Regulation and Legal Culture: The Case of Motor Vehicle Safety

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The National Traffic and Motor Vehicle Safety Act of 1966[1] was a revolutionary statute. Indeed, it represented the convergence of two revolutionary movements. The first was the political movement for reform of federal administrative regulation.[2] Abandoning the New Deal model of a reactive regulatory commission charged with adjudicating, on a case-by-case basis, the reasonableness of the activities of particular firms, the National Traffic and Motor Vehicle Safety Act created a "pro-active" bureau charged with the responsibility for promulgating new general rules of conduct that would operate industry-wide. The second revolutionary movement was intellectual and reshaped the substance of automobile safety regulation.[3] Abandoning the historic definition of the automobile

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1. National Traffic and Motor Vehicle Safety Act of 1966, Pub. L. No. 89-563, 80 Stat. 718 (1966) (codified as amended at 15 U.S.C. §§ 1381-1431 (1982 & Supp. III 1985)) [hereinafter "Act" or "Safety Act"].

2. For a contemporary argument in favor of broader administrative rulemaking authority see Shapiro, *The Choice of Rulemaking or Adjudication in the Development of Administrative Policy*, 78 HARV. L. REV. 921 (1965) (suggesting that greater rulemaking authority would allow agencies to develop policy in a more coherent and forthright fashion). *See also* R. MELNICK, REGULATION AND THE COURTS: THE CASE OF THE CLEAN AIR ACT 5-9 (1983) (describing "new regulation" in general terms); Stewart, *Vermont Yankee and the Evolution of Administrative Procedure*, 91 HARV. L. REV. 1804, 1811 (1978) (noting that "burdens of trial-type hearings . . . led . . . federal agencies to turn from case-by-case adjudication to general rulemaking proceedings in order to develop administrative policy").

3. For early pronouncements of the new perspective, see ACCIDENT RESEARCH: METHODS AND APPROACHES (W. Haddon, E. Suchman & D. Klein ed. 1964) [hereinafter ACCIDENT RESEARCH]; Gordon, *The Epidemiology of Accidents*, 39 AM. J. PUB. HEALTH 504 (1949) (accidents conform to same biological laws as disease).

Haddon, a Harvard-trained M.D. with a master's degree in public health, was the agency's first administrator and a leading proponent of the new science of accidents. In a series of scholarly publications, Haddon elucidated an etiology of accidental trauma that pictured accidents as a public health phenomenon which could be controlled by the same techniques that were applied to other "epidemics".

safety problem as one of avoiding accidents by modifying driver behavior, the 1966 Act adopted an epidemiological perspective. Reconstituted, the safety issue became how to modify the vehicle (environment) so that the interaction of the passenger (host) and the deceleration forces of accidents (agent) produced less trauma.[4]

A review of ACCIDENT RESEARCH came to Senator Ribicoff's attention and reportedly influenced his call for traffic safety hearings in 1965. *Federal Role in Traffic Safety: Hearings before the Subcomm. on Executive Reorganization of the Senate Comm. on Government Operations*, 89th Cong., 1st & 2d Sess. (1965-1966). Ribicoff was a freshman Senator who arrived in Washington with a reputation as "Mr. Safety," due to an aggressive but ineffectual campaign against speeding which he had overseen as Governor of Connecticut. Haddon's focus on passive protection, in particular vehicle redesign, as an alternative to driver modification strongly appealed to Ribicoff. The initial congressional hearings conducted by Ribicoff set in motion a competition among politicians on various committees to determine who could produce the strongest safety legislation. *See* Drew, *The Politics of Auto Safety*, ATLANTIC MONTHLY, Oct. 1966, at 95.

For a more recent review of the intellectual history of the science of accidents, and, in particular, Haddon's contributions to the reconceptualization of accidents from an epidemiological perspective, see Haddon, *Advances in the Epidemiology of Injuries as a Basis for Public Policy*, 95 PUB. HEALTH REP. 411, 412-18 (1980).

4. Legislative history demonstrates that Congress appreciated that the Act represented a major shift away from a focus on driver error to a greater concern for vehicle crashworthiness. Senator Ribicoff articulated the rationale for safety standards in these terms:

> Empirical evidence is woefully inadequate, but a strong argument can be made for the contention that the average motorist is performing near the limits of his potential as a master of the modern automobile. . . . If this is true, then there is all the more reason to see if something can't be done to help the average motorist survive a crash without serious injury.
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> What I am saying is this, since human beings err, since drivers err, since drivers make mistakes, and they are always going to make mistakes, that automobiles should be built in such a way as to minimize the damage done.

Traffic Safety: Hearings on S. 3005 Before the Senate Comm. on Commerce, 89th Cong., 2d Sess. 32, 47 (1966). On the Senate Floor, R..ibicoff described the Act's rulemaking provisions as "revolutionary." 112 Cong. Rec. 14,230 (1966).

The Senate Report on the legislation also reflected the central role that crashworthiness standards were expected to play. The report stated:

> For too many years, the public's proper concern for the safe driving habits and capacity of the driver (the "nut behind the wheel") was permitted to overshadow the role of the car itself. The "second collision"—the impact of the individual within the vehicle against the steering wheel, dashboard, windshield, etc.—has been largely neglected. . . .
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> The Committee heard compelling testimony that passenger cars can be designed and constructed so as to afford substantial protection against the "second collision" for both driver and passenger; further, that some of these design changes can be achieved at little or no additional manufacturing cost.

Traffic Safety Act of 1966, S. REP. NO. 1301, 89th Cong., 2d Sess. 3, *reprinted in* 1966 U.S. CODE CONG. & ADMIN. NEWS 2709, 2710-11. The corresponding House report expressed similar convictions. H. R. REP. NO. 1776, 89th Cong., 2d Sess. 10 (1966) (need for legislation justified by reference to "vast room for improvement in the 'second collision' area").

UNSAFE AT ANY SPEED popularized the concept of the second collision. R. NADER, UNSAFE AT ANY SPEED: THE DESIGNED-IN DANGERS OF THE AMERICAN AUTOMOBILE (1965). Sales of Nader's book surged contemporaneously with congressional deliberations on the proposed legislation and helped generate a rationale for enactment that politicians seemed to find compelling. The proposed legislation was steadily strengthened in tandem with the growing public perception that auto fatalities and injuries could be reduced through improvements in crashworthiness design. Under the Johnson Administration's proposal, safety standards were completely discretionary. Moreover, standards were not permitted to be imposed for a two-year period to enable manufacturers to make improvements on

Operating at the intersection of these institutional and policy innovations, the National Highway Traffic Safety Administration's (NHTSA) central task, as of 1966, could be described quite simply. The Agency's job was to promulgate rules that would force manufacturers to build vehicles that better protected their occupants in case of a crash. To be sure, the agency's mandate was not confined exclusively to the protection of vehicle occupants by rules addressed to post-accident energy transfer (in common parlance, "the second collision"). The agency also could exercise its rulemaking authority to promote "crash avoidance" technologies,[5] and it had adjudicatory authority to force manufacturers to furnish notice to owners of automobiles of "defects" relating to vehicle safety.[6] But the big safety payoffs were thought to lie in the agency's central regulatory task of "forcing" the technology of vehicle occupant protection.[7]

a voluntary basis. *Traffic Safety: Hearing on H.R. 13,228 Before the House Comm. on Interstate and Foreign Commerce* (pt. 1), 89th Cong., 2d Sess. 2-8 (1966). In final form, the Safety Act required regulators to issue safety standards within a strict timetable. Initial standards were required to be issued within five months of the Act's passage; "new and revised" standards were required to be issued within a year thereafter. Safety Act § 103(h), 80 Stat. 718, 720 (codified as amended at 15 U.S.C. § 1392(h) (1982)).

5. Safety Act § 106, 80 Stat. 718, 721 (codified as amended at 15 U.S.C. § 1395 (1982)). Crash avoidance technologies seek to prevent the "first collision"—the initial impact between the automobile and an object in its external environment. NHTSA has promulgated a series of safety standards mandating that crash avoidance technologies be incorporated into vehicle design. *See, e.g.*, 49 C.F.R. § 571.105 (1986) (requirements for hydraulic brake systems); 49 C.F.R. § 571.108 (1986) (performance standards for lamps and reflective devices); 49 C.F.R. § 571.111 (1986) (rearview mirrors).

6. Safety Act § 113(e), 80 Stat. 718, 726 (codified as amended at 15 U.S.C. § 1412 (1982)). Amendments passed in 1974 empowered the agency to force the automaker to remedy defects without charge. Motor Vehicle and Schoolbus Safety Amendments of 1974, Pub. L. No. 93-492, § 102(a), 88 Stat. 1470, 1471 (codified as amended at 15 U.S.C. § 1414(a) (1982)).

The statute "defines" but does not explain the meaning of the term "defect." *See* 15 U.S.C. § 1391(11) (1982) (defect "includes any defect in performance, construction, components or materials in motor vehicles or motor vehicle equipment"). The Senate Report accompanying the original legislation stated that "the term 'defect' is used in the sense of an error or mistake in design, manufacture, or assembly." *Traffic Safety Act of 1966*, S. REP. 1301, 89th Cong., 2d Sess. 8, *reprinted in* 1966 U.S. CODE CONG. & ADMIN. NEWS 2709, 2716. The House report offered no guidance.

The agency has refused to issue an administrative definition on grounds that "any attempt to precisely define safety related defect would be ill-advised" and that "[w]hether a defect exists depends solely on the facts of the particular situation." 38 Fed. Reg. 9510 (1973). As a practical matter, the industry's own practices and customs appear to be determinative. NHTSA has never ordered an industry-wide recall and has refused to call vehicles "defective" which comply with prevailing norms for vehicles of the same type or class.

7. The original Act comprised four titles. Title I, "Motor Vehicle Safety Standards," was conceived by safety advocates to be "the heart of the bill." *Traffic Safety: Hearings on S. 3005 Before the Senate Comm. on Commerce,* 89th Cong., 2d. Sess. 34 (1966) (statement of Sen. Ribicoff). Title I empowered the agency to set standards that "shall be practicable, shall meet the need for motor vehicle safety, and shall be stated in objective terms." Regulators were authorized to impose minimum standards only on vehicle and equipment performance, not design. In formulating standards, regulators were required to consider relevant data, including the results of research, development, testing and evaluation conducted under the Act; to consult with state officials "to the extent appropriate"; and to consider whether proposed standards were "reasonable, practicable, and appropriate" for the particular type of motor vehicle or equipment which they addressed. Safety Act §§ 102(2), 103, 80 Stat. 718, 718, (codified as amended at 15 U.S.C. §§ 1391(2), 1392 (1982)).

The regulatory and technological ambitions of NHTSA's supporters paralleled the public health dimensions of the problem attacked. Automobile accidents were not just the leading cause of accidental death, they were—and are—the leading cause of death for all persons from ages five to thirty-four.[8] For every person killed in an automobile, six more suffered disabling injuries. The grim statistics on vehicular mayhem hovered in the range of 50,000 deaths and 300,000 disabling injuries per year.[9] The scientists, engineers, and public activists who supported the 1966 Act foresaw public health benefits from redesigning the automobile that rivalled the most significant public health breakthroughs of the past, including such staggering successes as the protection and treatment of public water supplies.

From the vantage point of more than twenty years, of course, the optimism of 1966 seems rather quaint. The leaders of the regulatory reform movement believed in the social efficacy of federal power expressed through law. Their central political heuristic was the development of civil rights law from *Brown v. Board of Education*[10] to the Civil Rights Act of 1964.[11] Surely other social ills, from poverty to pollution to the carnage on the roads, would respond to appropriate forms of national legal intervention. The proponents of the new science of accidents were equally sanguine. They often drew their supporting political images from the

8. NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION, MOTOR VEHICLE SAFETY Table A-17 (1983) (listing leading causes of death by age group for 1981).

9. *See* R. CRANDALL, H. GREE SPECHT, T. KEELER & L. LAVE, REGULATING THE AUTOMOBILE 57, 76 (1986) (providing statistics on motor vehicle fatalities and injuries from 1961 to 1982) [hereinafter REGULATING THE AUTOMOBILE]. Other analyses indicate that the ratio of injuries to fatalities is much higher—possibly on the order of one hundred to one. 2 OFFICE OF TECHNOLOGY ASSESSMENT, AUTOMOBILE TRANSPORTATION SYSTEMS 6, 185-86 (1979).

10. Brown v. Board of Educ., 347 U.S. 483 (1954); Brown v. Board of Educ., 349 U.S. 294 (1955).

11. Pub. L. No. 88-352, 78 Stat. 241 (1964) (codified as amended at 42 U.S.C. §§ 2000a-2000d-6 (1982)).

A strong egalitarian impulse conceived of automobile safety as an "entitlement" whose content was defined by "the average person's" limited capacities. *See, e.g., Traffic Safety: Hearings on S. 3005 Before the Senate Comm. on Commerce*, 89th Cong., 2d Sess. 50 (1966) (remarks of Sen. Ribicoff) (person driving Plymouth, Ford, or Chevrolet is "entitled" to "certain basic things" "just as much as a person driving a Cadillac," including collapsible steering wheels and dual brakes); *Id.* at 181-82 (remarks of William I. Steiglitz) (automobiles driven not only by "professional test drivers," but by "average person" and car is causally related to accident when it conflicts with "basic human characteristics" and "places demands on the driver that are beyond his capability").

The asserted need for equal protection and the promise of governmental efficacy submerged concerns that legislation would infringe upon 'states rights.' *Id.* at 41-42 (remarks of Sen. Ribicoff) ("we have been sucked in with the propaganda that the Federal Government has no place in traffic safety; that we should leave this up to the states. There isn't a state in the country that has the facilities or the qualifications to go into the complexities of the automobile"); *Traffic Safety: Hearings on H.R. 13,228 Before the House Comm. on Interstate and Foreign Commerce*, 89th Cong., 2d Sess. 785 (1966) (remarks of Rep. Mackay) ("chaos will result if 50 different states set 50 different sets of standards").

technological and managerial accomplishments of the space program.[12] With a NASA-like combination of political will and technical sophistication, success in the battle against vehicle injury and death seemed inexorable.

The combination of these political symbols proved extraordinarily powerful in the concrete context of the automobile safety debate. Safety partisans effectively characterized the vehicle safety problem as a problem of social irresponsibility.[13] Fixated on styling and power, the manufacturers had allegedly failed to provide the public with the safer vehicles that were technologically feasible. Indeed, the manufacturers had for years supported a governmental response to auto safety that focused on driver behavior, while making only limited use of the results of research into safer vehicle designs that they had themselves partially funded.[14] Regulation therefore was thought essential to shift the industry's design priorities from tailfins to passenger protection. Acting out a consensus that rarely attends legislative programs more controversial than the declaration of National Secretaries Day, Congress passed the National Traffic and Motor Vehicle Safety Act—subjecting the largest industry in the United States to comprehensive safety regulation for the first time—without a single negative vote in either house.[15]

Two decades later, our expectations have been lowered. The central images of our political debates are Watergate and Vietnam. The moral force of *Brown v. Board of Education* has been blunted by the

12. *See, e.g., Traffic Safety: Hearings on S. 3005 Before the Senate Comm. on Commerce,* 89th Cong., 2d Sess. 208 (1966) (remarks of Robert F. Kennedy) (urging application of "same imaginative techniques that we are using to win the race to the moon to eliminate the most deadly features of today's cars"); *Traffic Safety: Hearings on H.R. 13,228 Before the House Comm. on Interstate and Foreign Commerce,* 89th Cong., 2d Sess. 450 (1966) (remarks of N.Y. State Rep. Edward Speno) ("[I]f we can send a man to the moon and back, why can't we design a safe automobile here on earth?"); *id.* at 781 (remarks of Col. John P. Stapp) (urging that "most completely regulated form of transportation by the Federal Government is space flight" and that "the international record in space flight today" is "17 flights, 733 orbits, 1,163 hours, 31 minutes, 28 seconds" and "19,033,250 miles covered without a single injury or fatality"). Amazement over the nation's progress towards reaching the moon subdued concern over the costs of auto safety regulation. *See Traffic Safety: Hearings on S. 3005 Before the Senate Comm. on Commerce,* 89th Cong., 2d Sess. 211 (1966) (remarks of Robert F. Kennedy) (country can afford to spend $150 million on auto safety, where NASA is spending several billion dollars to ensure astronauts' safety).

13. *See, e.g., Traffic Safety: Hearings on H.R. 13,228 Before the House Comm. on Interstate and Foreign Commerce,* 89th Cong., 2d Sess. 321 (1966) (remarks of Rep. Macdonald) (auto industry has responsibility to give people not only what they want, but what they can handle); TRAFFIC SAFETY ACT OF 1966, S. REP. NO. 1301, 89th Cong., 2d Sess. 2 (1966), *reprinted in* 1966 U.S. CODE CONG. & ADMIN. NEWS 2709 (reporting "disturbing evidence of the automobile industry's chronic subordination of safe design to promotional styling and of overriding stress on power, acceleration, speed and 'ride' to the relative neglect of safe performance or collision protection"); C. MCCARRY, CITIZEN NADER 13-96 (1972).

14. *See* J. EASTMAN, STYLING V. SAFETY 209-33 (1984).

15. 112 CONG. REC. 14,256 (1966) (Senate vote); 112 CONG. REC. 19,669 (1966) (House of Representatives vote).

ambivalence of *Bakke*.[16] Neil Armstrong's "giant step for mankind" is remembered less vividly than the cloud that engulfed the space shuttle Challenger seventy-two seconds after takeoff. Hence, when we argue that the vehicle safety program has not fulfilled its sponsors' dreams—indeed, virtually has abandoned its safety goals—there may be a tendency to greet this report of yet another "government failure" with a barely-stifled yawn.

But hear us out. There are many explanations for NHTSA's failure to redesign and socialize the automobile in the ways that safety activists imagined in 1966; none need be interpreted as making failure inevitable. Each regulatory problem has, or had, a remedy. The failure to use the available remedies suggests that there is a deeper, more interesting, and less easily resolved issue about motor vehicle safety regulation. We suspect that NHTSA succeeded by failing; that it legitimated its existence by abandoning its statutory mandate. For both the regulatory reform and vehicle safety initiatives embodied in the 1966 Act may have been politically naive. The inefficacy of the New Deal agencies' post-hoc adjudicatory techniques may have been one of their primary political strengths. And the shift from blaming drivers for accidents to blaming automobiles for injuries may have created a political drama that would have a necessarily short run. The plot line was too complex for general audiences and the "villains," the automobile companies, were both too important economically and too beset by economic troubles to bear the sustained public disaffection necessary to mobilize political support.

A comprehensive evaluation of whether the public wants, or should "rationally" want, NHTSA to engage in the ambitious program of safety regulation envisaged in 1966, however, cannot be provided here. In this Article we concentrate on only one impediment[17] to NHTSA's adoption of safety regulations—the requirement that those rules survive pre-enforcement judicial review. This Article first demonstrates that NHTSA has abandoned its rulemaking mandate in favor of regulation by recall—a shift in regulatory technique virtually synonymous with abandonment of the agency's more ambitious safety goals. In Part II, we sketch our particular perspective on the explanation of regulatory behavior and the function of the legal culture in our general "environmental hypothesis." The Article in Part III turns to its central focus, the differential impact of

16. University of California Regents v. Bakke, 438 U.S. 265 (1978) (holding that reservation of specific number of medical school positions for minority candidates invalid absent finding of past discrimination).

17. Other influences on NHTSA's conduct include Congress, the Executive Branch, press coverage, public opinion, and internal professional conflict. A detailed discussion of all of these factors is provided in our forthcoming book.

"judicial review" on agency rulemaking and recall activities. While we do not claim that judicial review has been the sole cause of the agency's shift from rules to recalls, we believe it demonstrable that judicial review has strongly reinforced that shift. Finally, we offer some speculations about why judicial review of NHTSA took the particular form that it did.

