I. A Comparative Study Of U.S. Environmental Regulation ............................................................................................................... 718
III. Governmental Structure And Legalistic Regulation ...... 722
   A. Varieties of Federalism ......................................................... 722
   B. How Fragmentation of Authority Affects American Law ........................................................................................................ 724
   C. How Decentralized Governance Affects American Law ........................................................................................................ 727
II. Some Implications For Change .................................................. 729

I.

A COMPARATIVE STUDY OF U.S. ENVIRONMENTAL REGULATION.

For the past several years, I have been directing a research program that compares American environmental regulation (as well as other fields of regulatory law) with comparable programs in other economically advanced democracies. The research strategy has been to conduct detailed case studies, each involving a multinational corporation that runs parallel business operations in the U.S. and in Europe, Canada or Japan. Each company that we studied interacts repeatedly with regulatory regimes governing the same technologies and environmental regulatory issues in the U.S. and in at least one other country. Thus each company serves as an observation post for viewing the legal requirements and characteristic regulatory implementation
styles of the different national regimes, for assessing the extent of cross-national differences in regulation, and most uniquely, for close examination of the actual consequences of those differences.

One case study involves a multinational firm that manufactures small metal parts in the U.S. and Japan and focuses on that company's comparative experience with the Japanese and American laws and agencies that regulate the collection and disposal of solvents and other industrial wastes. A second study is about a manufacturer of electronic parts and the regulation of its industrial effluent by California and Japanese water pollution control authorities. A third study concerns a multinational designer and operator of disposal facilities for municipal solid wastes. The researchers compared this company's experience in attempting to obtain permits from environmental and land use regulatory authorities in California, Pennsylvania, England, and The Netherlands. A fourth company studied is a chemical manufacturer which discovered chemical contamination (caused by leaking underground storage tanks or waste system pipes) on its manufacturing sites in two American states, Great Britain, and The Netherlands. The research compared governmental regulation of the company's investigation and remediation efforts in the U.S. with the same process in the U.K. and Holland. A fifth study focuses on a major motor vehicle manufacturer and its experience in attempting to obtain an air pollution permit in connection with expansion of production or the use of new paints at its plants in Minnesota, New Jersey, and two sites in Germany.

This is not the place to present the findings of this research


2. See Kazamasu Aoki et al., Industrial Effluent Control in the United States and Japan, in REGULATORY ENCOUNTERS, supra note 1.


4. See Lee Axelrad, Investigation and Remediation of Contaminated Manufacturing Sites in the United States, the United Kingdom, and Netherlands, in REGULATORY ENCOUNTERS, supra note 1.

in detail. But at the risk of some oversimplification, the results can be summarized briefly. Notwithstanding much-publicized EPA initiatives to make environmental regulation less legalistic, the case studies found that for regulated companies with cross-national experience American environmental regulatory processes are more detailed, prescriptive, complex, unpredictable, and costly to comply with than are comparable regulatory regimes in other economically advanced democracies. American regulatory regimes are experienced as quicker to impose legal penalties for violations, and their legal sanctions tend to be much more severe. These "procedural" differences, moreover, generally are far more salient to the regulated companies than differences in substantive regulatory norms, which usually differed, if at all, only slightly. Hence the companies' actual regulatory compliance, abatement, or mitigation measures in their American facilities, as best as we could tell, did not differ significantly from the measures taken in their Japanese, British, Dutch, or German facilities. The municipal waste corporation, for example, used similar liners in the facilities constructed in Europe and the U.S. The motor vehicle manufacturers employed the same innovative pollution control technology in its paint shops in Germany and the U.S. The higher costs imposed by the U.S. regulatory regimes fell


9. See Aoki & Cioffi, supra note 1 (manuscript at 2:37-38); Aoki et al. supra note 2 (manuscript at 3:20); Lori Johnson, et al., New Chemical Notification Laws in Japan, The United States, and The European Union, in REGULATORY ENCOUNTERS, supra note 1 (manuscript at 8:7).

10. See Kagan, Conclusion, supra note 8 (manuscript at 12:11).

11. In some of the case studies, it was difficult for the researchers to obtain independent verification of the equivalence of the environmental control measures that the multinational company took in each country. On the other hand, the researchers were able to obtain detailed verbal descriptions of the measures taken by technical-level company officials with experience in both countries and who appeared to have little incentive to dissemble in this regard.

