. 3 (criticizing EPA for obscuring issues "in an 8,000-word regulatory initiative full of jargon and technicalities").

^{59. 5} U.S.C. §§ 551-706 (1982).

pany rules published in the Federal Register.⁶⁰ As courts and agencies adapted informal rulemaking to proceedings never contemplated when the APA was drafted, however, the "statement of basis and purpose" took on a function different from its original purpose of informing the public.⁶¹ Today, this statement forms the primary basis for judicial review.⁶² Under the "hard look" standard of review in environmental cases,⁶³ agencies must respond to each significant comment in a rulemaking that may involve hundreds of parties and tens of thousands of record pages.⁶⁴

No procedural instrument can perform two functions as different as informing the public about complex issues and forming the basis for an agency's defense of its action in court.⁶⁵ This does not mean that we should abolish judicial review or even meliorate the "hard look" standard of review in environmental cases. Rather, we should recognize that enhanced judicial review of informal rulemaking has altered the statement of basis and purpose so that it can no longer fulfill its original function.

New procedural mechanisms, unrelated to judicial review, are needed to encourage agencies to make simple, common-sense statements of the nature of problems in their area of responsibility and the solutions they propose. A number of ways to improve communication between agencies and the public have been suggested, 66 and others can be imagined. 67 Specific

- 60. Administrative Procedure Act § 4(b), 5 U.S.C. § 553(c) (1982).
- 61. In at least one recent environmental statute, the original function of the "statement of basis and purpose" has been preserved. See Toxic Substances Control Act, 15 U.S.C. § 2625(f) (1982) ("Any final order issued under this chapter shall be accompanied by a statement of its basis and purpose. The contents and adequacy of any such statement shall not be subject to judicial review in any respect.").
- 62. See Kennecott Copper Corp. v. EPA, 462 F.2d 846, 850 (D.C. Cir. 1972); Automotive Parts & Accessories Ass'n v. Boyd, 407 F.2d 330, 338 (D.C. Cir. 1968).
- 63. See National Lime Ass'n v. EPA, 627 F.2d 416, 451-52 & n.126 (D.C. Cir. 1980) ("hard look" demands remand to agency for more adequate explanation or supplementary data). See generally Rogers, A Hard Look at Vermont Yankee: Environmental Law Under Close Scrutiny, 67 GEO. L.J. 699 (1979) (reviewing "hard look" cases).
- 64. See Portland Cement Ass'n v. Ruckelshaus, 486 F.2d 375, 393-94 (D.C. Cir. 1973), cert. denied, 417 U.S. 921 (1974); International Harvester Co. v. Ruckelshaus, 478 F.2d 615, 651 (D.C. Cir. 1973) (Bazelon, J., concurring) ("agency [must] set forth with clarity the grounds for its rejection of opposing views"); Rodgers, Judicial Review of Risk Assessments: The Role of Decision Theory in Unscrambling the Benzene Decision, 11 ENVTL. LAW 301, 309 (1981) ("Few practitioners believe that judges read, much less studiously follow, the monstrous records thrust before them. Nor do these records deserve reading, contrived and formless as they are.").
- 65. But see Bazelon, New Gods for Old: "Efficient" Courts in a Democratic Society, 46 N.Y.U. L. REV. 653, 655 (1971) ("The true measure of the quality of a judicial system is how many hidden problems it brings into public view and how well it stimulates the responsible officials and agencies into doing something about these problems.").
- 66. See EPA Policy on Public Participation, 46 Fed. Reg. 5736 (1981). Other devices that also hold some promise are increased Congressional oversight over agency rulemaking, but see INS v. Chadha, 103 S. Ct. 2764 (1983) (legislative veto unconstitutional), and the proposed "regulatory budget," see Regulatory Budgeting and the Need for Cost-Effectiveness in the Regulatory Process: Hearings Before the Joint Economic Comm., 96th Cong., lst Sess. (1979); C. DeMuth, R. Shackson, E. Stork & A. Wright, The Regulatory Budget as a Management Tool for Reforming Regulation (May 29, 1979) (unpublished paper) (John F. Kennedy School of Gov't, Harvard Univ.).
- 67. If encouraging social dialogue about risk selection were the only goal, one might want to 898

remedies are less important, however, than that responsible people in agencies dealing with risks realize that what they say and how they say it can be almost as important as what they do. 68

require each environmental agency to make a public annual report justifying its actions and proposed agenda to a committee of citizens (an EPA board of directors?).

68. The new EPA administrator, appointed after this Review was written, appears to be more sensitive than his predecessors to the agency's educational function. See Ruckelshaus, How E.P.A. Faces the Arsenic Risk, N.Y. Times, July 23, 1983, at A22, col. 1 (defending EPA decision to request comments from public on whether health risks posed by copper smelter are acceptable); see also Ruckelshaus, Science, Risk, and Public Policy, 221 SCIENCE 1026, 1028 (1983) (scientific community should join with EPA in effort to educate public on risk issues).