I. The Regulatory Track Record

NHTSA's regulatory behavior can be described concisely. Established as a rulemaking agency to force the technology of automobile safety design, NHTSA indeed functioned in a rulemaking mode from roughly its inception in 1966 until about 1974. NHTSA's promulgated rules, however, have had extremely modest technology-forcing[18] effects. The rules that have become operational have required off-the-shelf technologies, many of which were already in widespread, if not universal, use at the time of the standards' promulgation.[19] Since the mid-1970's, NHTSA has instead concentrated on its alternative statutory power to force the recall of motor vehicles that contain "defects" related to safety performance. It has thus retreated to a traditional form of case-by-case adjudication which requires little, if any, technological sophistication and which has no known effects on vehicle safety.

Personnel at NHTSA hotly contest this description. They maintain that NHTSA retained its rulemaking focus at least until the first Reagan Administration.[20] This is demonstrably not the case. Of some fifty general safety regulations adopted under the National Traffic and Motor Vehicle Safety Act, forty-five (ninety percent) were issued prior to 1974. None of the fifty were first issued after 1976. By contrast, motor vehicle recalls

18. "Technology-forcing" is a broad term. It includes both the creation of new technologies and the requirement that existing technologies be embodied in products. New technologies or technological embodiments may relate to the production process as well as to products brought to market. Whether an act requires the development of a "new" technology relates principally to the feasibility of its objectives as a matter of engineering design or production. Because all technological progress must build on past knowledge, there may be endless debate over what is "new" or how "new" it is. When we say that NHTSA has achieved little or "modest" technology-forcing, we mean to convey only that it has required manufacturers to do little they did not already know how to do in 1966. For a general discussion of technology-forcing, see P. LORANG & L. LINDEN, AUTOMOBILE SAFETY REGULATION: TECHNOLOGICAL CHANGE AND THE REGULATORY PROCESS 149-54 (1977) (discussing NHTSA's difficulties in forcing manufacturers to generate new technology).

19. STAFF OF THE NATIONAL COMMISSION ON PRODUCT SAFETY, FEDERAL CONSUMER SAFETY LEGISLATION 21 (1970) (safety standards require features that originated in industry and were already incorporated in many vehicles); P. LORANG & L. LINDEN, *supra* note 18, at 64-65 (safety technology "remarkably similar to what it was in 1968, the first year federal rules took effect"); OFFICE OF TECHNOLOGY ASSESSMENT, TECHNOLOGICAL INNOVATION AND HEALTH, SAFETY, AND ENVIRONMENTAL REGULATION IX-43 (1981) (compliance with federal safety standards described as having "slight influence" on overall pattern of innovation in auto industry).

20. Interview with Joan Claybrook, former Administrator of NHTSA, en route to New Haven, Connecticut (April 9, 1984).

have increased from about fifteen million motor vehicles between 1966 and 1970, to some thirty-three million vehicles from 1971 to 1975, to over thirty-nine million vehicles between 1976 and 1980. Indeed, during the decade 1976-1985, the Agency supervised the recall of over half as many American motor vehicles as were sold new.[21]

To be sure, recalls levelled off somewhat to a total of about thirty million vehicles between 1981 and 1985. But this figure does not include over ten million Ford vehicles initially determined by NHTSA to have defective transmissions, for which the negotiated remedy was distribution of a dashboard warning label to motorists in 1981.[22] More importantly, this considerable recall activity comes at a time when NHTSA has relaxed, rescinded, or shelved a number of existing and proposed safety standards.[23]

The date of first adoption of general rules may, of course, not be the best indicator of the agency's rulemaking activity. A number of automobile safety standards (rules) are quite broad. Federal Motor Vehicle Safety Standard (FMVSS) 201, for example, specifies requirements for car interiors to minimize post-crash injuries.[24] It covers a wide number of specific topics, such as requirements for instrument panels, seat backs, protrusions, sun visors, and arm rests. Over time, advances in technology or design might well require major amendments to such a rule, perhaps totally transforming the prescriptions contained in the rule as of its adoption date in 1967. Hence, in measuring rulemaking activity, one should also pay attention to amendments.

Moreover, it may be plausible to imagine that the agency could maintain its level of rulemaking effort while not successfully concluding many rulemaking proceedings. After all, in the early years of its operation an agency can borrow standards that are already utilized elsewhere—by

21. The Agency's safety standards are set out at 49 C.F.R. §§ 571.1-571.302 (1986) (codifying 26 crash avoidance standards, 21 crashworthiness standards, and 2 post-crash standards). The statistics on agency regulations were compiled by examining Federal Register notices issued by the Agency from its inception until July 1, 1985. Recall data were derived from the Agency's annual reports. Additional recall information was examined from a data base compiled by Richard Tobin at the State University of New York at Buffalo, whose assistance is gratefully acknowledged. *See also* Tobin, *Recalls and the Remediation of Hazardous or Defective Consumer Products: The Experiences of the Consumer Product Safety Commission and the National Highway Traffic Safety Administration*, 16 J. CONS. AFF. 278, 288-89 (1982) (reporting number of vehicles recalled and number of recall campaigns initiated by NHTSA between 1966 and 1982).

22. *See* Center for Auto Safety, Inc. v. Lewis, 685 F.2d 656, 657 (D.C. Cir. 1982) (upholding Secretary of Transportation's decision to settle case without litigation).

23. *NHTSA Oversight: Hearings Before the Subcomm. on Surface Transportation of the Senate Comm. on Commerce*, 97th Cong., 2d Sess. 50-53 (1982) (statement of Clarence Ditlow, Director, Center for Auto Safety) (during first 16 months of Reagan Administration, NHTSA rescinded or relaxed existing rules or terminated pending rulemaking in 19 instances, and proposed similar actions in an additional 21 instances).

24. 49 C.F.R. § 571.201 (1986).

insurance agencies, private standard-setting associations, government procurement offices, and the like—which have a significant history and are relatively noncontroversial. Rulemaking initiatives proposing the use of truly novel technologies may require a much longer gestation period.

These considerations suggest that in measuring rulemaking activity one should take into account not only amendments but also the general level of rulemaking activity, as revealed by all actions related to rules. Later, more technologically advanced activities may also have greater safety impacts, such that a smaller number of actions would in fact represent a more aggressive regulatory presence. Finally, one should be attentive to the allocation of agency resources. A small output of important and novel standards may represent an increasing rather than a decreasing investment in rulemaking as a regulatory technique.

Yet observed from any of these perspectives the general picture of NHTSA activities remains the same. It is surely the case that NHTSA's official rulemaking activity as evidenced by Federal Register notices is much more significant post-1976 than its final rules suggest. But the maintenance and amendment functions those notices reveal are often substantively trivial. Taking together the trivial and the significant, total rulemaking issuances in NHTSA's second decade number less than half those of its first.

From the standpoint of regulatory effects, counting rulemaking issuances actually overstates the impact of NHTSA's post-1976 rulemaking activity. While we are unaware of any year-by-year data on the incremental benefits of NHTSA's safety standards,[25] price impact information is available from the Bureau of Labor Statistics (BLS).[26] The BLS data reveal that about ninety-two percent of all price increases tied to NHTSA's safety rules occurred over the period from 1967 to 1976. Only eight percent of net price increases were imposed from 1977 to 1986. It is simply not plausible to believe that NHTSA discovered, sometime around 1976, a way to get more bang for the regulatory-compliance buck. There is no evidence of such a quantum jump in the efficacy of the regulatory technol-

25. There are engineering estimates as well as regression analyses of the impact of NHTSA's safety standards on injuries and deaths. *See, e.g.*, REGULATING THE AUTOMOBILE, *supra* note 9, at 45-84 (1986).

26. BLS issues annual reports on the value of "quality changes" in automobiles, in order to exclude such values from its calculations of price increases attributable solely to inflation. In making these calculations, BLS separately identifies increases and decreases in auto prices attributable to new safety requirements (or revocations of requirements), whether in the form of new rules or amendments to old rules. The BLS data include NHTSA's bumper standard, which is both a safety measure and a property protection measure. BUREAU OF LABOR STATISTICS, REPORT ON QUALITY CHANGES FOR 1986 MODEL PASSENGER YEAR (1985). *See also* NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION, PRELIMINARY REPORT: THE COST OF AUTOMOBILE SAFETY STANDARDS 17 (1982) (tabulating BLS data for model years 1968-1982).

ogy. It seems much more probable to imagine that the pre- and post-1976 cost figures simply reflect the real effects of NHTSA's regulations on automobile manufacturers in those periods.

Nor does a story of intensified effort stymied by technological barriers square well with the data. The regulatory record is littered with ideas and proposals of remarkably modest technological sophistication that have never found their way into regulatory form.[27] NHTSA also has sponsored considerable research on vehicle safety technology, but has used little learned in any of these endeavors.[28]

NHTSA's shift from rules to recalls is also reflected in its allocation of resources to these two areas of activity. When reasonably full staffing had been achieved, by about 1970, NHTSA employed fifty-four rulemaking

27. In October 1971, for example, the Agency issued a comprehensive rulemaking plan which contemplated various innovations. NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION, PROGRAM PLAN FOR MOTOR VEHICLE SAFETY STANDARDS A-14 (pedestrian protection) (1971); *id.* at A-45 (tire pressure warning indicators); *id.* at A-22 (motorcycle rider protection); A-38 (improved bus and truck uphill performance); *id.* at A-53 (spray protectors); *id.* at A-59 (limits on toxic gases and noise in the passenger compartment); *id.* at A-61 (alcohol interlocks, which would "sense the driver's impairment due to alcohol consumption by requiring specified tasks involving reaction time, judgment, etc., or analysis of his breath or other means," and prevent engine ignition once sensor triggered); *id.* at A-60 (speed controls to limit vehicle speed to 95 miles per hour and cause the vehicle's horn to sound and lights to brighten at speeds between 81 and 85 miles per hour, in order to warn bystanders of the presence of a vehicle being driven at excessive speed).

The Agency tentatively predicted that initiatives described in the plan could generate benefits totalling $75.9 billion at a cost of $37.8 billion, yielding net benefits of $48.1 billion at an overall benefit/cost ratio of 2.7:1. The intiatives were expected to save about 20,000 lives annually by 1980. *Motor Vehicle Oversight: Hearings Before the Senate Comm. on Commerce*, 92d Cong., 1st Sess. 27 (1972).

Although the Agency to our knowledge never withdrew these cost/benefit predictions, many initiatives described in the plan, or elsewhere, (including all of those identified above), have not been implemented. Some proposals, for example the alcohol ignition interlock, never made it off the drawing board. Others, such as an initiative on radar brakes, were tentatively proposed but never pursued in rulemaking, or elsewhere, 37 Fed. Reg. 15,003 (1972) (Advance Notice of Proposed Rulemaking), or were formally proposed but were dropped in the face of public criticism (*e.g.*, speed controls), or industry resistance (*e.g.*, periscopes). *See* 35 Fed. Reg. 18,295 (Proposed Motor Vehicle Safety Standard; proposing that "no vehicle be able to attain a speed greater than 95 miles per hour" under specified test conditions); FEDERAL REGULATION AND REGULATORY REFORM: REPORT BY THE HOUSE SUBCOMM. ON OVERSIGHT AND INVESTIGATIONS OF THE COMM. ON INTERSTATE AND FOREIGN COMMERCE, 94th Cong., 2d Sess. 178 (1976) (mere whisper of speed control in 1970 reported to provoke "a flood of hostile mail"); GENERAL ACCOUNTING OFFICE, IMPROVEMENTS NEEDED IN PLANNING AND USING MOTOR VEHICLE SAFETY RESEARCH 17-19 (1974) (Notice of Proposed Rulemaking on indirect field of view withdrawn in March, 1973 due to negative comments from industry on periscope).

The Agency eventually adopted a requirement that speedometers not indicate speeds over 85 miles per hour. No limit was placed on the actual speed capabilities of vehicles, however. The Agency reasoned that the rule would help to prevent the temptation of "immature" motorists to drive at excessive speeds. 45 Fed. Reg. 40,585 (1980), codified at 49 C.F.R. § 571.127 (1980). The requirement was revoked before taking effect. 47 Fed. Reg. 7250 (1982).

Indeed the Agency has methodically pursued the initiatives on pedestrian protection for nearly two decades, in a seemingly endless quest for additional data. *See* GENERAL ACCOUNTING OFFICE, IMPROVEMENTS NEEDED IN PLANNING AND USING MOTOR VEHICLE SAFETY RESEARCH (1974). Other initiatives are still being considered, some 16 years after the plan was issued. 52 Fed. Reg. 14644, 14647 (1987) (NHTSA Semi-Annual Regulatory Agenda, identifying continuing work on pedestrian protection and spray protectors).

28. *See* P. LORANG & L. LINDEN, *supra* note 18, at 47-70, 141-46.

engineers and only thirteen defects investigators. From that time forward, there has been a continuous decline in the former and increase in the latter. Parity was achieved in 1982. Thereafter recall personnel have outnumbered rulemaking officials.[29]

For all these reasons we are persuaded that the motor vehicle safety program really has changed over time and that the changes are very nearly as dramatic as simple statistics on the output of rules and recalls suggest. Moreover, it seems clear that these changes began long before the Reagan Administration took office. Indeed the shift from rulemaking to recalls is particularly characteristic of the Carter Administration in which Joan Claybrook, a long-time associate of Ralph Nader and a vigorous and staunch defender of the appropriateness of automobile safety regulation,[30] headed the agency.[31] Something happened at NHTSA, and it is not to be

29. Today the Office of Defects Investigations employs 42 full-time, non-clerical personnel and 4 part-time clerks. The Office of Vehicle Standards employs 32 non-clerical personnel and 3 part-time clerks.

When NHTSA commenced its standard-setting efforts on October 8, 1966, its rulemaking group consisted of eight engineers on loan from the Federal Aviation Administration, the Interstate Commerce Commission, and the Post Office. *Motor Vehicle Safety Standards: Hearings Before the Senate Comm. on Commerce*, 90th Cong., 1st Sess. 144 (1967). After a flurry of activity to meet the statutory deadline for issuance of initial rules, regulatory officials turned their attention to establishing a formal rulemaking structure. Rulemaking activities were assigned to an Associate Administrator for Motor Vehicle Programs (MVP). Within MVP, the Office of Operating Systems and the Office of Crashworthiness were given responsibility for crash-avoidance rules and crashworthiness rules, respectively. A separate organizational unit, under the direction of another Associate Administrator, was responsible for long-term research and development.

Staffing in crash-avoidance and crashworthiness totalled 55 persons in 1971 and 52 persons in 1975. In 1978 the two offices were merged into a single office, the Office of Vehicle Safety Standards. Office staffing totalled 34 in 1980 and 30 in 1983. NHTSA Personnel Data (1983) (on file with the authors).

The agency formally commenced its recall activities on October 27, 1967, when a Defects Division was established with a professional staff of three persons. By December 1970, the division consisted of 13 engineers and technicians. *Auto Safety Repairs at No Cost: Hearings on S. 355 Before the Senate Comm. on Commerce*, 93d Cong., 1st Sess. 174-75 (1973). Personnel data provided by NHTSA indicate that staffing in the Office of Defects Investigations totalled 24 persons in 1972, 25 persons in 1975, 29 persons in 1980, and 32 persons in 1983. NHTSA Personnel Data, *supra*.

The stature of the defects office has steadily grown with its acquisition of resources, as has its autonomy from the rulemaking enterprise. The recall staff was organized in October, 1967 as a tiny division within the Office of Standards Enforcement (OSE), reporting to the agency's chief rulemaking engineer, the Associate Administrator for MVP. In July 1971 the Defects Division was removed from OSE and raised to the status of a separate office, the Office of Defects Investigation (ODI). Defect investigators continued to report to the Associate Administrator for MVP.

In 1978, ODI was removed entirely from the control of the chief rulemaker. Together with the Office of Fuel Economy Compliance and Vehicle Safety Compliance, the ODI was placed under the control of the newly established post of Associate Administrator for Enforcement. 43 Fed. Reg. 8525 (1978) (codified as amended at 49 C.F.R. § 501 (1986)). We were told by an agency official in 1981 that the reorganization was designed in part to give defects more visibility.

30. For a sample of Claybrook's views, see D. BOLLIER & J. CLAYBROOK, FREEDOM FROM HARM (1986); Claybrook & Bollier, *The Hidden Benefits of Regulation: Disclosing the Auto Safety Payoff*, 3 YALE J. ON REG. 87 (1985).

31. The slowdown in auto safety rulemaking was reported by knowledgeable observers long before the Reagan Administration took office in January, 1981. In 1976, for example, a subcommittee of the Agency's House oversight committee reported that NHTSA's rulemaking program "has been

explained by facile reference to changing administrations' well-known pro- or anti-regulatory biases.

II. Explaining NHTSA's Regulatory Behavior

Explaining regulatory legislation and agency implementing behavior has become a substantial cottage industry. Attempts to predict the form of regulatory legislation and the behavior of implementing agencies take two general tacks. The first harks back to the progressive era and postulates what might be called a general "public welfare hypothesis." In the second model, politicians and bureaucrats are viewed as driven by self-interest. The form of regulatory legislation and the policy choices of bureaucrats are merely epiphenomena of this more basic pursuit of private gain.[32]

A. *The "Public Welfare" Hypothesis*

According to the public welfare theory, legislators adopt regulatory legislation in order to pursue the public interest, or general welfare. Implementing agencies pursue these public welfare goals by applying ap-

subject to across-the-board delays of long promised standards;" that "only a handful of significant amendments to existing standards have been issued by NHTSA;" and that "the slowdown is an example of the virtual abandonment of a major Congressional directive that is only 10 years old." FEDERAL REGULATION AND REGULATORY REFORM: REPORT BY THE HOUSE SUBCOMM. ON OVERSIGHT AND INVESTIGATIONS OF THE COMM. ON INTERSTATE AND FOREIGN COMMERCE, 94th Cong., 2d Sess. 166, 168 (Subcomm. print 1976). Based on a comprehensive review of the agency's regulatory activities over the preceding decade, the subcomittee concluded: "In summary, in recent years NHTSA has produced fewer and fewer significant rulemaking actions. What NHTSA has not done speaks louder than the few regulatory actions it has produced in recent years." *Id.* at 168.

Ralph Nader likewise observed that progress on setting standards followed a long and tortuous path in the Carter Administration. In a November 30, 1977 letter to Claybrook, Nader asserted that "apart from an acceleration of vehicle defect recall investigations—largely a result of processing a backlog of casework—there has been very little done either in a traditional or 'model agency' mode." Letter from Ralph Nader to Joan Claybrook, Administrator, National Highway Traffic Safety Administration (Nov. 30, 1977) (on file with the authors). Nader concluded that auto manufacturers would "tolerate your vehicle recalls, especially with their aftermarket sales stimulation, if they can control the standards function." *Id.*

Even while asserting the importance of safety standards, Claybrook herself explicitly recognized the limitations of rulemaking in forcing technology and stressed the importance of product liability suits to promote auto safety. In a 1980 article in *Trial* magazine, Claybrook urged that state legislatures should abandon efforts to make manufacturers' compliance with regulatory standards a defense against products liability actions. In pertinent part, Claybrook reasoned that "the rulemaking process is cumbersome and time consuming and standards often are not updated quickly in response to changed conditions and new technology." Claybrook, *Auto Protection: Beyond Federal Standards,* TRIAL, Nov. 1980, at 38-41. Claybrook also reasoned that regulatory standards reflect the production capabilities of the smallest companies, and that rules "cannot anticipate and cover all important aspects of motor vehicle performance." *Id.* at 39.