12. See Kagan, Conclusion, supra note 8 (manuscript at 12:40-44); Aoki & Cioffi, supra note 1 (manuscript at 2:31-32); Aoki et al., supra note 2 (manuscript at 3:3-7).

13. See Welles & Engel, supra note 3 (manuscript at 9:56-57).

14. See Dwyer et al. supra note 5 (manuscript at 11:55).
into at least three categories. First, in the U.S. there were much higher expenditures on lawyers, who are needed in the U.S., but rarely in the other countries studied, to help environmental managers figure out often uncertain and changing legal requirements. The greater perceived need to consult lawyers reflects the commonly held notion that a mistake in the U.S. can so easily result in a large fine. Lawyers also were needed more in the U.S. to deal with legal controversies or appeals. Second, the U.S. regulatory regime evoked significantly higher expenditures on "accountability" measures such as studies, reports, and certifications designed to prove that the company was meeting environmental standards. Documentation accompanying American permits, applications, environmental analyses, etc. was invariably many times as lengthy as required in parallel procedures abroad. Finally, the U.S. system was characterized by significantly higher opportunity costs, stemming from longer delays in obtaining legally required permits.

Compared to their counterparts abroad, the American regulatory regimes studied provided stronger rights of public participation, broader access to information concerning regulatory compliance, and easier access to the courts. In some case studies, citizen-group lawsuits in the U.S. compelled the regulated company to pay for mitigation measures that went beyond those that regulatory officials had demanded.

On the other hand, in some cases American adversarial legalism seemed to diminish environmental protection in the company's U.S. operation. It took the chemical company with contaminated manufacturing sites six months to a year longer to negotiate the regulatory maze created by the Resource Conservation and Recovery Act (RCRA) than it took to gain regulatory approval of its remediation plan in the U.K. and the Netherlands. As a result, the company commenced the actual cleanup much more quickly in those countries. The waste disposal company that we studied took 12 years (including three lawsuits) to gain final regulatory approval for a local landfill facility in California, compared to five and eight years in The Netherlands and England respectively, even though there was intense opposition from neighbors and at least one appeal was in-
Consequently, Californians had to wait longer for a state-of-the-art, well-lined disposal facility. The U.S. subsidiaries of the Japanese metal manufacturer and electronics parts manufacturer we studied had made less progress than their counterparts in Japan in institutionalizing environmental management and waste reduction plans, such as those specified in ISO 14000 standards. The study found that the environmental managers in the companies' American factories, who were coping with a more legally uncertain and potentially punitive pollution control regime, had adopted a more defensive stance—simply trying to "stay out of legal trouble." More generally, the troublesome finding is that managers in regulated multinational enterprises regard American methods of regulation as more unreasonable, threatening, and wasteful, which tends to undermine incentives for the kind of business-government cooperation so essential to effective environmental regulation.

II. GOVERNMENTAL STRUCTURE AND LEGALISTIC REGULATION

How can we explain these persistent cross-national differences in regulatory methods and consequences? The answer, I suggest, has a good deal to do with national differences in governmental structure and in how regulatory responsibility is allocated among levels of government. The features of American environmental regulation highlighted by these case studies—its far greater detail, complexity, punitiveness, legal unpredictability, and transaction costs—arise from distinctive characteristics of the American brand of federalism.

A. Varieties of Federalism

Federalism, in and of itself, is not the key structural variable. In all economically advanced democracies, environmental regulation involves some division of function between central and local governments. In a comparative study of federal governments and environmental regulation—including Canada, Australia, Germany, the EU, and the U.S.—Daniel Kelemen observes a trend toward environmental policymaking by the central government, while the bulk of policy implementation is left with

20. See Welles & Engel, supra note 3 (manuscript at 9:30, 39, 45).
21. See Aoki & Cioffi, supra note 1 (manuscript at 2:31-35); Aoki et al., supra note 2 (manuscript at 3:25-27).
22. See id. at 3:27, n.54.
23. See Kagan, Conclusion, supra note 8 (manuscript at 12:36-39).
subnational governments. This pattern, he notes, follows a political logic. Environmental organizations push for the establishment of nationwide norms because they can lobby one central government more efficiently than many subnational ones. Politicians and regulated businesses in states with stricter environmental laws often want the central government to compel lax-regulation states to meet the same standards. And central government political leaders often can gain political support for taking a stand in favor of environmental protection. At the same time, central governments often are much less eager to expand massively the national environmental bureaucracy and to shoulder fully the costly, difficult, and often opposition-provoking task of enforcing those laws.