32. For an extensive survey of the literature on both the "public welfare" and "self-interest" models, see Noll, *Government Regulatory Behavior: A Multidisciplinary Survey and Synthesis,* in REGULATORY POLICY AND THE SOCIAL SCIENCES 9 (R. Noll ed. 1985).

propriate, expert judgment to decision-making tasks within their jurisdiction.

The particular form of regulatory legislation is thus explicable through an analysis of the social or economic problem that the legislature intended to address. Natural monopoly conditions bring forth entry and rate regulation; information asymmetries generate a regulatory response in the form of labeling requirements or other methods of information disclosure; the necessity to preserve urban amenities yields planning and zoning requirements. To be sure, the legislature may misanalyze particular social problems and prescribe the wrong solution. But reform from this public welfare perspective merely entails the correction of cognitive errors.

The public welfare story of regulatory implementation has a similar cast. The problems of implementation largely concern technique or methodology. Bureaucratic behavior is a constant search for appropriate means to implement legislatively-prescribed goals. Administrative reform would entail changes that promise to bring appropriate technical, scientific, or managerial expertise to bear upon the agency's task.[33]

From this public welfare perspective, one might begin to explain the course of auto safety regulation by imagining that NHTSA's choice of regulatory technique has been driven by the pursuit of the congressional goal of automobile safety. One would then attempt to determine whether the agency's decisions have indeed produced beneficial results, and if not, where its analysis of the costs and benefits of its two forms of regulation has gone wrong. Of course one might discover that the agency has been trapped into a suboptimal regulatory posture by some flaw in its empowering legislation, perhaps some lack of congressional foresight concerning the legal or other resources that the agency would need to accomplish its mission. Or one might discover that Congress had misestimated the need for design changes in automobiles, and that the agency had simply discovered that the best use of its rulemaking power was to let it atrophy.

B. *The Private Interest Model: Agency Capture*

As might be imagined, the private interest perspective gives rise to a rich set of stories and hypotheses about legislative-administrative behavior. The search constantly is for *whose* private interest is being served.[34]

One of the most richly elaborated theories derived from a self-interest model is that of "industry capture." This theory relies on a set of inter-

33. For critical reviews of the "public interest" theory of government regulation, see R. NOLL, REFORMING REGULATION 33-46 (1971); Posner, *Theories of Economic Regulation*, 5 BELL J. ECON. & MGMT. SCI. 335 (1974).

34. *See, e.g.*, Shughart, Tollison & Kimenyi, *The Political Economy of Immigration Restrictions*, 4 YALE J. ON REG. 79 (1986) (arguing that immigration law enforcement responds to domestic labor interests).

locking private interest hypotheses. The first is that industries seek to obtain supracompetitive profits by inducing the government to limit competition.[35] The second hypothesis is that industries pursue this objective by offering support to reelection-oriented legislators in return for appropriate regulation. Third, legislators are prepared to enter into the bargain because significant benefits can be given to a well-organized industry without arousing much notice on the part of the widely dispersed and unorganized citizenry that will pay for this regulatory largesse. Once in operation, the regulatory scheme is maintained in the interest of the regulated industry by bureaucrats who look both to Congress and the industry for their rewards. These rewards flow from industry in the form of social and business relations and the prospects of further career opportunities in the private sector. Rewards also include the goodwill of oversight and appropriations committees staffed by legislators who can derive the greatest electoral payoff from the regulation in question.

The capture story has a number of variations. It might be imagined, for example, that the industry does not actually solicit the regulatory legislation, and indeed, may oppose it. But once in place the regulatory bureaucracy succumbs to the perennial blandishments of industry coupled with the self-interested preferences of those few legislators who elect to serve on the relevant oversight or appropriations committees. In an even less conspiratorial mode, "capture" comes about simply by virtue of the industry's superior resources and organization in generating and presenting information to the relevant decision-makers. Ultimately the industry view of regulation becomes the factual predicate upon which the regulators regulate. Nor need the "capturer" be an industry. A capturer must merely have the organization and resources to deliver rewards to reelection-oriented legislators or career-oriented bureaucrats.[36]

35. A subsidiary tenet is that limiting competition by private agreement is difficult to orchestrate without governmental assistance.

36. The capture story for automobile safety regulation can thus be told in the context of automobile safety regulation with either General Motors or Ralph Nader in the role of captor. Or at least it could be if the facts so warranted. Moreover, the captors might change identity over time. Perhaps Nader captured Congress in 1966 to get the legislation passed, but by the mid-1970's the system had switched to operating in the interests of industry.

There is also a somewhat less developed literature on the *internal* capture of regulatory systems by particular coalitions of bureaucrats or bureaucrats and legislators. Perhaps the most tantalizing discussion for our purposes concerns the influence of various professional subcultures on agency regulatory activity. Thus, for example, the Federal Trade Commission's prosecutorial policy has been described as the output of negotiations between lawyers and economists within the Commission having quite different professional perspectives and, more importantly, quite different professional reward structures outside the agency. R. KATZMAN, REGULATORY BUREAUCRACY (1985).

NHTSA is similarly an agency that contains within it several different, and arguably competing, professional cadres. We might imagine competition for the heart of the agency's regulatory program

C. *Public and Private Interest Combined: The Environmental Hypothesis*

Both the public welfare and private interest approaches provide useful perspectives on NHTSA's development of regulatory policy. But neither the overall story, nor the one we recount here, is fully articulable within either of these traditions. In part this is because the two traditions are not nearly so distinct as their developers and advocates might make them out to be. In the most general sense, the idea of the public welfare or public interest in American political life tends to be more a procedural than a substantive notion. In a pluralist democratic polity, the policy output of competition amongst various interests may be precisely what is meant by "the public interest" or "pursuing the public welfare." Pluralist theory does not hypothesize an overarching general will or interest that can be specified as the aim or goal of the social order. Hence a legislative-administrative policy process in which people both inside and outside government are imagined to be pursuing their own aims may be said to generate "public interest" outcomes.

At some level, of course, the blending of public and private interest hypotheses in pluralist theory renders the idea of the public interest completely empty. "The public interest" becomes simply the vector sum or output of the policy process, whatever that output might be. As a behavioral hypothesis this form of public interest theory is non-falsifiable; as a descriptive heuristic, it is indistinguishable from a private interest perspective.

Private interest notions suffer from similar defects. If a regulatory statute has any effect at all, it of necessity rearranges the legal claims available to various members of the body politic. If rights have values, this redistribution of rights benefits some more than others. Every regulatory scheme can thus be found to be run in the interest of some group or coalition of groups who obtain special benefits. Moreover, even if some or all of the benefitted group fail to recognize the improvement in their positions that the regulatory scheme would bring, it seems likely that they will notice over time. Eventually, therefore, they will attempt to sustain or even improve these beneficial results. Finding a group or groups who are being benefitted, and who are behaving strategically to maintain those benefits, is virtually assured with respect to every regulatory system. The null hypothesis is always rejected. Moreover, since no group will ever get all it wants, the private interest story is one of complex compromises amongst

amongst the safety engineers, the legal staff, and the economists who staff the policy and evaluation office. *See infra* note 98.

groups whose goals all can be, and are, articulated in public interest terms. The statutory or regulatory outcome is thus descriptively indistinguishable from the public interest story.

Mindful of the vagueness, overlaps, and normative loadings of these two analytic traditions, we tell the story of auto safety regulation at NHTSA using somewhat unconventional labels. Our most general perspective, which we call the "environmental hypothesis," is reminiscent of both private interest and public welfare analyses.[37] This explanation posits that NHTSA is struggling to provide the form of regulation that society wants. As it engages in this struggle, the agency receives feedback from many sources, including Congress, the courts, the Executive Office of the President, interest group activity, general public opinion as expressed in opinion polls and press commentary, and many others. Responding to this rich environmental feedback, the agency engages in actions designed to explore the contours of its legitimate regulatory mandate. The apparent success or failure of its prior efforts, as indicated by signals from important actors in the agency's environment, induces adaptations that, over time, profoundly influence the agency's regulatory approach.

This Article pursues a special form of the environmental story which we call the "legal culture hypothesis." In short form the hypothesis is that, legally, adopting rules is difficult; recalling "defective" automobiles is easy. Judicial review of NHTSA's regulatory effort thus has reinforced and legitimated a shift from technology-forcing by rule to consumer assistance by recall.

By labeling our explanation a "legal culture" rather than simply a "judicial review" hypothesis we mean to signal two important things about the argument. First, we are not here describing some simple judicial or congressional "mistake". Recalls do, and rules do not, respond appropriately to the basic political presuppositions of American law. The preferred or most clearly legitimate form of coercive state intervention in our polity is remedial. Such intervention attempts to correct past injury or injustice, usually in individual instances, and on the basis of widely-shared understandings of legal and moral responsibility. Recall actions, like common law warranty claims, tend to fit this paradigm. They charge that automobile companies have sold (past act) defective and potentially dangerous

37. This approach is not entirely novel. It has strong echoes of Allison's Model III, G. ALLISON, ESSENCE OF DECISION 144-84 (1971), and Steinbruner's cybernetic decisionmaking models. J. STEINBRUNER, THE CYBERNETIC THEORY OF DECISIONMAKING (1974). Nor is it parsimonious. Because here we are pursuing only one portion of the agency's environment, the usefulness or comparative advantage of this approach cannot be demonstrated. The "environmental hypothesis" therefore serves merely as a label to identify our general perspective on the way that one should seek to understand regulatory behavior.

products (existing injury) to unwitting consumers (injustice) who are (individually) entitled, at their option, to have the defect repaired (remedy). Safety performance standards, by contrast, assert (in highly technical language) that some (probablistic) percentage (group) of future injuries or accidents might be avoided (preventive action) if all (general) automobiles were systematically modified. Rather than claiming that our settled expectations have been violated and demanding redress, safety rules merely urge that our future might be more secure if we changed our behavior or the design of our products—a much less compelling claim for state intervention.

Hence, if the judicial posture toward rulemaking is a mistake, it is not a simple one, and its correction may confront overwhelming ideological obstacles. To find that judicial review retards effective safety regulation is not to hold out the prospect that there are politically feasible remedies for that difficulty. Achieving the policy goals articulated for safety regulation in 1966 may require an unacceptable reorientation of our ideas about the political legitimacy of administrative regulation.

Second, the "legal culture" hypothesis recognizes that judicial review decisions establish more (and often less) than technical rules permitting or prohibiting particular administrative activity. The legal culture as mediated by the judiciary both reflects and shapes the preferences of other regulatory participants, and it reinforces certain political and professional values in legislative-bureaucratic battles. The impact of particular judicial decisions is at once specific and general; amorphous, yet pervasive. Regulatory responses thus may seem disproportionate to specific judicial stimuli, and the lines of causation from stimulus to response are often drawn by a faint and wavering hand. The constraints and incentives that emerge from judicial-administrative interactions are the product of an extraordinarily complex mix of values, interests, and institutions functioning in real time and having, therefore, real histories. This is, in the end, a story about politics, not physics.

III. NHTSA in Court

NHTSA's judicial track record, pursuing automobile recall orders and defending its safety standards, has been dramatically discontinuous. When seeking a recall it has found most legal barriers lying face down in the cinders; in rulemaking proceedings the agency has confronted obstacles more appropriate to infantry training than to a track meet. The agency has lost six of the twelve rulemaking cases decided on the merits;[38] its

38. NHTSA's safety standards were struck down in whole or in part in Wagner Elec. Corp. v.

record in defects litigation is blemished by only one defeat, a lower court case that is being appealed.[39] A study of NHTSA litigation is thus simultaneously revealing and puzzling. Feedback from the judicial arena has surely reinforced a migration toward the recall as a regulatory technique. But why has NHTSA had this particular experience—an experience that falsifies the predictions that general administrative law principles might suggest? To answer that question, we must say something more about the general structure of judicial review in American administrative law and elaborate NHTSA's litigation history in some detail.

A. *Fixing General Ideas*

NHTSA, like most federal administrative agencies, appears before courts both as a plaintiff and as a defendant. It is a defendant in proceedings attacking the validity of its rules. It is a plaintiff in proceedings

Volpe, 466 F.2d 1013 (3d. Cir. 1972) (Standard 108, turn signal and hazard warning flashers); H & H Tire Co. v. Department of Transp., 471 F.2d 350 (7th Cir. 1972) (Standard 117, retreaded tires); Chrysler Corp. v. Department of Transp., 472 F.2d 659 (6th Cir. 1972) (Standard 208, passive restraint); National Tire Dealers & Retreaders Ass'n v. Brinegar, 491 F.2d 31 (D.C. Cir. 1974) (Standard 117, pneumatic tires); PACCAR, Inc. v. National Highway Traffic Safety Admin., 573 F.2d 632 (9th Cir. 1978) (Standard 121, air brakes), *cert. denied*, 439 U.S. 862 (1979); Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29 (1983) (Standard 208).

The agency was upheld in Automotive Parts & Accessories Ass'n v. Boyd, 407 F.2d 330 (D.C. Cir. 1968) (Standard 202, head restraints); Boating Indus. Ass'n v. Boyd, 409 F.2d 408 (7th Cir. 1969) (Standard 108, lighting); Ford Motor Co. v. National Highway Traffic Safety Admin., 473 F.2d 1241 (6th Cir. 1973) (Standard 208, ignition interlock); Chrysler Corp. v. Department of Transp., 515 F.2d 1053 (6th Cir. 1975) (Standard 108); Vehicle Equip. Safety Comm'n v. National Highway Traffic Safety Admin., 611 F.2d 53 (4th Cir. 1979) (Standard 115, vehicle identification numbers); Pacific Legal Found. v. Department of Transp., 593 F.2d 1338 (D.C. Cir.) (Standard 208), *cert. denied* 444 U.S. 830 (1979).

NHTSA's standard for uniform tire quality grading (UTQG) has also been litigated. B.F. Goodrich Co. v. Department of Transp., 541 F.2d 1178 (6th Cir. 1976) (partial remand); B.F. Goodrich Co. v. Department of Transp., 592 F.2d 322 (6th Cir. 1979) (standard upheld); Public Citizen v. Steed, 733 F.2d 93 (D.C. Cir. 1984) (invalidating agency suspension of standard). The UTQG standard requires labelling to indicate certain performance characteristics. The standard is principally a consumer information measure to enable purchasers to compare tires and make informed purchases.

See also State Farm Mut. Auto. Ass'n v. Dole, 802 F.2d 474 (D.C. Cir. 1986) (challenge to "trap door" provision of Standard 208 dismissed on ripeness grounds), *petition for cert. filed sub nom.* New York v. Dole, 55 U.S.L.W. 3475 (U.S. Dec. 17, 1986) (No. 86-999); Center for Auto Safety v. Peck, 751 F.2d 1336 (D.C. Cir. 1985) (upholding relaxation of bumper impact standard, a mixed safety/property protection measure).

39. NHTSA's recall decisions were upheld in United States v. General Motors Corp., 518 F.2d 420 (D.C. Cir. 1975) (outlining lenient standards for summary judgment and remanding for trial; wheels); United States v. Ford Motor Co., 421 F. Supp. 1239 (D.D.C. 1976) (seat brackets), *aff'd.*, 574 F.2d 534 (D.C. Cir. 1978); United States v. General Motors Corp., 565 F.2d 754 (D.C. Cir. 1977) (carburetor plugs); United States v. General Motors Corp., 561 F.2d 923 (D.C. Cir. 1977) (pitman arms); United States v. Ford Motor Co., 453 F. Supp. 1240 (D.D.C. 1978) (windshield wipers); Center For Auto Safety v. Lewis, 685 F.2d 656 (D.C. Cir. 1982) (agency decision not to recall Ford automobiles with defective transmissions upheld); *see also* United States v. General Motors Corp., 574 F. Supp. 1047 (D.D.C. 1983) (denying defendant's motion to dismiss; defective brakes). The Agency's only defeat came in United States v. General Motors Corp., No. 83-2220 (D.D.C. Apr. 14, 1987), *appeal docketed*, No. 87-5170 (D.C. Cir. May 12, 1987). *See also* Wall St. J., May 12, 1987, at 6 (government requesting expedited appellate review).

seeking to force a recall of "defective" vehicles. Moreover, as is generally true in civil litigation, NHTSA has the burden of proof as a plaintiff and is entitled to the "benefit of the doubt" as a defendant. Thus far, then, the puzzle merely deepens. NHTSA should have an easier time in court defending its rules than proving its defect cases.

Nor is this assessment altered by any special aspects of administrative law governing the "deference" that courts should pay to administrative judgments. Arcane quibbles about the appropriate "scope" of judicial review aside, courts are supposed to uphold NHTSA's rules if they are "reasonable". The courts exercise a limited scope of review. By contrast, courts should enforce a proposed recall only if they believe the agency is correct, for in a recall proceeding the court technically is not "reviewing" an agency order. The court is making the initial decision itself in a proceeding in which the agency is merely a special prosecutor. Even if the defects determination were viewed as an "informal" agency decision put at issue by way of defense in the judicial enforcement proceeding, judicial "review" in recall proceedings is said to be "*de novo*," that is, an independent exercise of judicial discretion.[40] If courts observe the norms of administrative law, then, other things being equal, they should affirm rulemaking decisions more often than defects determinations.

The normative expectations of administrative lawyers have seldom been subjected to empirical verification of a more than anecdotal sort. In one of the rare empirical studies of Supreme Court review of agency action, Martin Shapiro found that "the courts generally let the agencies do what they want."[41] Seven years later Warner Gardner came to a similar, more carefully documented, but less succinctly expressable conclusion.[42] Taking all reported federal appellate court decisions for 1974 as his sample, Gardner found that agencies were affirmed over sixty percent of the time. This held true for "newer" health, safety, and consumer agencies as well as for what Gardner termed "old line" agency activities. Moreover, refining the analysis further, and shifting to a qualitative appraisal, Gardner's audit found that informal rulemaking, the type of rulemaking exercised by NHTSA, was treated "deferentially" by reviewing courts fifty-eight percent of the time, while informal adjudication, the category that would include a NHTSA defect determination, received the closest judicial scrutiny of any functional category of agency actions.

40. For the Supreme Court's most comprehensive statement of the federal courts' scope of review with respect to administrative agency action, see Citizens to Preserve Overton Park v. Volpe, 401 U.S. 402 (1971).

41. M. SHAPIRO, THE SUPREME COURT AND ADMINISTRATIVE AGENCIES 270–71 (1968).

42. Gardner, *Federal Courts and Agencies: An Audit of the Partnership Books*, 75 COLUM. L. REV. 800 (1975).

The irony of "deferential" courts invalidating half of the vehicle safety rules reviewed, while "independent" courts repeatedly endorse NHTSA's defects determinations, may disappear, of course, when abstract cases are given more concrete texture. It is perfectly plausible to imagine that the agency—perhaps operating through different bureaus and personnel—has been nearly faultless in its recall initiatives and particularly foolish in its rulemaking. We believe, however, that such an explanation cannot be supported by the facts.

B. *The Early Rulemaking Cases*

Judicial review of safety standards began cautiously, and from the agency's point of view well, in *Automotive Parts & Accessories Association v. Boyd*.[43] The principal plaintiff represented a segment of the automobile industry which feared that NHTSA's regulation requiring that all new passenger automobiles be factory-equipped with front seat head restraints[44] would ultimately foreclose them from a lucrative market for head restraints as add-on equipment. The Automotive Parts and Accessories Association (APAA) pursued a host of different legal theories, but in a careful and scholarly opinion Judge Carl McGowan of the District of Columbia Circuit Court of Appeals rejected them all. The McGowan opinion nevertheless established the basic framework within which judicial review of NHTSA standards would go forward over the ensuing years. Two aspects of that opinion are of particular interest for our discussion. Both aspects in some sense "proceduralize" the reviewing court's investigation of the reasonableness of the agency's standard setting.

First, Judge McGowan set forth what he perceived to be the basic scope of review under the "arbitrary and capricious" standard in Section 10 of the federal Administrative Procedure Act.[45] In McGowan's words, "The paramount objective is to see whether the agency, given an essentially legislative task to perform, has carried it out in a manner calculated to negate the dangers of arbitrariness and irrationality in the formulation of rules for general application in the future."[46] So stated, whether an agency's rule is arbitrary or capricious may turn as much on the agency's apparent reasoning process as on the good sense of the final judgment under review.

In a similar vein, the court addressed the question of whether NHTSA's "concise general statement of basis and purpose" was sufficient

43. 407 F.2d 330 (D.C. Cir. 1968) [hereinafter *Auto Parts*].
44. 49 C.F.R. § 571.202 (1986).
45. 5 U.S.C. § 706(2)(a) (1982).
46. *Auto Parts*, 407 F.2d at 338.

to pass muster under Section 4 of the Administrative Procedure Act.[47] The NHTSA statement with respect to head restraints was certainly concise and general. It stated in full: "This standard specifies requirements for head restraints to reduce the frequency and severity of neck injury in rear-end and other collisions."[48]

The court viewed this statement as unnecessarily terse:

> [O]n the occasion of this first challenge to the implementation of the new statute it is appropriate for us to remind the Administrator of the ever present possibility of judicial review, and to caution against an overly literal reading of the statutory terms "concise" and "general." These adjectives must be accommodated to the realities of judicial scrutiny, which do not contemplate that the court itself will, by a laborious examination of the record, formulate in the first instance the significant issues faced by the agency and articulate the rationale of their resolution. We do not expect the agency to discuss every item . . . in informal rulemaking. We do expect that, if the judicial review which Congress has thought it important to provide is to be meaningful, the "concise general statement of . . . basis and purpose" mandated by Section 4 will enable us to see what major issues of policy were ventilated by the informal proceedings and why the agency reacted to them as it did.[49]

While Judge McGowan put forward this requirement as a necessity of judicial review, the demand for more elaborate discussion of the major issues thrown up by the rulemaking proceeding has the equally important function of reinforcing the participation of outside parties in the Agency's deliberations. The Agency's failure to respond to significant issues of either fact or policy raised by a participant will, under Judge McGowan's standard, provide a straightforward basis for judicial challenge to the rationality of the Agency's rule. After all, failure to respond to significant issues raised by participants can hardly satisfy the basic standard of reasonableness that the court had set forth: to perform its task in a manner "calculated to negate the dangers of arbitrariness and irrationality."[50]

In the case under review the Administrator had, in another part of the order promulgating the head restraints standard, specifically responded to the comments of the APAA. Moreover, the Administrator had elaborated on this response in a three-page letter rejecting the APAA's request to

47. 5 U.S.C. § 553(c) (1982).
48. *Auto Parts*, 407 F.2d at 338 n.12.
49. *Id.* at 338.
50. *Id.*

reconsider the decision to promulgate the standard. In reviewing these materials Judge McGowan found that:

> [T]he picture they present is one of conscientious attention to the objections raised to the proposed rule, and their reasoned disposition on the basis of technical information and other relevant considerations which we have no basis for rejecting. The principal elements in the decision to require factory installation appear to have been (1) greater ease of enforcement and consequent assurance of the extension of protection to consumers and (2) the enhancement of protection due to the relationship between the head restraint and structure of which it is a part. The one seems evident to us as a matter of common experience, while the other is amply supported by expert opinion in record.[51]

The petitioners argued vigorously that evidence in the record supported a finding that head restraints could create safety problems. In part these problems resulted from anatomical variations which could cause some persons to strike their heads on the edges or corners of head restraints. It was further suggested that head restraints cut down visibility and thus might cause accidents. In responding to these claims the court said:

> There can be no question but that the Administrator, on the basis of the submissions made to him, could reasonably determine that the benefits of mandatory head restraints far outweigh any disadvantages from such restraints due to decreased visibility, or other possible adverse affects on safety. On the one hand, the benefits from the reduction of neck injuries in rear-end crashes were clearly identifiable from the information and specific data contained in submissions from . . . independent sources . . . as well as the substantial statistical compilation within the Department. The evidence that head restraints might lead to significant safety disadvantages, on the other hand, seems rather speculative.[52]

In short, in *Auto Parts* the rulemaking record revealed both conscientious attention to the significant issues and a substantial data base that was, in part, independently generated. The Agency's technical mastery of the subject was due in significant degree to the fact that head restraint technology had long been in use. The rulemaking merely mandated its use in all newly manufactured vehicles. It remained to be seen how the courts would deal with NHTSA's more problematic judgments—judgments that

51. *Id.* at 341 (footnote omitted).
52. *Id.* at 342.

were somewhat more "technology-forcing" and therefore less easily documented. The Agency did not have to wait long for an answer.

In April, 1971, NHTSA adopted Standard 117 on retreaded tires.[53] The standard was based on the belief that retreaded tires should be expected to provide the same safety characteristics as new tires. Standard 117 in its final form, therefore, merely incorporated five laboratory performance tests that were a part of the safety standards for new tires set forth previously in Standard 109,[54] and never challenged in court. Two of those standards, the ones specifying performance requirements related to endurance and high speed driving, however, were now hotly contested by the retreading industry. The retreaders were understandably concerned. Industry testing had revealed that retreads would fail approximately twenty-eight percent of the time on the endurance test and seventeen percent of the time on the high speed test.

In responding to these industry complaints the government pointed out that retreaders had admitted in the rulemaking proceeding that they might be able to redesign their tires to do better on the high speed and endurance tests. The retreaders' basic legal claim was that such speculative admissions could not provide the factual predicate for the standard. The required redesign specifications had not been fully articulated, their cost had not been analyzed, and the Agency had not determined how long it should take the retreading industry to begin production of redesigned retreads. In addition, participants in the rulemaking proceeding had suggested that the redesign features could themselves produce safety hazards in highway driving.

In *H & H Tire Co. v. Department of Transportation*,[55] the reviewing court agreed with the petitioners that the Agency had failed to justify its standard adequately. The court was concerned that little evidence existed in the record to correlate laboratory tests with performance on the road. Internal NHTSA studies supported these concerns and called for further research. "Thus," wrote the court, "we cannot conclude from the record before us that the respondents adequately investigated the practicability of Standard 117 before issuing it."[56]

The court was equally unhappy with the Agency's failure to engage in any economic or cost studies with respect to the promulgated standards:

> [T]he respondent seems to overlook the fact that, if economic analysis were to show that retreaders would suffer severe economic hardship,

53. 49 C.F.R. § 571.117 (1972).
54. 49 C.F.R. § 571.109 (1986).
55. 471 F.2d 350 (7th Cir. 1972).
56. *Id.* at 355.

> either by being forced out of business or by being priced out of their market, the retreaders' customers would also suffer. . . . In their responses to the notice, some retreaders stated that purchasers of retreads are often persons who cannot afford new tires or who, because of the expense of new tires, continue to use worn out tires much longer than they, in safety, should. The Safety Act explicitly recognizes that tires may be new or retreaded. This certainly militates against the idea that Congress intended to authorize the respondent to narrow the selection of alternatives available to consumers when they decide to buy automobile tires. . . .
>
> We do not minimize the desirability of all reasonable and practicable steps for the diminution of highway carnage. That, of course, could be accomplished by the elimination of all privately owned automobiles. We do not understand that Congress had that in mind.[57]

The demands of *H & H Tire* sound eminently sensible. After all, NHTSA's interest should be in on-the-road performance. And what is to be said for a standard that might decrease safety through the imposition of unknown additional costs on consumers? Hadn't the Agency simply failed, in the *Auto Parts* vernacular, "to negate the dangers of arbitrariness and irrationality" that attended its regulatory task? Perhaps. But from the Agency's perspective the opinion revealed a thorough misunderstanding both of NHTSA's powers and of the practical necessities of technology-forcing. If NHTSA needed on-the-road evidence of safety effects before it could regulate, how could it require anything new? Didn't the court understand that imposing new and more costly technologies always extended the useful life of old ones by providing economic incentives for their continued use, and that there was always a safety loss in the transition period as consumers continued to use worn out equipment? And how was NHTSA to respond to these claims of excessive cost? Only manufacturers had the cost data; they refused to disclose it and NHTSA had no statutory power to require disclosure.[58]

On the same day that the Seventh Circuit Court of Appeals struck down the retreaded tire performance standards in *H & H Tire*, the Sixth Circuit in *Chrysler Corp. v. Department of Transportation*,[59] enjoined the implementation of the Agency's passive restraints standard. Although retreaded tires might be considered peripheral to the Agency's overall

57. *Id.* (citation omitted).

58. This particular defect was remedied by an amendment to the Federal Motor Vehicle Safety Act requiring the disclosure of cost data by any manufacturer objecting to a regulation on the grounds of cost. Motor Vehicle and Schoolbus Safety Amendments of 1974, Pub. L. No. 93-492, § 105, 88 Stat. 1470, 1481 (codified as amended at 15 U.S.C. § 1402(a) (1982)).

59. 472 F.2d 659 (6th Cir. 1972).

vehicle safety program, the passive restraints rule was at the core of the enterprise. Reducing the effects of the "second collision" was the major articulated rationale for the 1966 Act.[60] Providing restraint systems that cushion impacts automatically, and hence are "passive," carried forward the legislation's basic public health strategy. Moreover, the projected life-saving and injury-reducing potential of passive restraints eclipsed that claimed for all the Agency's other safety standards combined.

It would be easy, nevertheless, to minimize the importance of the Sixth Circuit's holding in *Chrysler Corp. v. Department of Transportation.* The court rejected Chrysler's basic objection, that passive restraints—airbags in particular—had not been demonstrated to be "practicable" in highway use. NHTSA surely took great solace from statements such as "the Agency is empowered to issue safety standards which require improvements in existing technology or which require the development of new technology, and it is not limited to issuing standards based solely on devices already fully developed."[61] The "bad law" in the Seventh Circuit seemed to be paired with some "good law" in the Sixth. Indeed, the Agency lost in *Chrysler* on the narrow ground that its criteria for anthropomorphic test dummies were incomplete and that, therefore, the passive restraints standard currently lacked the "objective performance criteria" required by the Act.

Yet *Chrysler* was a managerial and political disaster that has haunted NHTSA's regulatory efforts to the present day. Properly understood it was also a doctrinal calamity. For, cheerful general language aside, the Sixth Circuit's legal posture on technology-forcing was not really so different from the Seventh Circuit's view in *H & H Tire.* The court's apparent broad approval of technology-forcing must be taken in context. The airbag was not yet generally on the road, but it was hardly a vague idea either. As the court noted:

> We need not detail here the immense amount of factual data contained in the record relevant to this issue; suffice it to here observe that present systems demonstrate considerable sophistication over earlier prototypes. In addition, several automobile manufacturers and several airbag developers have expressed a great deal of confidence in their present systems and an equal confidence that present developmental research programs will eliminate any obstacles which may presently remain.[62]

60. *See supra* note 4.
61. 472 F.2d at 673.
62. *Id.*

Indeed, the court's language understated the road-readiness of the airbag. Alone among major manufacturers, General Motors was not a plaintiff in *Chrysler*. For good reason. GM had already announced that it would include airbags as standard equipment in all 1975 GM passenger cars and light trucks. Several major non-automotive manufacturers, who were actively competing to be the major suppliers of airbag systems and components, also claimed to have production-ready systems. And Ford, which was a plaintiff, had just delivered a fleet of two hundred airbag-equipped cars to the Allstate Insurance Company.

In these circumstances, the level of technology-forcing ratified by the court was hardly very radical. That ratification also had to be read in conjunction with the court's refusal to allow the Agency to put the burden of final development of the test dummy on the industry. Since the Agency has a minuscule research budget, and virtually all automotive technology development (including that of performance testing devices) goes on within the industry, the Agency's power to force technology may have been simultaneously confirmed and rejected. As the dissenting member of the Sixth Circuit panel argued in vain to his brethren:

> It cannot be emphasized too strongly that the most potent weapon in the Agency's arsenal to achieve motor vehicle safety is its power, conferred by the Act, to compel the industry to develop new technology through the issuance of motor vehicle safety standards. Yet, if the rationale of the majority is adopted, industry is in effect relieved from the responsibility of developing a concomitant part of new automotive safety technology since without a previously developed testing device and procedure the Agency is powerless to press industry toward this end.[63]

Chrysler not only denied the Agency its most potent weapon, it enormously enhanced the power of the defensive strategy that the industry had adopted in both rulemaking and judicial proceedings—the full court press. The "inadequate-dummy" claim was but one of scores thrown at the Agency in the passive restraints proceeding, each backed by such data and argument as a massive industry, with its army of engineers and lawyers, could marshal. Under the *Auto Parts* formula the Agency was required to respond to each argument. This required responsiveness was surely burdensome. Properly understood, *Chrysler* multiplied that burden many times, for the case suggested that every objection should be given equal rebuttal effort whatever its intrinsic merit.

In order to understand the strategic effect of *Chrysler*, one must appreciate that, before the case was briefed and argued, the notion that

63. *Id.* at 692 (Miller, J., concurring in part and dissenting in part).

the reviewing court would buy the dummy argument seemed preposterous. The objection was that NHTSA had not specified all the dummy's performance characteristics. But this could in no way prejudice the manufacturers. So long as their passive restraints systems performed acceptably using a dummy having the characteristics specified in the rule, they complied with Standard 208. Manufacturers literally could give the dummy any additional characteristics they desired, including characteristics specifically engineered to produce compliance and having no relation to the predicted post-crash behavior of human bodies. Further refinements in dummy technology were slated for later incorporation in the Standard. Meanwhile, the manufacturers in *Chrysler* were complaining about a gap in the rule that gave them engineering discretion and potentially eased their compliance burden.

Notwithstanding these plain facts, the petitioners somehow convinced the court that the gaps in the dummy criteria made the standard non-objective and performance testing non-repeatable. In its technical context, therefore, the *Chrysler* decision announced *sotto voce* that anything could happen on any issue. And, in hindsight, the three scant pages devoted to this issue in the Agency's 122-page brief seemed a major tactical blunder. Rather than simply pointing out the obvious, that the manufacturers were arguing against themselves and that their demand for "full specification" of the dummy in performance terms was impossible in any event, the agency perhaps should have filled the brief with detail from the rulemaking proceeding on the technical niceties of dummy construction. Perhaps that would have convinced the court that NHTSA had done all that was possible to achieve a complete and objective specification. But even then the argument may not have succeeded. For the *Chrysler* decision might also be read to demand completion of all planned research and development activity on a standard before promulgating it in any form. To admit that there are gaps to be filled as technological understanding increases is to admit that the technical basis for the standard is inadequate.

From the manufacturers' standpoint, finding a gap, or many gaps, in any regulation should be child's play. Moreover, automakers need only point out these technological inadequacies and give them some credibility to force the Agency to document the technical merits of any detail in its standards. This is a full court press under conditions that recall an old basketball verity: Five players can never beat six if one of the six is wearing a striped shirt and using a whistle. But in this game the player ratios are probably on the order of 10:1 rather than 6:5.

C. *The Agency Chastened*

This apocalyptic reading of the early cases is, obviously, not necessary. Yet there is evidence both that NHTSA tended to read the cases this way and that it did so with some justification. Comprehensive oversight hearings on NHTSA's stewardship of the vehicle safety program were called before the Senate Commerce Committee less than two years after *Chrysler*. A principal focus of those hearings was the tardy pace of NHTSA rulemaking. Time and again, the Agency responded to its critics that prompt action was not possible, indeed was likely to be dysfunctional, given the requirements of judicial review.

Listen as the Agency's Administrator describes his plight:

> We are the men in the middle in the adversary situation that has developed. We propose something. We are criticized on the one hand, with some support from the Committee, saying we are going too slow. The industry on the other hand is in there fighting and saying we are going too fast. We are trying to carry out our statutory responsiblities to get safety in these vehicles. . . . The only thing is that you and some of the critics say we are going too slow. We say we are going with what the Administrative [Procedure] Act permits us to do.[64]

Such generalities were hardly satisfying to safety partisans who pressed the Agency constantly on specific issues. In connection with the Agency's work on Standard 208, for example, Administrator Gregory testified:

> We have not rushed into decisionmaking because, despite the charges of certain critics, the key factors are not all known. There is a difference between advocacy, which pushes to achieve some action desired by the advocate and the final action of the statutorily responsible public official. The public official must understand all the key data and the various points of view, make his decision and then accept responsibility for his action. The same does not hold true for the advocate. Dispute is probably inevitable when one is dealing with an issue like passive restraints.
>
> We want to insure, insofar as possible, since the industry took us to court before on this standard, that further delay will not be occasioned by new court challenges.[65]

64. *Motor Vehicle Safety Oversight: Hearings Before the Senate Comm. on Commerce*, 93d Cong., 2d Sess. 86 (1974) (statement of Dr. James Gregory, Administrator, NHTSA).

65. *Id.* at 76 (statement of Administrator Gregory).

As the Agency's sensitivity to judicial review in the aftermath of the *Chrysler* decision came up repeatedly and in different contexts, the exchanges, particularly between Senator Hartke and the Chief Counsel, became more pointed. But the latter stoutly maintained that the Agency's view of its legal situation was realistic:

> Hartke: Can you push the state of the art forward by proposing a rule [that cars be designed so that their occupants would survive a 50 mile per hour barrier crash], or does that run into the legal question?
>
> Schneider: It turns into the legal question when you issue it, if you cannot support it.
>
> Hartke: Isn't it a lot better to get knocked down by the court than to concede before you start?
>
> Schneider: No. . . . I can cite two examples. One is a controversial subject where Congress said, "Get it out at a certain time," and we didn't. . . . A lawsuit was brought, and so what has happened is that the court has set the effective dates. The case is still pending on appeal in court, so I really should not go into a lot of detail; but the long and short of it is that I, personally, feel that the day those regulations ultimately come into effect will have taken much longer because of the litigation than they would be but for the litigation.
>
> On a more important subject, standard 208, the original delay in 208 was because of the litigation. In other words, the litigation resulted in a decision which led to more work needing to be done because in the court's judgment the test device was no good. I think there, again, if you are not on solid ground when you go forward with these things, you run the risk, great risk, because litigation is ever increasing, Mr. Chairman, from the industry vis-a-vis DOT. We run the great risk of the standard ultimately having an effective date come about at a later time because of court action than it would have but for court action.[66]

Again, in relation to the Agency's effort to promulgate school bus safety standards with all deliberate speed, the Chief Counsel testified:

> Mr. Chairman, what people say before the committee is fine and good; but you as a lawyer know full well that it is what is in the rulemaking record which we lawyers have to take when we are challenged in court. Everything we do say today, it seems, results in being challenged in court. We have to have support in the record. What they say to you privately, the school bus manufacturers are not saying in the rulemaking record.[67]

66. *Id.* at 109-10 (statement of Lawrence Schneider, Chief Counsel, NHTSA).
67. *Id.* at 84.

And in relation to NHTSA's overall schedule for rulemaking actions, Administrator Gregory stated in a letter to Chairman Magnuson dated February 15, 1974, a copy of which was submitted to the hearing record:

> Mr. Chairman, I too share your concern in what often appears to be unnecessary delays in rulemaking actions. In establishing these dates, however, I think it must be recognized that should we move without a strong engineering position; without proper considerations for cost and lead time; or, without adequate benefit cost information, we are vulnerable to court actions which would result in longer delays. . . .[68]

Such testimony is obviously self-serving and should be discounted accordingly. Yet, it is far from clear that Gregory and Schneider should be viewed as excessively timid. They were having a lot of trouble in court in addition to *H & H Tire* and *Chrysler*. Whereas in those cases the Agency had been reversed for failing to respond effectively to the substance of manufacturers' complaints, in *Wagner Electric Corp. v. Volpe*,[69] the Secretary was reversed because the final rule *was* modified to take account of manufacturers' objections without providing a further opportunity for affected parties to comment on the modified form of the rule.