Even in governmental systems not thought of as federal in structure, such as Japan, this pattern recurs: the national government promulgates broad pollution control laws, but enforcement is delegated to provincial and municipal governments. In the U.K. and The Netherlands, the implementation of national land use planning statutes is delegated to counties and provinces. Although the national government in such countries may provide the bulk of the financing for the sub-national units, it seems that there is a recurrent sense that in terms of policy implementation, it is desirable to vest discretion in local governmental units because they are better situated to adjust national environmental standards to local contexts and economic concerns.

The United States, of course, fits this pattern in general. But American federalism has several distinctive structural and procedural characteristics when viewed in comparison to most other economically advanced democracies. First, in the U.S., political authority at the national level of government is unusually fragmented, due to both separation of powers, rather than parliamentary government, and to less cohesive, more locally-oriented political parties. Second, in the U.S., traditions of local government political leaders often can gain political support for taking a stand in favor of environmental protection. At the same time, central governments often are much less eager to expand massively the national environmental bureaucracy and to shoulder fully the costly, difficult, and often opposition-provoking task of enforcing those laws.

25. Id. at 18-20.
26. See Aoki and Cioffi, supra note 1 (manuscript at 2:23); Aoki et al., supra note 2 (manuscript at 3:10).
governance are particularly strong. Even in the environmental era, land use, waste disposal, water supply, and the like have primarily been the province of locally-elected, locally-financed municipal or, for unincorporated areas, county governments. State governments have retained a large measure of responsibility for environmental regulation and for implementation of national pollution control laws. At the same time, the U.S. central government has been comparatively more aggressive in using national laws, administrative agencies, and courts to supervise local and state governments' regulatory actions. In consequence, the U.S. has also seen much higher levels of litigation to check and challenge state and local regulatory decisions.

These distinctive modes of fragmenting and checking governmental authority help explain the characteristics of American environmental regulation noted in the previously mentioned comparative studies: its legal requirements are more detailed, complex, malleable, and indeterminate, and permitting processes are more protracted due to the possibility or actuality of litigation.

**B. How Fragmentation of Authority Affects American Law**

Consider first the effects of separation of powers and non-cohesive political parties. In parliamentary systems, policy-making is dominated by the party or coalition of parties in power. Both the judiciary and the national bureaucracy tend to be deferential and responsive to the current government. Policy development tends to be rather deliberate, formulated by experts in the relevant ministries after elaborate consultations with affected interests.

By contrast, in the U.S. policy-making power at the national level of government is divided among the Executive and a variety of House and Senate Committees. Congressional committees often have been dominated by a political party other than the President's. Even if not, in a system of non-cohesive parties, the relevant legislative committee chairs often have policy views or commitments that differ substantially from those of the President and his appointees who head environmental agencies. In

29. See Kelemen, supra note 24, at 91-95.
such a fragmented system, interest groups and advocacy groups involved in the policy process enjoy many points of political influence. The policy-making process involves a perpetual jockeying for influence. The passage of each piece of legislation involves the laborious assembly of ad hoc legislative coalitions, which often require concessions to representatives who favor different constituencies and values. Administrative regulations frequently are challenged in court, which in turn encourages agencies to include provisions that will satisfy potential legal adversaries.