In addition to the Catch-22 aspects of combining these "substantive" and procedural decisions—non-responsiveness is irrational and responsiveness is procedurally improper—*Wagner Electric* added further burdens of uncertain magnitude to the rulemaking process. With no reliable method for discerning what issues raised by participants might be treated as important by reviewing courts, or what changes in a proposal would be considered sufficiently substantial to require another round of notice and comment, NHTSA could hardly be faulted for taking a very cautious approach to rejecting either manufacturers' substantive arguments or their requests for further proceedings to explore new or modified issues. The manufacturers' full court press on rulemaking proposals, which also included constant petitions for amendment, interpretation, or waiver of existing rules, was being reinforced procedurally as well as substantively by judicial review. And the offensive team had a very thin bench. Under these circumstances they might appear to be stalling for time while running, passing, and dribbling with all the energy they could muster.

Later cases have tended to confirm, rather than ameliorate the Agency's difficulties. NHTSA's attempts to redeem the general technology-forcing power alluded to in the majority opinion in *Chrysler* have seldom been

68. *Id.* at 28.
69. 466 F.2d 1013 (3d Cir. 1972).

successful.[70] The fate of one of NHTSA's more ambitious technology-forcing endeavors—an attempt to mandate improvements in the safe braking capacity of large trucks—is instructive. The legal forcing device was wonderfully simple. The regulation[71] merely required that trucks be capable of stopping from 60 miles per hour on a specified road surface within a certain number of feet without "wheel lock-ups" or "jacknifing". The regulation's accident-avoidance goal was also straightforward. In the words of the reviewing court, "[c]ommon sense would seem to indicate that when two types of vehicles of widely divergent size share the same roadway, and the larger, heavier vehicle has a much longer stopping distance, any situation which requires emergency braking is potentially disastrous to the smaller automobile and its passengers."[72]

However, the only technology that would satisfy this requirement was an antilock braking system (ABS), a complex, computer-assisted device that was used on most commercial aircraft, but was then available only on some limited-production surface vehicles. When the ABS technology was forcibly moved from limited to mass production, reliability problems surfaced almost immediately. In response to numerous petitions, NHTSA continually relaxed and reformulated the standard. The problems nevertheless persisted. Indeed, some spot checks by fleet owners suggested that the failure rate of the systems might exceed fifty percent.[73]

Responding to a manufacturer's claim that the persistent evidence of unreliability made it essential for NHTSA to study thoroughly the reliability of the ABS device in use, the Court of Appeals in *PACCAR, Inc. v.*

70. In National Tire Dealers & Retreaders Ass'n v. Brinegar, 491 F.2d 31 (D.C. Cir. 1974), for example, the standard at issue required that retreaded tires have permanently affixed to their sidewalls information concerning seven characteristics of the tires. These included the tire's size, its maximum inflation pressure, its maximum load, the number of plys, an indication that it was a "tube-type" or "tubeless" tire, and the words "bias/belted" or the word "radial" depending on the tire's construction. Tire retreaders objected to these requirements because the variation in tire casings that they received for retreading, combined with the hot vulcanizing process for retreading tires, would make the inclusion of this information laborious and time-consuming. Tires would have to be heated and cooled several times in order to get all this information molded into their sidewalls. One retreader submitted information suggesting that, on the basis of an experiment it had run, the price of its retreaded tires would have to be increased about 30% in order to achieve reasonable compliance with the standard's requirements. NHTSA's only response to such submissions was a suggestion that retreaders might be able to sort tires into uniform lots which would reduce the cost of compliance significantly, coupled with the invocation of *Chrysler's* suggestion that the Agency was not responsible for demonstrating exactly how and at what cost manufacturers could comply.

The District of Columbia Court of Appeals viewed the Agency's response as entirely inadequate. The opinion characterized NHTSA's statements as "unsupported and unconvincing assertions." *Id.* at 40. Nor in the court's words was "the Secretary's statement of the reasons for his conclusion that the requirements are practicable . . . so inherently plausible that the court can accept it on the agency's mere *ipse dixit*." *Id.*

71. 49 C.F.R. § 571.121 (1972).

72. PACCAR, Inc. v. National Highway Traffic Safety Admin., 573 F.2d 632, 640 (9th Cir. 1978), *cert. denied*, 439 U.S. 862 (1979).

73. *Id.* at 642.

National Highway Traffic Safety Administration found the Agency's data base totally inadequate to support retention of the standard.[74] It enjoined implementation of the stopping distance requirements until the agency could develop evidence that the braking systems required would decrease rather than increase the danger to the public. Shades of *H & H Tire.*

In addition, the *PACCAR* court invalidated the testing requirements under Standard 121.[75] The stopping distances specified by the rule were for a specific road surface with skid numbers of 75 and 30.[76] The court agreed with the petitioners that the testing requirements were impracticable for several reasons. For one thing, the skid numbers used were based on a mathematical calculation that assumed the use of a particular tire which was no longer produced. Other tires produced different results.

At a more basic level the court agreed with the petitioners that it was impossible to maintain a road surface at a particular skid number. Fluctuations in skid numbers on a given road surface meant that manufacturers would have to overcompensate by testing their vehicles on road surfaces substantially slicker than the regulations required in order to assure that the vehicles would perform as required when tested. The court rejected NHTSA's assurance that it would test trucks on a substantially stickier surface than the regulation required, thus allowing a margin for surface variances, saying "these informal assurances are not enough. Manufacturers are entitled to testing criteria that they can rely upon with certainty."[77]

PACCAR is a peculiar and, for NHTSA, a frustrating case. The Agency obviously had not operated with the degree of scientific or engineering precision that, abstractly considered, one would like to expect. Yet, as the *PACCAR* court noted, "There is much in the Standard that has long been needed for highway safety, and it is undisputed that the antilock device, when perfected, will advance that goal. We are also aware that some manufacturers have expended a great deal of time, energy, and money over the last six years, in attempting to produce vehicles to comply, and that they have, to a large degree, been successful."[78]

74. NHTSA conceded that there had been problems, but it pointed to its continuous revision of the standard as evidence of its responsiveness to new data. While PACCAR claimed that trucks with unreliable ABS systems were now less safe than they had been previously, the agency noted that it had received not a single confirmed report of an accident caused by ABS failure. NHTSA further noted that it had road tested three ABS equipped trucks for three months and had encountered no problems. *Id.* at 643.

75. *Id.*

76. The skid number represents the degree of friction between the tire and the road surface and is therefore a quantitative measure of the slickness of the road. The number 75 represents a dry road while the number 30 represents a wet road.

77. 573 F.2d at 644.

78. *Id.* at 643.

In short, the Agency had been engaged in technology-forcing which placed the requirements for innovation and experimentation firmly on the automotive industry. It had been partially, perhaps mostly, successful, but had not quite achieved the degree of reliability needed. Yet, on judical review, the Agency discovers that its responsiveness over time to new data and industry petitions will be viewed *not* as a sensible incremental approach, but rather as evidence that it did not know what it was doing. Moreover, the Agency is required to demonstrate practicability in use in a legal context that almost certainly destroys its capacity to do so. After *PACCAR*, when truck manufacturers no longer have any obligation to comply with the standard, how is the Agency to develop the comprehensive data on road performance necessary to sustain its regulation? Unless truck manufacturers and operators voluntarily cooperate with the Agency by installing and maintaining expensive devices that they obviously wish to avoid, that data can never become available. The court seems to be demanding data that its opinion renders unobtainable.

The *PACCAR* court's approach to the testing standard must have been equally distressing. According to *Chrysler*, the statute's "objectivity" requirement applies to testing criteria as well as to safety standards. The Agency, therefore, was virtually forced to adopt the "stickiness coefficient" approach, notwithstanding its known and irremediable variability. There simply was no other way to specify an objective performance criterion. The problem was that the criteria were very difficult to satisfy. Hence NHTSA did the only thing it could do. It recognized the problem explicitly and gave assurances that it would not test trucks for compliance purposes on a surface whose variance might penalize a conscientious manufacturer. But this promise was held to be an "impracticable" guarantee for manufacturers who are entitled to criteria "that they can rely upon with certainty" in doing their own testing. Another Catch 22: the "practicable" is non-objective and the "objective" is impracticable.

D. *A Preliminary Assessment*

Our discussion thus far has viewed the decisions of reviewing courts primarily through the lens of their strategic effects on NHTSA's capacity to promulgate safety standards. We should reverse the telescope momentarily to observe the view from the bench. The courts that have reviewed NHTSA's rules might be seen merely to be holding the Agency to precisely those aspirations of scientific objectivity and rationality that underlie the epidemiological perspective on safety regulation. Reviewing courts have required that the Agency get the facts, analyze them in a sophisticated fashion, and adopt policies that are closely connected to these factual

and analytical predicates. Courts also have required that the Agency be sensitive to the limitations or subsidiary purposes included in its governing legislation. NHTSA has not been permitted to pursue automobile safety at any cost.

Put in this way, the position of the judiciary seems straightforward and sensible. The 1966 Act, after all, is predicated on a vision of scientific rationality. Nor should Congress be imagined to have desired significant disruption of the automobile industry or automobile utilization when it instructed the Agency to pursue its safety goals. The statute, after all, says that the Agency should eliminate "unreasonable risks." Its standards are required to be "objective" and "appropriate" to the type of vehicle involved, as well as "practicable".

This interpretation is reinforced by the even-handedness of the judiciary when the Agency shifted in the 1980's to an active program of deregulation. The most important decision was *Motor Vehicle Manufacturers Association of the United States v. State Farm Mutual Automobile Insurance Co.*[79] Without here detailing the tortuous regulatory path of FMVSS 208, suffice it to say that the passive restraints standard invalidated in the *Chrysler* case was subsequently finalized,[80] then withdrawn,[81] then reissued[82] and approved on judicial review,[83] and then rescinded by Secretary Andrew Lewis in the first Reagan Administration.[84] It was review of that rescission order that reached the Supreme Court in *State Farm*.

Secretary Lewis's rescission was premised on findings, first, that automobile manufacturers would comply with the standard as then written by installing "passive belts" rather than airbags and, second, that the passive belt might well not provide any greater safety benefits than the "active" belt currently required to be installed because those belts could be detached easily by automobile occupants. The former finding was based upon the automobile industry's submissions to the Secretary; the latter on

79. 463 U.S. 29 (1983).

80. 39 Fed. Reg. 10,271 (1974) (reciting agency finding that test dummy now specified in sufficiently objective terms to satisfy conditions of *Chrysler* remand).

81. Secretary of Transportation William T. Coleman initiated a further rulemaking on the issue of the passive restraint requirement. 41 Fed. Reg. 24,070 (1976). Based on NHTSA's anticipation of widespread public resistance, Secretary Coleman proposed a demonstration project to encourage public acceptance; promulgation of the mandatory standard was left for a later, unspecified date. Dept. of Transportation, The Secretary's Decision Concerning Motor Vehicle Occupant Crash Protection (December 6, 1976); 42 Fed. Reg. 5071 (1977) (briefly explaining Secretary's decision).

82. Modified Standard 208, 49 C.F.R. § 571.208 (1978).

83. Pacific Legal Found. v. Department of Transp., 593 F.2d 1338 (D.C. Cir.), *cert. denied*, 444 U.S. 830 (1979).

84. Citing the economic difficulties of the auto industry, Lewis proposed a revision of the entire standard. 46 Fed. Reg. 21,205 (1981). After a comment period, NHTSA issued a final rule (Notice 25) which rescinded the passive restraint requirement in Modified Standard 208. 46 Fed. Reg. 53,419 (1981).

the Agency's lack of any significant data indicating how motorists would respond to detachable passive belts.

The Court voiced two main concerns:[85] First, the Secretary had not explained why, if detachable passive belts caused problems of disengagement, Standard 208 should not be rewritten to require that the performance standard be met either by the installation of air bags or by the installation of nondetachable passive belts.[86] Second, the Court could not understand why the Secretary believed that a detachable passive belt would function in the same way as a manual or active belt. For, the Court reasoned, so long as the passive belt was not detached by the occupant, it would operate without any action on the part of the driver or passenger. Hence, inertia favored usage rather than, as with active belts, nonusage. The Court could therefore not understand why the agency predicted that detachable passive belts might function much like active belts.[87]

The Secretary was not faulted for the fact that the data available to him were uncertain on this question, but instead for an apparent inexplicable leap from uncertainty to a behavioral prediction. The Court[88] clearly

85. Much of the Supreme Court's opinion dealt with the appropriate scope of review for the revocation, as distinguished from the promulgation, of a rule. In the end the Court resolved these questions in favor of exercising precisely the same scope of review for revocations as for promulgations or amendments. 463 U.S. at 41. The Court basically asked itself whether the Secretary's rationale made sense in its own terms and whether the factual predicate to sustain it was sufficient. It found the Secretary's explanation inadequate and his failure to develop a better factual record arbitrary.

86. 463 U.S. at 46.

87. *Id.* at 51.

88. The District of Columbia Circuit took a similar view in Public Citizen v. Steed, 733 F.2d 93 (D.C. Cir. 1984). At issue was NHTSA's suspension of its tire tread-wear grading requirements. These requirements had been twice issued by the Agency. The first issuance was enjoined by the Sixth Circuit Court of Appeals at the suit of certain tire manufacturers on the familiar ground that the Agency's test procedures had certain technical difficulties. B.F. Goodrich Co. v. Department of Transp., 541 F.2d 1178 (6th Cir. 1976). NHTSA then revised the regulations and reissued them excluding radial tires from the requirements because the problems with the methodology for measuring wear rates in radial tires had not been solved adequately. Following another judicial challenge by the tire manufacturers, the rule was upheld. B.F. Goodrich Co. v. Department of Transp., 592 F.2d 322 (6th Cir. 1979).

In 1983, however, the Agency proposed to suspend the tread-wear grading requirements entirely on the grounds that it must do so "to avoid dissemination of potentially misleading tire information to consumers," as well as "to minimize the imposition of unwarranted compliance cost on industry and consumers." 48 Fed. Reg. 5690 (1983). The Agency's proposed suspension notice listed several tentative sources of data variability that a review of test data at its San Angelo test grounds had revealed.

In reviewing this suspension, the D.C. Circuit found that the test variability problems actuating NHTSA's concern in 1983 were precisely the same problems it had rejected as not seriously undermining its tests in 1975 and 1978. Indeed, NHTSA had insisted previously that those test procedures produced "reasonably fair and reasonably reliable grading procedures" and that the Act did not require that it achieve "theoretical perfection." The Agency's argument in that regard had been adopted explicitly by the Sixth Circuit Court of Appeals when upholding the treadwear rule. B.F. Goodrich Co. v. Department of Transp., 541 F.2d 1178, 1189 (6th Cir. 1976).

The D.C. Circuit then overturned the Agency's suspension order on two grounds:

> First, the record does not support NHTSA's finding that the magnitude of the variability problem justified suspending the tread-wear rating requirements, rather than retaining them while improvements in the test procedures and in the manufacturers' grade assignment

believed that the rational response to uncertainty was to seek further information, meanwhile maintaining the status quo.[89]

The Supreme Court clearly understood that a political preference for deregulation had in part motivated the actions under review in *State Farm*. When combined with the cases reviewing the promulgation of rules the decisions reveal, therefore, that neither regulation nor deregulation can be supported by hunch, conjecture, or ideology. The Agency has been allowed to pursue neither safety nor regulatory relief without thoroughly justifying its actions in terms of a reliable factual predicate and its statutory mandate. The Agency may operate in a domain beset by factual uncertainty, but it cannot offer uncertainty as a predicate for its acts. Judicial review of the rationality of administrative rules operates on the Weberian maxim "Bureaucratic administration means fundamentally domination through knowledge."[90]

These apparently reasonable judicial requirements may nevertheless be uniquely disabling to an agency having NHTSA's standard-setting mandate. The National Traffic and Motor Vehicle Safety Act presumes that at least some standards will be "technology-forcing." NHTSA is supposed to improve the state of the art in automobile safety design. Yet, it is to do this by setting performance standards, not design standards. The statute presumes that the automobile industry will engage in the innovative

practices could be developed. Second, NHTSA failed to explain why alternatives, which the rulemaking record indicates were available to the agency, could not correct many of the variability problems that NHTSA ha[1] identified.

733 F.2d at 99-100.

The court was clearly impatient with the Agency's failure to fully implement provisions of the Act which, according to congressional instruction, were to be in place no later than 1968. Indeed, the court waxed apopleptic in its conclusion:

> It is hard to imagine a more sorry performance of a congressional mandate than that carried out by NHTSA and its predecessors under Section 203 of the Act. Between inaction, foot-dragging, and field reversal, the track record of the agency's performance is very muddy indeed. . . .
>
> NHTSA's rationale for suspending the treadwear grading requirements read like a "how-to" manual for the compulsive perfectionist.

733 F.2d at 105.

89. In the Supreme Court's words,

> Rescission of the passive restraint requirement would not be arbitrary and capricious simply because there was no evidence in direct support of the agency's conclusion. It is not infrequent that the available data do not settle a regulatory issue and the agency must then exercise its judgment in moving from the facts and probabilities on the record to a policy conclusion. Recognizing that policymaking in a complex society must account for uncertainty, however, does not imply that it is sufficient for an agency to merely recite the terms "substantial uncertainty" as a justification for its actions. As previously noted, the agency must explain the evidence which is available, and must offer a "rational connection between facts found and the choice made." Generally, one aspect of that explanation would be a justification for rescinding the regulation before engaging in a search for further evidence.

463 U.S. at 52 (citation omitted).

90. 1 M. WEBER, ECONOMY AND SOCIETY 225 (G. Roth & C. Wittich ed. 1968).

engineering necessary to make the automobile operate in accordance with these performance requirements.

This division of function between the agency and the industry is eminently sensible.[91] Both engineering know-how and the incentives to reduce compliance costs lie with the industry. Yet the division of responsibility produces something of a paradox when the agency seeks to justify its requirements. If the agency adopts standards requiring only the use of well-known and widely-tested safety devices, thus merely writing into performance criteria language the characteristics of existing designs, it will carry out only a limited portion of its technology-forcing mandate—a demand that manufacturers incorporate known and proven safety advances into their products. But to the extent that NHTSA does more to force technology, it will be attempting to speed up a process of experiential and incremental engineering advance. The ultimate success of that endeavor could not possibly be demonstrable at the time the technology-forcing regulatory power is exercised.[92]

One must expect, therefore, that not only will there be gaps in the technical, factual predicate for such standards, there will always be a series of problems which have not yet been solved and which might make the standard "inappropriate," "impracticable," and perhaps initially even unsafe, compared to the status quo. Whether such standards can be justified as a reasonable exercise of agency judgment may then depend importantly on circumstances beyond the agency's control, not the least of which will be manufacturer cooperation in pressing forward experimental safety projects. In this context, as the dissenting judge in *Chrysler* recognized, industry resistance becomes self-validating.

Indeed, present, cogent rationalization may be almost the antithesis of the behavior required for successful technology-forcing. The only way to force technology may be to behave "unreasonably"—to demand what cannot now be done, or what can now be done only at excessive cost.[93] A statement of basis and purpose relying on the folk wisdom that "necessity

91. One should not make too much, however, of the distinction between design and performance standards. Many automobile safety standards seem merely to translate designs into performance language. Moreover, there is no conceptually clean break between the two techniques. *See generally* Mills, *The Techniques of Automotive Regulation: Performance versus Design Standards*, in GOVERNMENT, TECHNOLOGY AND THE FUTURE OF THE AUTOMOBILE 64 (D. Ginsburg ed. 1980) (discussing relative advantages of each technique).

92. Indeed, candid appraisal of any technology-forcing effort would almost certainly describe it as deeply problematic. Read the prospectus of a genetic engineering firm. Even with patentable laboratory techniques, bringing a product to market is beset by significant uncertainties affecting timing, cost and marketability. Such investments are not for those who demand assured success or a predictable income stream.

93. This was in fact the technique Congress adopted when imposing fuel economy and emissions standards on the automobile industry. L. LINDEN & H. IVERECH, REGULATING THE AUTOMOBILE 7-10 (1977).

is the mother of invention," tempered by the agency's promise to withhold sanctions if the industry's best efforts fail, may be an essential regulatory technique. But this is precisely the technique that NHTSA has been denied, explicitly in *PACCAR*, and implicitly in *Chrysler*, *H & H Tire*, and elsewhere.[94] The unhappy position of technology-forcing in the context of rationality review is but one difficulty with the judicial posture that has developed in the course of reviewing NHTSA's rules. The "decision process" rather than "decision product" cast of judicial review for reasonableness, while it seems restrained and appropriate for "generalist judges" reviewing an "expert agency," has even more general, unfortunate consequences.

First, it invites courts to invalidate reasonable judgments that are badly explained or perhaps inexplicable in straightforward logical fashion. The search for a "rational process" tends to collapse incremental learning in real time—a process that may entail tentative commitments, revised technical and interpretive perspectives, false starts, lucky guesses, new information, or an evolving technological, economic and political environment—into an analytical exercise of the "If A, then B" sort. This approach is both pernicious and self-defeating.

It is pernicious because it gives enormous leverage to the status quo, whether the status quo is no rule, as in *PACCAR*, or the continuance of a rule, as in *State Farm*. The fits, starts, and reversals of real decisionmaking look, from a rational-analytic perspective, like the fumblings of an incompetent or misguided administrator. It is self-defeating because this approach to review instructs administrators to write a rational-analytic account of their decisions in order to withstand judicial review. If the courts really are interested in the decision process, they are unlikely to learn much about it. The current approach to judicial review virtually assures that no administrator will find it prudent to reveal the agency's real process of decision.[95]

94. There is evidence, moreover, that the technology-forcing technique works, at least sometimes, to produce necessary advances. Recall National Tire Dealers & Retreaders Ass'n v. Brinegar, 491 F.2d 31 (D.C. Cir. 1974), discussed *supra* note 70. The court there invalidated NHTSA's tire labelling requirements because it had failed to demonstrate that they were economically practicable. But not all of the rule's requirements were nullified. Two requirements had been specified in the statute, to take effect whenever the Agency adopted a labelling rule. Although those requirements caused the same compliance difficulties as the other aspects of the rule, the court left them in effect. Why? Because Congress, unlike regulatory agencies, need not demonstrate that it knows what it is doing; as the court opined, laconically, "No adminstrative procedure test applies to an act of Congress." 491 F.2d at 37.

Did the price of retread tires then shoot up in the way the retreaders had asserted in the rulemaking proceeding? Not at all. An adhesive manufacturer quickly developed a label that could be affixed permanently to retreads after the vulcanizing process was complete—at a cost of only 12 cents per tire.

95. The statement of basis and purpose at issue in *State Farm* is a classic example. The Agency's

Second, the process approach leads courts to imagine that remands for further consideration or explanation have a modest effect on an agency's regulatory policy choice. Courts, after all, are not judging the reasonableness of the agency's policy; that is for the agency to decide. Judges see themselves as merely shaping up the process of rational bureaucratic decisionmaking. But this view enormously understimates the potential impact of a judicial remand, particularly one premised, as most are, on the incompleteness of the agency's decision process.

Any remand occurs long after the rulemaking docket has been closed and the staff has been reassigned. Often the remand finds the agency with a new administrator and a new agenda. The idea that an agency can or will quickly turn to remedying the factual or analytic defects in its remanded rule is surely naive, however minor those problems might appear in the abstract. Delay will be measured in years, as Chief Counsel Schneider implicitly warned Senator Hartke, not months. And, of course, delay means that rulemaking will go forward in a new political, economic, and technological context that will radically alter the perceived rationality of the rule. Rather than the rule shaping reality, reality will reshape the rule.

We do not want to wax hyperbolic but, if NHTSA's engineering estimates are to be believed,[96] absent the *Chrysler* remand tens of thousands of lives and millions of serious injuries would have been prevented between 1972 and the present by an evolving passive restraints technology.[97] For as we suggested earlier, *Chrysler* was both a managerial and a political disaster.

statement is set forth in technocratic terms that invite reversal. Yet, as the dissenters seem to recognize, the historical basis for NHTSA's risk aversion concerning passive restraints made a convincing case for the Agency's position. 463 U.S. at 58, 59. For not only had Ronald Reagan accepted a mandate to do something about overzealous regulation, the Agency's prior experience with the acceptability of the passive restraint mechanism suggested the political wisdom of caution. Yet the syllogistic form of prior instances of judicial review discouraged the Agency from simply laying its cards on the table.

96. In one of its more conservative estimates NHTSA suggested that 15-year fatality savings would be 57,000 lives. 49 Fed. Reg. 28,987 (1984). We are not arguing here that those engineering estimates should be believed. The factors influencing the highway death rate include the age distribution of the driving population, the spatial distribution of driving, the range of distribution of the weights of vehicles on the road, the distribution of speeds, the use of alcohol, the safety of highway structures, changes in the availability and quality of emergency and long-term medical care, changes in vehicle occupancy rates, changes in the distribution of daytime and nighttime driving, and so on. Looking at the long-term trends on injuries and fatalities, the only innovation that seems to have had a clear, marked and immediate effect on automobile injuries and deaths was the introduction of the national 55 mile per hour speed limit in early 1974. We simply do not know whether NHTSA regulation has had the effect claimed for it or whether the passive restraints rule would have had those effects. Yet, the most careful second generation studies of the impact of safety regulation suggest that safety equipment has produced a reduction in the incidence of injury and death. *See* REGULATING THE AUTOMOBILE, *supra* note 9, at 53, 54.

97. Claybrook & Bollier, *supra* note 30, at 101 n.94, 122 n.233.

The managerial disaster was in general terms merely the internal reflection of the strategic weaknesses that judicial review exacerbated. If courts focus on gaps in the record or in the rulemaking analysis, agencies will learn to do so also. The standard bureaucratic response to hostility in the external environment is to replicate the threat internally in order to make anything issued by the agency completely defensible. Lawyers, economists, and engineers can be assigned to "flyspeck" the rulemaking record and to "remand" it within the agency for revision prior to promulgation.[98]

98. Internal changes at NHTSA from 1975 to 1980 strongly suggest that the Agency was engaged in a process of replicating external conflict concerning safety standards. These changes include reformation of the rulemaking process and realignment of professionals (engineers, lawyers, economists, and policy analysts) participating in that process.

NHTSA in the mid-1970's was pictured as an Agency "dominated" by engineers. *See* Pruitt, *People Doing What They Do Best: The Professional Engineers and NHTSA*, 39 PUB. ADMIN. REV. 363 (1979) (based on interviews conducted in 1976). The early priority given safety standards was attributed to engineers' professional biases and to their capture of transient political appointees who served as administrator. *Id.* at 367-68.

The Agency's internal rulemaking procedures support this depiction. NHTSA, Order 800-1 (1972). The original procedures, issued in 1972, vested almost exclusive rulemaking authority in the Agency's chief rulemaking engineer, the Associate Administrator for Motor Vehicle Programs (MVP), who was "responsible for developing motor vehicle safety standards and for ensuring that proposed standards comply with the substantive goals of the National Traffic and Motor Vehicle Safety Act." Other agency officials were authorized to participate in the rulemaking process, and to concur in or dissent from proposed rules, but the order gave little content or force to this review function. The order set strict limits on the time available for comment, and the "Coordination Panel," where all parties convened to exchange views on proposed rules, was dominated by engineers. Under the terms of the original order, engineers were responsible for taking the initiative in all substantive phases of rulemaking, including obtaining the Administrator's permission to commit Agency resources to a proposal; formulating the rule; and incorporating or disregarding changes proposed by other agency staff during the internal rev' w and comment period.

In February, 1977, the 800-1 order was revised. The new Order stressed that the Administrator, not the chief rulemaking engineer was in charge of the rulemaking apparatus. In contrast to his previous plenary role, the rulemaking engineer was responsible primarily for preparing "rulemaking support papers." The new Order gave cost/benefit analysts and policy analysts under the Associate Administrator for Planning and Evaluation (P & E) a new and major role in the rulemaking process. In a memorandum accompanying the new order, the Administrator made clear that such analysts would have "the most significant role, both in inceptional planning and pending rulemaking, in taking a lead as independent questioner and critic to assure that all available alternatives are fully flushed out and considered. . . . P & E must bring independent and objective scrutiny to these matters."

We were told that the revised order was designed to free the Administrator from captivity of Motor Vehicle Programs by terminating that group's largely exclusive claim upon rulemaking decisions. The new Order also preserved the role of attorneys as independent critics in the rulemaking process.

There is evidence that these new procedures fostered considerable discontent among engineers almost from the moment of their adoption. In a 1980 memorandum entitled *Why I Am Losing My Hair*, the agency's new chief rulemaker, who until 1978 had been the chief policy planner and cost/benefit analyst, addressed the "festering" "current of discontent" among his staff. He specifically cited the prevailing notion among engineers that lawyers and economists "exist to harass us" and "continually raise issues that are without merit or fail to understand our analyses." The chief rulemaker disagreed. "If they do come up with an analysis that terminates a rulemaking action, you should be overjoyed," he reminded his staff. "If P&P and OCC find reasons to kill a regulation, imagine the never ending number of petitions you would have had to manage were it issued." Memorandum from Associate Administrator for Rulemaking to All Rulemaking Staff (Feb. 1, 1980) (on file with the authors). Today, former heads of Policy and Evaluation hold the posts of both Associate Administrator for Research and Development and Associate Administrator for Rulemaking.

It will be only natural for that staff to become more risk averse than the judiciary that poses the outside threat. For the staff's job is to clear up any problem that *might* generate judicial concern—and *any* gap or lack of persuasiveness *might*. Even a modest judicial demand for an adequate reasoning process can translate into bureaucratic paralysis, unless sufficient counterweights are pressing agency initiatives forward. Any counterweights at NHTSA have obviously had insufficient heft. The agency lacks the institutional resources to live up to the legal system's expectations for rational bureaucratic behavior.

More importantly, the lessons of *Chrysler* and *H & H Tire* came at a time when the agency was moving toward a radical shift in its rulemaking approach. As a first step, it was in the process of folding many of its equipment specific standards into a more general, performance-based occupant protection format, based importantly on the model of the FMVSS 208 barrier crash criterion.[99] When Standard 208 was remanded, activity on half a dozen other rules had to be suspended.[100] The standard's fate apparently derailed a second, much bolder, step. NHTSA was contemplating a rulemaking approach similar to the simple fifty miles per hour crash test that Hartke inquired about in the 1974 Senate Commerce Committee hearings. The idea was to abandon all equipment- or design-specific crashworthiness criteria in favor of a simple demand for "survivability" of occupants in a barrier crash of a predetermined speed.[101] Manufacturers would be allowed to achieve compliance in any fashion they chose.

The strategic advantages of this radical approach were obvious. No longer would NHTSA bear the burden of demonstrating the practicability and reasonableness of particular changes in vehicle design in the face of a blizzard of industry complaints based on the multiplicity of NHTSA's proposals regarding other aspects of the design and production of vehicles composed of fifteen thousand parts. The standard would instead be phrased as a simple performance goal. Manufacturers could change any and every component or system in the vehicle, or any process relating to

99. NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION, PROGRAM PLAN FOR MOTOR VEHICLE SAFETY STANDARDS 7 (1971).

100. *See Amendments to the National Traffic and Motor Vehicle Safety Act of 1966: Hearings Before the House Subcomm. on Commerce and Finance of the Comm. on Interstate and Foreign Commerce* (pt. 1), 93d Cong., 1st Sess. 362-69 (1973) (statement of Secretary of Transportation Brinegar) (detailing the reasons for delay of promulgation of various rules initially proposed in 1970).

101. NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION, *supra* note 99, at 7-9, 10 (agency will move toward "specifying occupant crash protection requirements on a total system performance basis," with frontal collision speed eventually raised to fifty miles per hour; current safety standards to be rendered obsolete).

its production, in order to achieve that goal. The burden of technological innovation would be theirs.

The potential incompatibility of this strategy with what the courts seemed to be demanding was also obvious. Even if NHTSA could point to a prototype safety car that would meet the fifty miles per hour standard, which seemed well within reach, it would be unable to demonstrate that its safety car was economically practicable to produce and market, or that the manufacturers could duplicate the safety car's performance in vehicles that were. Even if believed to be technologically feasible, therefore, this new direction for rulemaking seemed legally impossible. *PACCAR* confirmed the pessimistic predictions made on the basis of *Chrysler* and *H&H Tire*. And, without recourse to a general performance standard, there was no managerial game plan for breaking the rulemaking staff through the industry's full court press. The standard-setting process stagnated.

These legal difficulties might, of course, have been overcome by new infusions of statutory power or by massive increases in appropriations and staffing limits. But the political disaster that followed in the wake of *Chrysler* radically reduced the Agency's political capital and further reinforced the retreat from rulemaking. NHTSA's political problems were not, of course, the direct result of the *Chrysler* opinion. That decision merely served as a "but for" cause—"For the lack of a nail. . . ."—for events that rapidly took on their own special dynamic.

Briefly, the story is as follows. The *Chrysler* remand did not invalidate all of FMVSS 208. It left in effect one compliance option, which now became mandatory—connecting existing seat and shoulder belts to an ignition interlock that would prevent the car from starting unless the belts were engaged. This device was not only possible with off-the-shelf technology, it was also cheap. It promised a massive increase in seatbelt utilization, and one manufacturer even had market survey data suggesting that consumers thought the interlock desirable. Hence, NHTSA left the interlock requirement in effect pending the proposed revision of Standard 208 to reinstitute the passive restraint requirement. The interlock even survived judicial review.[102]

But it did not survive long in the marketplace. Attached first in the fall of 1973 to model year 1974 vehicles, the interlock generated a quantity of hate mail to the Ninety-Third Congress reminiscent of the outcry following Richard Nixon's removal of Archibald Cox as Special Prosecutor during the Watergate investigation. By August, 1974, Congress repealed the

102. Ford Motor Co. v. National Highway Traffic Safety Admin., 473 F.2d 1241, 1244 (6th Cir. 1973).

interlock requirement, forbade its readoption, and attached a legislative veto to any reissuance of FMVSS 208.[103] In the process, congressmen competed vigorously with each other to express the appropriate level of moral outrage at NHTSA's invasion of motorists' personal liberty. The agency was vilified as "big brother"[104] and characterized as "un-American;"[105] its interlock requirement was ridiculed as "asinine,"[106] a "nightmare."[107] Such political lessons are not soon forgotten. Indeed, although we cannot recount the full story here, the search for "public acceptability" has since 1974 been a primary criterion guiding NHTSA's rulemaking activities.

E. *Judging Defects*

Before speculating about the bases for the observed, and seemingly disabling, judicial approach to review of NHTSA's regulations, it will be useful to contrast that line of cases with NHTSA's experience in court when seeking to force the recall of automobiles containing a "defect that relates to motor vehicle safety."[108]

United States v. General Motors Corp. (wheels)[109] is a good example of the degree to which the judiciary has eased the agency's enforcement burden in recall cases. There NHTSA had ordered General Motors to recall a number of its 1960 through 1965 model year, three-quarter ton, Chevrolet and GMC pickup trucks because of a large number of failures in a particular type of wheel used on those models. General Motors did not deny that a significant number of failures had occurred, but urged that the failures would not occur if the vehicles were operated in accordance with the owners' manual. General Motor's claim was that the wheel failures were the result of significant overloading of the vehicles by owners who added heavy campers or other special bodies to the trucks.

103. Motor Vehicle and Schoolbus Safety Amendments of 1974, Pub. L. No. 93-492, § 109, 88 Stat. 1470, 1482 (codified as amended at 15 U.S.C. § 1410(b) (1982)).

104. 120 CONG. REC. 30,838 (1974) (remarks of Sen. Eagleton); *id.* at 27,815 (remarks of Rep. Wyman). *See also id.* at 27,809 (remarks of Rep. Frenzel) ("an exercise in big brotherism").

105. *Id.* at 27,816 (remarks of Rep. Wyman).

106. *Id.* at 30,841 (remarks of Sen. Cotton).

107. *Id.* at 27,820 (remarks of Rep. Rousselot).

Many other congressmen expressed their sentiments in equally strong terms. *See, e.g., id.* at 27,817 (remarks of Rep. Devine) ("I do not think the American people want bells ringing, whistles blowing, and sirens going every time they sit down in a car"); *id.* (remarks of Rep. Collins) ("This buzzer is something carried over from the Chinese torture system"); *id.* at 30,848 (remarks of Sen. Domenici) ("onerous restrictions . . . which are so ridiculous that they become almost something one cannot live with").

108. National Traffic and Motor Vehicle Safety Act of 1966, Pub. L. No. 89-563, § 113, 80 Stat. 718, 726 (1966) (amended version at 15 U.S.C. § 1402 (1982)).

109. 518 F.2d 420 (D.C. Cir. 1975).

The Court of Appeals for the D.C. Circuit held that the government could discharge its burden of establishing a defect simply by showing a significant number of failures, without making any showing of their cause. It did leave open the possibility that the manufacturer could avoid a finding of defect by demonstrating, as an affirmative defense, not only that the failures had resulted from owner abuse or neglect, but also that such behavior was not foreseeable by the manufacturers.

The relaxed recall standard was further elaborated in another General Motors case, *United States v. General Motors Corp.* (pitman arms).[110] In that case the government had introduced evidence in the district court that a part of the steering linkage (the pitman arm) had failed on a 1959 Cadillac in one ninety degree turn at ten to fifteen miles per hour; that the arms were made of metal somewhat softer than that usually employed to withstand the stresses of low speed turns; and that General Motors had sold six times as many pitman arm replacement units for its 1959 and 1960 Cadillacs as for the immediately preceding and succeeding years.

General Motors claimed that, notwithstanding these proofs, the government had failed to demonstrate the existence of a defect creating an unreasonable risk of injury or death. Indeed, there had been no reported injuries from pitman arm failures, and General Motors had received no complaints about the defect from any of its customers. Moreover, the stress necessary to break the arms could only be applied at very low speeds (as when parallel parking), and a risk analysis suggested that failures of pitman arms in the 1959 and 1960 Cadillacs left on the road might produce, at most, two injuries before that model Cadillac disappeared.

On the basis of these proofs the trial judge awarded summary judgment to General Motors. The court ruled that the government had failed to demonstrate an unreasonable risk of injury from failure of the pitman arms and, therefore, had failed to demonstrate a defect in 1959 and 1960 Cadillacs. The court of appeals not only reversed the award of summary judgment for General Motors, but directed that summary judgment be granted to the government. The court held that in order to prove a defect existed, NHTSA need only demonstrate (1) that there had been failures in the equipment in apparently excessive numbers and (2) that this failure would produce loss of steering control.[111] General Motors' failure to disprove either the possibility of failure in a driving situation or the conclusion that such failure would produce loss of control of the car meant that

110. 561 F.2d 923 (D.C. Cir. 1977).
111. *Id.* at 937.

the condition of these components created an "unreasonable risk." Summary judgment for the government was therefore appropriate.[112]

The posture of the courts in recall cases contrasts strikingly with the judicial posture assumed in regulation review proceedings. Courts have given the Agency very modest responsibility to demonstrate that a significant problem related to automobile safety is involved in a recall campaign. One rarely finds the courts asking whether the safety problem underlying the recall is sufficiently serious to justify the expense of repair or replacement, or whether the Agency really knows enough to determine that the recall will promote safety. General Motors can be required to offer to replace the pitman arms in 40,000 seven-year-old Cadillacs in the face of an uncontradicted projection that this replacement will prevent two injuries. NHTSA may force the recall of General Motors trucks without any knowledge of the cause of their failure, even when the only available evidence suggests that their wheels do not fail when utilized in accordance with the owner's manual. If offered to justify a regulatory wheel strength requirement or a standard requiring increased durability in steering arms, this sort of data and analysis surely would be laughed out of court.