In parliamentary systems with cohesive political parties, environmental statutes tend to grant broad discretion to administrative bureaucracies, which in turn often rely on informal guidance in adjusting policy to particular problems and contexts. At least until the next election, the government in power enjoys unchallenged power over environmental administrators and courts, and can quickly amend the law to reverse administrative or judicial decisions that displease it. But in the U.S., where power is fragmented, administrators are caught between the expectations of many masters. Efforts to revise laws and regulations and judicial decisions face many obstacles. Therefore each interest group—such as environmental organizations or industry associations—strives to "lock in" hard-won policy victories in the form of highly specific statutory language. Specific statutory language improves an interest group's ability to enforce those policies in court if executive branch officials, either presently or in a future administration, are "captured" by the group's ideological adversaries and start to move in a different policy direction.31

For example, the first great wave of federal environmental legislation enacted in the late 1960s and early 1970s reflected the fears of environmental advocacy groups and their Congressional allies that federal agencies, headed by President Nixon's Republican appointees, would undermine the ambitious pollution control standards of the newly enacted laws.32 Hence the environmentalists successfully fought for statutes that were enormously detailed, constraining administrative discretion. In contrast to the environmental laws of most other countries, the core statutes of American environmental regulation specified

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pollution reduction standards, established deadlines for administrative implementation, and created rights for "private attorneys general" to use the courts to prod potentially recalcitrant administrators to adhere to the statutory requirements. Business interests, in turn, learned to lobby the porous law-making system to obtain specific statutory exemptions and analytic requirements that enabled regulated entities and their trade associations to challenge regulations in court.

The extreme fragmentation of influence in the U.S. Congress also encourages individual Members to fight for special exceptions to general environmental laws and procedures in order to favor particular developmental projects or industries in the Member's home district. Thus the body of environmental legislation has steadily become even more lengthy and detailed, but also more malleable and confusing, riddled with contradictory concessions to environmental interests in one section and to regulated interests in another.

Similarly, fragmentation of governmental power between the central and the state governments has contributed to the unusual level of detail and complexity that characterize American environmental laws, regulations, reporting requirements, and permit procedures. While even relatively pro-environment Congresses have been reluctant to displace state and local governmental primacy in regulatory implementation, environmentalists often have managed to obtain statutory provisions that mandate federal oversight of state-level regulatory bodies. In several programs, environmental advocates are empowered to bring lawsuits against state and local governments for half-hearted implementation of federal norms, and often environmentalists can sue private companies directly. Many federal environmental statutes authorize state governments to make and implement policy, but insist in such cases that state regulations must be at least as stringent as federal rules. In some programs, the EPA is instructed to conduct audits of state agency enforcement activity, and the EPA is authorized to "overfile" variances and exceptions granted by state agencies. This federal commitment to close regulation and oversight of state and local regulation is manifested in the extraordinary detail of state regulations con-

33. See id.
34. See id.
cerning disposal of industrial wastes and remediation of contaminated sites, as illustrated by the case studies mentioned above, as well as the legalistic way in which local officials administered those rules.38

The combination of separation of powers and federalism also means that federal regulators do not bear full responsibility for the enforcement of environmental laws. They can blame problems and failures in that arena on the President, the EPA, state governors, state agencies, or the machinations of regulated industries. Because this governmental structure absolves Congress of responsibility for implementation failures, federal environmental statutes repeatedly have set administratively unattainable deadlines and unattainably ambitious substantive or analytical standards.39 The disjunction between lawmaking and enforcement responsibility also has encouraged Congress to hand the states ambitious federal goals and standards without providing them sufficient supplementary funding to monitor effectively and to compel compliance.

C. How Decentralized Governance Affects American Law

To a larger degree than most economically advanced democracies, American land use, waste disposal, and industrial development policies, as well as many other environmentally relevant policies, are all controlled by municipal and county governments. And to a larger degree than most economically advanced democracies, local governments in the U.S. rely heavily on local taxes, particularly property taxes, to finance basic governmental services, including education, public safety, infrastructure maintenance, and so on. In contrast, in Great Britain, The Netherlands, Germany, and Japan, significant parts of land use planning authority are vested in provincial or county governments. Suburbs are not created at will. Municipalities and provincial governments get large proportions of their budgets from the national government. One consequence is that, in those countries, businesses are less inclined to base location decisions on variations in local property tax rates than are businesses in

38. Of course, federal oversight does not necessarily succeed in bringing all state programs to equal levels of stringency or effectiveness. My point is only that political demands for federal oversight are partly responsible for the unusual level of detail, prescriptiveness, and complexity of American environmental regulation.