Moreover, when NHTSA decides not to institute a recall, its decisions, unlike those involved in revoking or suspending safety standards, seem virtually immune from judicial review. For example, with respect to the widely publicized problems with Ford transmissions, the Agency after extensive investigation decided not to find a defect related to automobile safety. Instead it settled the proceeding with Ford by requiring that a sticker be sent to owners of Ford automobiles indicating proper procedures for ensuring that the automobile did not slip into reverse from park.

Ralph Nader's institutional offspring, the Center for Auto Safety, was outraged by the NHTSA settlement. The Ford transmission problem was neither limited in scope nor trivial in effect. The initial NHTSA investigation had responded to twenty-three thousand complaints from owners detailing situations in which their automobiles had slipped out of park and rolled backward unexpectedly. A large number of injuries and deaths resulting from Fords rolling backwards had also been documented.

112. Similarly, in United States v. Ford Motor Co., 453 F. Supp. 1240 (D.D.C. 1978), the government was permitted to find that a defect in Ford windshield wipers related to automobile safety even though no reported accidents or injuries had resulted from the defect. The simple fact that the windshield wipers might break off due to metal fatigue some time during the life of the automobile was sufficient to establish that the automobiles contained a defect relating to automobile safety. Notwithstanding the lack of any accidents or injuries, the court concluded (on the basis of expert evidence) that a windshield wiper breaking off during a heavy downpour would create a dangerous situation or "unreasonable risk" within the meaning of the Motor Vehicle Safety Act, 15 U.S.C. § 1391(1) (1982). 453 F. Supp. at 1248.

However, both the district judge ruling on the Center's petition and the D.C. Circuit on appeal[113] found that the Secretary had not abused his discretion in entering into the Ford settlement. The decision rested upon the rationale that the Secretary must have the discretion to settle lawsuits on such terms as he can negotiate because, like any litigant, the Secretary in a recall proceeding faces the risk that litigation will prove unavailing.

That rationale makes perfect sense in most litigation contexts. One may wonder, however, whether litigation risk was even perceptible in the Ford case given the admitted facts and the Secretary's modest burden of proof in recall litigation, as developed primarily by the D.C. Circuit itself. The Secretary, after all, need prove only a significant number of failures in order to establish a prima facie case of defect. There was certainly plenty of evidence in the record to demonstrate that there was a significant risk of injury or death when these failures occurred. To be sure, Ford argued that the occurrences resulted from improper operation by owners. But on that issue the *General Motors* (wheels) case puts the burden of proof on manufacturers to demonstrate that this "abuse" by drivers was unforeseen. With twenty-three thousand documented complaints over nine model years, Ford's chance of success in that enterprise makes buying lotto tickets look like investing in Treasury bonds.[114]

IV. Understanding Judicial "Review"

What is it about recall activity that calls forth this gentle judicial inquiry into the rationality of the Agency's case? And why do these gentle courts become engines of reversal when presented with agency regulations?

A. *Explaining NHTSA's Experience*

The institutional locus of decisionmaking, and the way a shift in location affects legal expectations, may be the key to understanding why NHTSA's recall litigation has produced results so different from judicial review of its rulemaking. The posture of the Agency in defects enforce-

113. Center for Auto Safety v. Lewis, 685 F.2d 656 (D.C. Cir. 1982).

114. United States v. General Motors Corp. (X-car brakes), No. 83-2220 (D.D.C. Apr. 14, 1987), *appeal docketed*, No. 87-5170 (D.C. Cir. May 12, 1987), makes clear, however, that NHTSA does not always win the defects lottery. While the Agency was permitted to establish a *prima facie* case of "premature rear brake lock-up" in GM's 1980 X-body cars on the basis of consumer complaints, its proofs were overwhelmed by engineering and controlled testing data. GM demonstrated that its 1980 X-body cars had no greater braking problems than any other manufacturers' "peer group" vehicles. Indeed, the proofs tended to show that the suspect vehicles were superior in braking performance to the comparison vehicles. Slip op. at 46-47. Because, unlike any previous defects case, there was no specific component failure alleged, the district court ruled that GM's proof of performance comparability (or superiority) negated NHTSA's circumstantial evidence of an "engineering" or "performance" defect. *Id.* at 51-52.

ment is that of a litigant seeking to enforce a statutory command. The decisional institutions are Congress and the courts. According to the conventional wisdom of administrative law, an agency in this posture loses some of the customary deference paid to an expert decisionmaker subjected to judicial review of its decisions. This may be correct. But lesser deference to agency expertise hurts the agency's prospects for success in court *only if* other factors affecting success remain constant. Instead, they shift radically. Most importantly, we believe, the agency as litigant ceases to be responsible for the overall soundness of its policy. The substantive policy to recall defective cars is the legislature's. If procedural and evidentiary policies—for example, questions of who bears what burdens of proof and what evidence is essential to present a *prima facie* case—must be developed, those issues are to be decided by the courts. This shift of responsibility for policy development from agency to legislature and court may have several major effects on the psychology of judging—effects which, taken together, tend to explain the remarkable generosity of the defects jurisprudence.

First, any failure to protect automobile passengers from the effects of defective automobiles NHTSA seeks to recall will in some substantial sense be the responsibility of the court denying the Agency's recall petition. A risk-averse court will want to structure the evidentiary burden to give the plaintiff the benefit of the doubt. When denying a recall petition, the court cannot console itself with the idea that it is remanding the case to NHTSA for reconsideration, or that the Agency, not the court, is deciding the substantive issue. To be sure, a finding of insufficient evidence may in some cases "proceduralize" the courts' substantive judgments. But the question that has been asked in defects litigation is really the prior legal/policy question, "What level of proof should be sufficient in recall enforcement proceedings?"

Second, the common law of product liability instructs courts to be risk averse where product defects are concerned. The current state of the law is quite straightforward: If people are injured because products fail in their intended use (are defective), then the manufacturer is strictly liable. Moreover, the history of the common law development of strict liability reveals that the risk-distribution-compensation ethic undergirding products liability jurisprudence expresses one of the strongest normative commitments of our legal culture.[115] The incremental strengthening of manufacturers' responsiblities and lessening of plaintiffs' burdens of proof that

115. *See generally* Priest, *The Invention of Enterprise Liability*, 14 J. LEG. STUD. 461 (1985) (arguing that development of strict liability tort standard product of an intellectual movement in legal scholarship).

shaped the law into its present form demanded extraordinary and continuous conceptual innovation. Time and again legal rules were twisted into the doctrinal analog of a scrap heap, melted down, and poured into new molds. This sort of lawmaking is undertaken by courts only rarely, and only in the face of social needs that are perceived to be pressing. Defects litigation is the regulatory analog of the product injury case.[116]

Third, the defects question is not framed as a technological, scientific, or economic issue. The questions are straightforward and commonsensical. Should people expect steering arms to break, wheels to collapse, or windshield wipers to fly off? Obviously not. People expect cars and their components to work. If they don't work, the car is defective. And if one can imagine the relevant failure causing or exacerbating an accident, then that defect surely relates to automobile safety.

Finally, the court in a defects case is being asked to give a limited remedy in a limited context. The Ford transmission case aside, recalls tend to involve a minuscule percentage of cars then on the road. Moreover, the remedy only demands that manufacturers notify owners of the defect and repair cars that are presented. Since owners decide for themselves whether the reported defect is sufficiently serious to warrant the inconvenience of presenting it for repair, the preferences and common sense of car owners ameliorate any excessive caution in the judicial decree.

Defects litigation is thus particularistic and ordinary. It is not perceived to have systemic consequences. The stakes are defined largely by the parties' interests. Like any litigant, the Secretary may settle. Like any set of beneficiaries, owners may choose whether or not to avail themselves of their rights. And, as in any private litigation, the judge proceeds to shape the law in the light of authority, history, social need, and the merits of particular cases. Embedded in the legal culture of products liability litigation, all these considerations press defects litigation in the direction of modest burdens of proof and expeditious judgment for the plaintiff.

Compare the psychology of recall litigation from the judge's seat with the psychology of a rulemaking review proceeding from that same perspective. In rulemaking, the responsibility for regulatory implementation is clearly the Agency's. The court's function is quite different. Its role is to ensure the rule of law by keeping NHTSA within its statutory mandate. The provision of judicial review is premised on the notion that the judiciary must guard against administrative failure, not product failure.

116. United States v. General Motors Corp. (X-car brakes), No. 83-2220 (D.D.C. Apr. 14, 1987), for example, relies explicitly on products liability decisions when determining the appropriate weight to give circumstantial evidence of a vehicle defect. Slip op. at 60 n.52.

Recall also that the general lesson of the legal system—at least that part of our constitutional ideology concerned with administrative law—is that delegation of policy choice to administrators is a reluctant necessity.[117] Delegation is justified primarily by the complexity of the regulatory tasks assigned and the need for a high level of expertise. It is hardly remarkable, then, that courts, discovering agencies operating on the basis of hunches, speculations, and perceptions of political acceptability, are often convinced that these administrators have failed to execute their legitimate mandate. Fears of precisely these sorts of arbitrary and undemocratic exercises of power make delegations of administrative authority reluctant in the first instance.

Moreover, our constitutional ideology posits that keeping administrators within their delegated authority is an essential element of maintaining the rule of law, the separation of powers, and ultimately our liberal, democratic polity. Viewed from this perspective, any loss of effectiveness in substantive policy is thus but a small cost to pay in the crucial project of maintaining our constitutional structure. Here again the legal culture teaches courts to be risk averse, but risk averse about the processes of governance.

These very general institutional considerations help explain why the courts have taken rulemaking review seriously. But they do not tell us why we find courts reshaping the issue of regulatory reasonableness into an issue of process rationality, or why courts have jealously guarded rights of notice and participation. We have argued that this "proceduralized" form of judicial review is particularly debilitating from the agency's perspective. What cultural imperative has driven the courts in this direction?

In our view the demand for a rational decision process is the judiciary's response to a massive dislocation in the legal culture—Congress' demand that the courts decide general policy questions in a novel procedural context. The National Traffic and Motor Vehicle Safety Act, like most regulatory statutes adopted after 1966, permits immediate review of an agency rule, or of the withdrawal or amendment of a rule, by any party who may be adversely affected. Although superficially only a change in the usual timing of review[118] the consequences of this legislative innovation are

117. For two of many developments of this theme, see J. FREEDMAN, CRISIS AND LEGITIMACY IN THE ADMINISTRATIVE STATE (1978) (arguing that fair administrative procedure will supply legitimacy which agencies need to function efficiently); Stewart, *The Reformation of American Administrative Law*, 88 HARV. L. REV. 1667 (1975) (suggesting that current administrative process inadequately represents various interests).

118. One year after the enactment of the Federal Motor Vehicle Safety Act, the Supreme Court gave hesitant approval to the pre-enforcement review of agency regulations under the Administrative Procedure Act. But it is far from obvious that many of the lawsuits contesting NHTSA's rules would have been ripe for review without the specific statutory authorization provided by the National Traffic and Motor Vehicle Safety Act. *Compare* Abbott Laboratories v. Gardner, 387 U.S. 136 (1967) (holding pre-enforcement review of FDA drug-labelling requirements justified given substantial impact of

profound. Review in this form addresses not the particular circumstances of a rule's application, but the abstract legality of its commands. Of course, put in that way the issue is non-justiciable. The legal culture historically maintains that courts declare the law only as a byproduct of the adjudication of concrete controversies about the legal rights of particular parties.[119] Thus, in order to square the new congressional command to decide in the abstract with the conventional judicial role, courts have been required to identify a legal right that the legislature has called upon the courts to protect. What could it be?

Repairing to the Administrative Procedure Act, Judge McGowan in *Auto Parts* found that the plaintiffs' entitlement was to be free from "arbitrary" exercises of administrative power.[120] This traditional standard of judicial review caused little difficulty when applied to specific agency decisions to grant or deny a benefit or to impose a sanction. Decisions against the preponderance of the evidence or contrary to customary policies are arbitrary in the straightforward sense of "not according to law." But how should this criterion be applied to general policies embodied in rules?

The task of translation is superficially simple, but, given our legal culture, profoundly transformative. By analogy to more discrete decisionmaking, rules are arbitrary if they have no adequate factual predicate or if they violate existing legal norms, in particular the statute pursuant to which they were promulgated. So far so good; but let us now examine these two grounds of arbitrariness. First conformity with the statute. The Motor Vehicle Safety Act requires that rules "meet the need for motor vehicle safety," protect against "unreasonable risk," be "practicable" and "appropriate," and be stated in "objective" terms.[121] All the quoted terms demand policy choices, not the application of legal rules.[122] Is the court

regulations on petitioners) *with* Toilet Goods Assoc. v. Gardner, 387 U.S. 158 (1967) (holding preenforcement review of FDA inspection procedures unnecessary, since injury to petitioners speculative). As a reading of *Auto Parts* reveals, the parties to the case recognized the novelty of the issues and put a wide variety of claims before the court. Judge McGowan was particularly troubled by the fact that the plaintiffs were attempting to have the rule overturned on the basis of arguments that directly contradicted the positions that they had taken in the rulemaking proceeding itself. Characterizing the plaintiffs' position as "a soaringly expansive concept of the scope to be afforded on judicial review to a participant in a rulemaking proceeding," and noting that the court found it "hard to take the petitioners seriously on this score" the court nevertheless addressed the issues. 407 F.2d at 342. While unhappy with the plaintiffs' "effort to analogize themselves to private attorneys general with unlimited right to expose all dangers to the public interest," the court seemed to believe that the judicial review provisions of the National Traffic and Motor Vehicle Safety Act demanded a judicial answer on the merits. *Id.*

119. *See* Marbury v. Madison, 5 U.S. 137, 177 (1803) ("It is emphatically the province and duty of the judicial department to say what the law is. Those who apply the rule to particular cases, must of necessity expound and interpret the rule . . .").

120. *Auto Parts*, 407 F.2d at 330.

121. 15 U.S.C. §§ 1391(1)-1391(2) (1982).

122. The Supreme Court has recognized that statutory interpretation, in the absence of a clear

really to judge these questions? And, if so, how can it judge without appearing merely to be substituting its policy preferences for those of the Agency, a role that our legal culture views as illegitimate?

The conventional lawyerly moves for separating law and policy, or for camouflaging their inseparability, are unavailable to the courts in this context. Claims that the court is addressing these broad issues as a necessary aspect of narrowly-focused claims of right, or that these interpretive issues have legal histories which constrain the judicial role, are simply preposterous. To take the latter claim first, not only are the questions novel, the norms put at issue are also designed precisely to confer policy discretion on the administrator. The facts similarly belie the former claim. The parties look more like legislative claimants than ordinary litigants. They often are tangentially affected business interests,[123] or ideological champions of the left[124] or right.[125] Even the directly affected manufacturers may be litigating for strategic competitive advantage rather than to protect any conventional form of narrowly-focused property interest.[126] And, no matter who is litigating, the judgment will bind everyone. The litigants' "rights" and the "rights" of the public are indistinguishable. No amount of scholarly celebration of this so-called "public law" litigation[127] is likely to eliminate judicial anxiety in the face of a task that calls for repeated, transparent, and general policy choice.[128] The task must be

indication of congressional intent, can involve choices of policy inappropriate for the legal branch. Chevron, U.S.A. v. Natural Resources Defense Council, 467 U.S. 837 (1984) (refusing to overturn EPA's definition of a "stationary source" under the Clean Air Act Amendments of 1977). In formulating the doctrine of deference to an agency's interpretation of its own statute, the court explained that:

> When a challenge to an agency construction of a statutory provision, fairly conceptualized, really centers on the wisdom of the agency's policy, rather than whether it is a reasonable choice within a gap left open by Congress, the challenge must fail. . . . The responsibility for assessing the wisdom of such policy choices and resolving the struggle between competing views of the public interest are not judicial ones: "Our Constitution vests such responsibilities in the political branches."

Id. at 866 (citation omitted). *See also* Starr, *Judicial Review in the Post-*Chevron *Era*, 4 YALE J. ON REG. 283, 309 (1986) (commending *Chevron* court for forbidding federal courts from assuming oversight function with regard to administrative agencies).

123. *Auto Parts*; Motor Vehicle Mfrs. Ass'n. v. State Farm Mutual Auto. Ins. Co., 463 U.S. 29 (1983).

124. *See, e.g.*, Public Citizen v. Steed, 733 F.2d 93 (D.C. Cir. 1984).

125. *See, e.g.*, Pacific Legal Found. v. Department of Transp., 593 F.2d 1338 (D.C. Cir. 1979).

126. Thus, for example, the *Chrysler* litigation to overturn the initial passive restraints rule includes as plaintiffs all the major automobile manufacturers except General Motors, who was well ahead of its competitors in airbag development.

127. *See, e.g.*, Fiss, *Foreword: The Forms of Justice*, 93 HARV. L. REV. 1 (1979); Chayes, *The Role of the Judge in Public Law Litigation*, 89 HARV. L. REV. 1281 (1976).

128. Critics of such efforts are quick to point out the errors of the courts' ways. *See, e.g.*, D. HOROWITZ, THE COURTS AND SOCIAL POLICY (1977); Glazer, *Should Judges Administer Social Services?*, 50 PUB. INTEREST 64 (1978).

redefined to integrate it with a more modest conception of judicial competence.

From this strategic perspective the other, "evidentiary" interpretation of arbitrariness has much to recommend it. But here again the courts encounter an awkward gap between their traditional reviewing functions and the pre-enforcement review of rules. There are no obvious boundaries on the rulemaking record, no accepted standards of "proof" for policy judgments, and no procedural vehicles that define the "issues" in a rulemaking proceeding. As Judge McGowan noted in *Auto Parts*, the agency is engaged essentially in legislative activity, which in our legal system may operate on the basis of any evidence that a majority is willing to credit or even on no evidence at all.

Notwithstanding these obvious difficulties, evidentiary policing threatens the cultural image of a court much less than outright policy revision. Hence from *Auto Parts* forward courts have experimented with a series of techniques designed to sharpen issues, reveal factual assumptions, and, thereby, shape a record within which judicial review for factual adequacy makes sense. This story of procedural innovation has been told elsewhere,[129] and we need not rehearse it in detail here. Our point is merely that the need to integrate a novel judicial role into the accepted legal culture helps explain the use of the particular techniques that we have witnessed in the review of NHTSA's rules.

Auto Parts creatively transformed the requirement of a "concise statement of basis and purpose" into a demand for the presentation of a rule's factual predicate and an explanation of why a particular policy choice was made. These materials constituted a "record" from which the court could judge means-ends rationality and, thereby, police for arbitrariness in its traditional forms: the inadequacy of the record[130] and inconsistent[131] or incoherent[132] decisionmaking. Of course, the agency's presentation of factual material might be incomplete. Thus the record had to be expanded to include submissions of outsiders and the agency's responses to those submissions.[133] Moreover, as the record grew in importance so did meaningful opportunities to participate in its formulation through adequate notice.[134]

129. *See, e.g.*, DeLong, *Informal Rulemaking and the Integration of Law and Policy*, 65 VA. L. REV. 257 (1979) (examining criticisms of informal and "hybrid" rulemaking and suggesting alternative approaches for judicial review).

130. *PACCAR*; National Tire Dealers & Retreaders Ass'n. v. Brinegar, 491 F.2d 31 (D.C. Cir. 1974).

131. Public Citizen v. Steed, 733 F.2d 93 (D.C. Cir. 1984).

132. *State Farm*, 463 U.S. at 29.

133. *Tire Retreaders*, 491 F.2d at 31; *PACCAR*, 573 F.2d at 632.

134. Wagner Elec. Corp. v. Volpe, 466 F.2d 1013 (3d Cir. 1972).

This proceduralized form of judicial review necessarily transforms the image of rulemaking from a legislative-political endeavor into an analytic-policymaking enterprise.[135] The judicial role is no longer to remake political choices, but instead to examine agency reasons and agency choices in the light of an appropriate factual record. This is, then, but a familiar role in a new context. As the conventional reviewing court remands for new trial upon the discovery of essential evidentiary gaps in the trial court record, so the court reviewing administrative rules remands to the agency for reconsideration when the record seems inadequate to support the agency's choice. If this approach strongly reinforces the opposition tactic we have called the "full court press," and severely burdens and delays the rulemaking process, that is perhaps unfortunate. But it is surely consistent with an adversary legal culture whose libertarian values have always advantaged defendants and the status quo.[136]

The translation of legislative-political questions into analytic-policymaking issues through proceduralized judicial review, of course, never really fools the sophisticated regulatory players. Judicial review for process regularity was the opposition technique of "conservatives" confronting the New Deal, and is currently the major bulwark of "liberals" confronting the Reagan Administration's desire to deregulate.[137] Notwithstanding proceduralism's penchant for the status quo, such political shifts in some sense signal the legal culture's success in its aspiration to political neutrality. Judicial review in a proceduralist form, like lead ballast, tends to stabilize the ship of state whether the political winds blow from the left or the right.

B. *Assessing the "Legal Culture" Explanation*

These speculations about the bases for judicial behavior in review and enforcement proceedings are, of course, quite general. If accurate, they should predict the patterns of judicial activity and agency response in other regulatory domains as well. Do we find similar bi-polar patterns of intervention and deference in the jurisprudence surrounding other federal agencies with public health or safety missions and analogous regulatory and enforcement powers? What has been the experience at the Food and

135. *See generally* Diver, *Policymaking Paradigms in Administrative Law*, 95 HARV. L. REV. 393 (1981) (arguing that incremental decisionmaking should be the norm except where irreparable harm will ensue).

136. *See generally* Galanter, *Why the 'Haves' Come Out Ahead: Speculations on the Limits of Legal Change*, 9 L. & SOC'Y REV. 95 (1974) (arguing that nature of legal system limits possibility of redistribution).

137. *See, e.g.*, Shapiro, *APA: Past, Present and Future*, 72 VA. L. REV. 447 (1986) (arguing that courts' demand of synoptic rationality in administrative decisionmaking reflects judicial preference for status quo).

Drug Administration (FDA), the Consumer Product Safety Commission (CPSC), the Occupational Safety and Health Administration (OSHA), the Federal Aviation Administration (FAA), the Environmental Protection Agency (EPA), and the Nuclear Regulatory Commission (NRC)? Has judicial review there derailed rulemaking while facilitating a case by case approach?

Answering these questions definitively is beyond the scope of this paper. No one has studied any of the potentially comparable agencies with an eye to addressing this issue systematically. The jurisprudence with respect to each agency is substantial. More importantly, most of these agencies have statutory missions, regulatory powers, institutional structures, and substantive criteria for regulatory action that produce important non-comparabilities.

Shep Melnick's important study of judicial review of EPA air quality regulation,[138] for example, finds quite serious problems with judicial review of environmental policymaking. These problems of incapacitation through inattention to dynamic or systemic effects and technological naivete are surely reminiscent of judicial review of NHTSA's rulemaking. But in scope, legal form, and institutional context, EPA air quality regulation is strikingly different from NHTSA's regulation of automobile safety. An air quality "standard" is more like a national goal than a rule of conduct.[139] Courts do not encounter specific equipment requirements and lead times for compliance—legal commands comparable to federal motor vehicle safety standards—until the enforcement stage. It is there, in enforcement litigation, that "reasonableness" issues relating to state (but often EPA-inspired) implementation plans and state or federal demands on particular firms are usually "reviewed". For these and a host of other reasons, direct comparison of EPA rulemaking and enforcement review under the Clean Air Act with NHTSA's history pursuant to the Motor Vehicle Safety Act would be quite misleading.

Other pervasive non-comparabilities beset analysis of the FAA, NRC, FDA, and OSHA experiences. Alone among health and safety regulators, the goals, regulatory presuppositions, and behavior of the CPSC hold out tantalizing prospects for close comparisons of judicial review in that context with judicial review of NHTSA. Like NHTSA, the CPSC is a consumer product safety agency whose mandate was fashioned with close attention to product safety as a public health issue. Like NHTSA, it was launched with a primary emphasis on the preventive power of regulatory standardization and technology-forcing. Like NHTSA, the CPSC's

138. S. MELNICK, REGULATION AND THE COURTS (1983).
139. *Id.* at 44-49.

rulemaking power has atrophied while its primary regulatory activity has become product recalls.

Moreover, the box score for judicial review of rulemaking in the CPSC context indicates that this Agency's rules and rulemaking processes have received a spectacularly "hard look" from the judiciary. The Agency has lost, in whole or in part, every reported case raising a rulemaking issue.[140] The CPSC's judicial support in recall proceedings is, if possible, even more striking than NHTSA's. Manufacturers seem from the beginning to have been so certain of defeat should they oppose a recall request that none has ever gone to court.

Closer analysis reveals, however, that these parallels are not nearly so compelling as the simple recounting of wins, losses, and forfeits might suggest. Review of CPSC product standards, rules similar in structure and purpose to NHTSA's motor vehicle safety standards, has occurred but twice.[141] While these cases established quite demanding standards of factual justification and comprehensive consideration for CPSC standard setting, two cases do not provide overwhelming support for a conclusion that the judicial attitude toward CPSC rulemaking is the exact analog of the judicial approach to NHTSA's standards.

Nevertheless, the CPSC's ubiquitous excuse for its extremely modest rulemaking output, and its sometimes bizarre safety priorities, certainly resembles NHTSA's. Central to the CPSC's version of its regulatory collapse is Section 10[142] of its original Act. Section 10 permitted any person to petition the CPSC for the promulgation of a product standard. More importantly, unlike almost any other regulatory statute, Section 10 backed these petitions by provision for judicial review of a CPSC denial.[143] As petitions flooded in from consumers, competitors, state and local agencies, or whomever, the CPSC felt obliged to develop a record with respect to each that would withstand judicial review. This evidentiary burden gobbled up most of the Agency's standard-setting resources and, in effect, put it out of the rulemaking business.[144] Congress was convinced sufficiently

140. Aqua Slide-In Dive Corp. v. Consumer Prod. Safety Comm'n, 569 F.2d 831 (5th Cir. 1978) (voiding safety standard for swimming pools as unsupported by evidence); Dow Chemical, USA v. Consumer Prod. Safety Comm'n, 459 F. Supp. 378 (W.D. La. 1978) (challenge to interim regulation for suspected carcinogens sustained); ASG Industries, Inc. v. Consumer Prod. Safety Comm'n, 593 F.2d 1323 (D.C. Cir. 1979) (safety standard for wired glass suspended, remanded to agency for further development of record).

141. *Aqua Slide-In*, 569 F.2d at 831; *ASG Industries, Inc.*, 593 F.2d at 1323.

142. 15 U.S.C. § 2059 (1976).

143. 15 U.S.C. § 2059(e) (1976).

144. *Federal Regulation and Regulatory Reform: Hearings Before the House Subcomm. on Oversight and Investigations of the Comm. on Interstate and Foreign Commerce*, 94th Cong., 2d Sess. 195-96 (1976).

by this story to amend the statute in 1981.[145] Yet, repeal of Section 10's judicial review provision did not re-energize CPSC rulemaking. The reasons for inaction in the 1980's are obscure. Perhaps the institutional die had been irretrievably cast. The 1980's have certainly not been politically hospitable to reforms that would awaken dormant regulatory powers at the CPSC.

While the rulemaking review story at the CPSC looks something like NHTSA's, closer attention to the CPSC's recall experience suggests that the predicted judicial attitude to enforcement by the CPSC of a recall order is probably irrelevant to the agency's behavior.[146] Recalls at the CPSC are shaped by other strategic considerations. They seldom occur except on the basis of manufacturers' own reports that products may be defective. An agreement concerning the nature and extent of the recall is then worked out in the shadow of two concerns: the manufacturer's need to avoid a stream of damage actions and bad publicity, and the CPSC's desire to avoid the formal hearings required by its statute should no agreement be reached.[147] The resource demands of the formal hearings requirement substantially lessen the CPSC's leverage, however generous the courts might be in reviewing an eventual, contested, recall order.[148]

Conclusion

The specific contribution of judicial review to the decline of consumer health and safety rulemaking, whether at NHTSA or elsewhere, is difficult to establish with any precision. As we noted at the outset, whether we have looked at Congress, the Executive Branch, the press, or inside NHTSA, virtually every aspect of the Agency's environment seems to have at least facilitated the shift from rules to recalls. But surely we must credit to some degree the statements of regulatory participants that the negative impact of judicial review has been substantial. The retreat from regulation in the 1980's may be massively overdetermined by political and

145. Consumer Product Safety Amendments of 1981, Pub. L. No. 97-35, § 1210, 95 Stat. 703 (1981) (repealing 15 U.S.C. § 2059 (1976)). For a description of the Commission's informal compliance system see Merrill, *CPSC Regulation of Cancer Risks and Consumer Products: 1972-1981*, 67 VA. L. REV. 1261, 1296-1310 (1981).

146. Merrill, *supra* note 145, at 1283 n.116.

147. 15 U.S.C. § 2064(f) (1982).

148. Moreover, it is not obvious that the courts would be as generous to the CPSC in enforcement proceedings as they have been to NHTSA. The CPSC lost the only seizure case that it pressed to decision and since then has settled all other seizure proceedings. Consumer Prod. Safety Comm'n v. Anaconda Co., 593 F.2d 1314 (D.C. Cir. 1979) (denying seizure on the ground that allegedly defective electrical wiring not a "consumer product"). But here, unlike in rulemaking, judicial reluctance to support the Agency may have modest practical effects. No product proceeded against as an imminent hazard has remained on the market. Presumably some combination of consumer aversion, liability fears, and loss of goodwill adds force to the CPSC's modest legal leverage.

economic factors, but NHTSA's, as well as the CPSC's, experience predates the Reagan Administration. Indeed, the major events in the NHTSA story were complete as of 1975. And the retreat from regulation as standard-setting does not include a corresponding retreat from recalls, the judicially-favored regulatory mechanism.

In the NHTSA context, and perhaps elsewhere, it is very hard to explain this judicial posture as oriented toward maximizing the benefits and minimizing the costs of vehicle safety regulation, at least as measured in public health terms. The most authoritative studies indicate that vehicle failures are the probable cause of only thirteen percent of accidents, and most of these failures are attributable to poor owner maintenance.[149] Therefore recalls can, at best, be operating on but a small fraction of the vehicle safety problem. Because returns for repair range from only forty to sixty percent,[150] recalls could be preventing only seven percent of accidents if every recalled vehicle were defective, every defect sure to cause an accident, and every repair faultless.

The surely negligible effect of recalls on vehicle safety is underscored by NHTSA's steadfast failure to study the question. Since some vehicles are repaired and some not, while all have subsequent accident histories, the Agency has a perfect environment for studying the safety effects of recalls. Yet to our knowledge, no portion of NHTSA's research budget has ever been allocated to discovering the safety effects of recalls. We do not argue that it should be. The effects are surely negligible, as systematic study of the similarly oriented state vehicle inspection programs suggests.[151] By contrast the best, although very imperfect, studies of the effects of NHTSA's modest standard-setting suggest an overall improvement in vehicle safety of around thirty percent.[152] That is on the order of twenty thousand lives and one hundred thousand serious injuries per year.

From this public health perspective, judicial review is obviously backing the wrong horse. But, of course, the courts are not in the business of judging the social desirability of regulatory activity, the "reasonableness" criterion for substantive review notwithstanding. They are judging, ostensibly, whether there has been compliance with the law.

We believe the courts' actual behavior accords with their ostensible role.

149. INSTITUTE FOR RESEARCH IN PUBLIC SAFETY, TRI-LEVEL STUDY OF THE CAUSES OF ACCIDENTS 7-9, 18-23 (1979) (study prepared by private consulting group for NHTSA).

150. Data on the recall completion rate for the period 1966 to 1981 were provided by NHTSA officials. *See also* Tobin, *supra* note 21, at 293-94 (suggesting that approximately 40% of recalled vehicles never repaired); GENERAL ACCOUNTING OFFICE, THE AUTO SAFETY PROBLEM: IDENTIFYING DEFECTS AND RECALLING DEFECTIVE VEHICLES 5-6 (1975) (reporting recall response rates from 34% to 60%).

151. W. CRAIN, VEHICLE SAFETY INSPECTION SYSTEMS: HOW EFFECTIVE? (1980).

152. REGULATING THE AUTOMOBILE, *supra* note 9, at 55, 69.

When the legal culture accepted federal and state regulation in the 1930's, it accepted regulation substantially different in kind from that practiced by NHTSA. It accepted specific legislative rearrangement of entitlements and the creation of administrative adjudicatory bodies to determine the reasonableness of commercial conduct.[153] The courts' acquiescence in the legislative redistribution was the acceptance of the logic of democratic governance; the allowance of agency adjudication was the recognition that adjudicatory due process could exist in nonjudicial institutions. Large-scale rearrangement of entitlements by general rules, promulgated by appointive agencies having vague mandates, was not necessarily a part of the New Deal's realignment of legal icons. Such actions are supported by neither the ideology of democracy nor the ideology of adjudicatory justice.

To be sure, the "expertise" of administrators was much touted by Progressives and featured in many deferential judicial opinions. But so long as the process of decision remained adjudicatory, "fairness," at least "due process," supported the agency's exercise of power.[154] As agencies moved into rulemaking or standard-setting in a pure form, this prop of adjudicatory legitimacy was lost. Attempts to reconstitute it by thoroughly judicializing the rulemaking process have failed,[155] and, if successful, would probably have destroyed the very rulemaking capacity that they sought to legitimate.[156] Expertise was left to stand alone.

Although we have argued that "rational process" review evolved in response to the judiciary's need to maintain its own legitimacy by operating in accordance with generally accepted norms, we might as easily have argued that, in the traditional common law fashion, the courts have borrowed their standards of expertise from the agencies' aspirations. If the legitimacy of agency edicts were to be premised on their application of systematic technical intelligence to the problems in their charge, then courts would do their best to see whether the agencies behaved in an ex-

153. *See generally* Rabin, *Federal Regulation in Historical Perspective*, 38 STAN. L. REV. 1189, 1259-61 (1986) (discussing Supreme Court's abrupt "reversal of opinion" on constitutionality of administrative agencies in 1937).

154. A.L.A. Schechter Poultry Corp. v. United States, 295 U.S. 495 (1935), one of the two cases invalidating New Deal legislation on grounds that it contained an improper delegation of legislative authority to an administrator, makes this distinction explicit. The Supreme Court distinguished the Federal Trade Commission mandate—to police for "unfair competition"—from the President's power under Section 3 of the National Industrial Recovery Act to approve industry codes of "fair competition," on the ground that the FTC's activities had to be carried out through formal adjudication. 295 U.S. at 533.

155. Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, 435 U.S. 519 (1978).

156. For extensive discussion see Gifford, *Administrative Rulemaking and Judicial Review: Some Conceptual Models*, 65 MINN. L. REV. 63 (1980); Scalia, *Vermont Yankee: The A.P.A., the D.C. Circuit, and The Supreme Court*, 1978 SUP. CT. REV. 345 (1979); Stewart, *Vermont Yankee and the Evolution of Administrative Procedure*, 91 HARV. L. REV. 1805 (1978).

pert fashion. Only then could it be said that they were operating according to law.

This process has striking parallels to the development of products liability law. Faced with new technologies and forms of business organization which generated both new risks and new forms of social and economic organization, courts responded by imposing strict liability on manufacturers of defective products. This imposition was thought to be both distributively just in a risk-spreading sense, and also just from the internal standpoint of the new forms of enterprise that had emerged. The systematic elimination of errors or defects, including errors or defects that increase injury, is after all the highest aspiration of a technical-bureaucratic mode of production. The law based liability on the manufacturers' own implicit values, notwithstanding the recognition that action in accordance with those values could never be completely assured.

Commentators have criticized the courts for transposing this aspirational standard to judicial review; for succumbing to the intellectual appeal of comprehensive or synoptic rationality as a legitimating paradigm for administrative regulation.[157] They have urged that courts recognize the impossibility of such a decision process and the necessity of "muddling through" as a dynamic decisional technique where events unfold in real time, under uncertainty and in the face of resource constraints. But these arguments are radically incomplete.

They are incomplete first because the judicary has not required systematically that agencies, including NHTSA, make bulletproof decisions. The bureaucratic aspiration to comprehensive rationality is tempered both in doctrinal announcement and in practice by an appreciation of reality.[158] The courts seem to be searching instead for an "agency standard" somewhat analogous to the "industry standard" in products liability cases: A product or a rule will be defective only if it fails to meet the expectations engendered by good agency practice. As Judge McGowan's formulation of the standard of review in *Auto Parts* indicates, courts are looking for action that limits the dangers of irrationality, not for rational perfection.

We have argued here that even this more modest standard of judicial review is potentially disabling. It invites overcorrection within the bureaucracy to eliminate the inevitable legal uncertainty that arises from the courts' promise to judge reasonableness reasonably. Unless there are powerful forces driving agency risk-taking, paralysis will result.

157. *See, e.g.*, Diver, *supra* note 135, at 434; *see also* Rodgers, *Judicial Review of Risk Assessments: The Role of Decision Theory in Unscrambling the Benzene Decision*, 11 ENVTL. L. 301 (1981).

158. See the discussion in Gifford, *Rulemaking and Rulemaking Review: Struggling Toward a New Paradigm*, 32 ADMIN. L. REV. 577, 598-603 (1980).

The argument for judicial modesty is also incomplete because it fails to articulate a normative standard for "acceptable muddling through" that has reasonably predictable consequences. This failure is not surprising. The "muddling through" idea is a descriptive heuristic. Transformed into a normative concept it is itself a muddle. Every final decision has a history. Within that history concrete choices are always explicable. If we know enough about the concrete events, "It seemed like a good idea at the time," is almost always plausible. If that were good "muddling," judicial review would police only for bad faith or fraud.

Perhaps that is what the critics have in mind. Such a reduction in the judicial presence in regulatory affairs, however, has demonstrably not been sanctioned by the political process. Judged by the specific statutory provisions for judicial review that Congress adopts, and by the proposals it debates for general reform of judicial review of administrative action, there is no substantial constituency out there for reduction or elimination of judical review. Eclectic, uninformed and disabling as it may be, Congress, and perhaps the electorate, seem to want the legal culture, as interpreted and applied by reviewing courts and the private and public actors who look to them for guidance, to form a part of the regulatory environment.

Our study of vehicle safety regulation reveals that this preference or instinct is deeply conservative. The revolutionary reconceptualization of regulatory technique and of the vehicle safety problem represented by the 1966 Motor Vehicle Safety Act has failed to produce the major public health advances that were predicted. The core of the revolutionary enterprise—standard-setting to force technological advances in vehicle safety—has been abandoned. One, and we reemphasize only one, of the factors influencing that outcome has undoubtedly been NHTSA's experience in court.