the U.S. Another consequence is that in the U.S., revenue-hungry (or job-hungry) local governments face stronger incentives to favor economic development over environmental protection.40

From the environmentalist perspective, the logical remedy would be to shift authority over local land use decisions to a higher level of government. In a few instances, as in the case of the Bay Conservation and Development Commission in California and the various state-level coastal zone commissions, they have been able to do so.41 But for the most part, the powerful political forces maintaining local control have blocked that route. The next best strategy from the environmental standpoint is: first, to lodge veto powers, in the form of permitting requirements, in federal, state, or regional agencies designed to protect specific environmental values such as water, air, endangered species, and wetlands; second, to empower neighborhood groups and environmental advocacy groups to challenge local land use decisions in court for failure to meet environmental assessment criteria embodied in law. Environmental advocates often have been successful pursuing this course of action. This has indeed added punch to environmental enforcement and provided multiple access points not only for advocacy organizations but also for ordinary citizens impacted by environmental degradation. But these modes of vetoing and cross-checking local governmental decisions also have some disturbing procedural consequences.

Compared to parallel regulatory systems in Japan or Europe, the permitting system for new developments in the U.S. often resembles a complicated maze. Separate permits are required from local governments and from a large number of separate state or federal environmental agencies, each enforcing a different statute containing its own legal and analytic criteria.42 Moreover, because each separate agency—municipal, regional, state, and federal—is subject to a different vortex of political forces and sudden shifts in political leadership and policy, the rules in the regulatory maze tend to be perpetually changing, confusing, and contestable.

The multiplication of special permit regimes, combined with

40. See Paul Peterson, The Price of Federalism 36-37, 69-75 (1995); see also infra notes 48-51 and accompanying text.


the extraordinary detail and complexity of the governing rules and regulations, creates not one, but multiple opportunities for project opponents to challenge a project in the courts by arguing that one government unit or another made a legally incorrect decision. Hence, in my project’s study of an effort to build a municipal waste disposal facility in California, neighbors opposed to the project (with the financial support of a competing business firm) twice challenged an initial permit grant in court, delaying the process for years.\textsuperscript{43} In the same company’s cases in Europe, local opponents’ appeals were channeled into a single higher-level administrative body or an administrative court. Opponents obtained a full hearing and in some cases, significant mitigation measures, but the process was far quicker and far less costly.\textsuperscript{44}

The multiplication of separate regulatory entities and single-problem laws, combined with wide-ranging opportunities for environmental advocacy groups, local governments, and regulated businesses alike to challenge decisions in court, makes collective or collaborative problem-solving particularly difficult in the U.S. The larger the number of decision-makers and potential legal challengers, the harder it is to achieve consensus. The difficulty of achieving consensus is magnified exponentially in a legal regime in which any dissatisfied party can contest a negotiated agreement in court for failure to comply with a specific statutory, procedural, or analytical standard;\textsuperscript{45} in which litigation, thanks to a complex and analytically demanding body of legal rules, is unpredictable, very slow, and very costly;\textsuperscript{46} and in which some laws, such as the Endangered Species Act or certain water rights, allow so little flexibility that their proponents have little incentive to compromise.\textsuperscript{47}

III. SOME IMPLICATIONS FOR CHANGE

Some critics claim the American system of environmental regulation is too centralized. Richard Stewart writes that the scheme created by federal environmental regulation is analogous

\textsuperscript{43} See Welles & Engel, supra note 3 (manuscript at 9:27-29).
\textsuperscript{44} See id. at 9:57-62.
\textsuperscript{46} See id. at 113-114. Another distinctive feature of American law that encourages adversarial legalism in these kinds of disputes is the “American rule,” absolving parties that lose in court from having to pay the winner’s lawyers’ fees.
to Soviet-style central planning in its tendency to strangle investment and innovation. Other critics claim the system is too decentralized, although they may emphasize different adverse consequences. Thus, some environmental advocates argue that the current allocation of responsibility breeds a race toward laxity, as local governments, eager for tax revenues or economic development, sacrifice environmental values for economic development. Business interests, on the other hand, complain that decentralized control encourages a NIMBY process, whereby local governments or environmental interests who are hostile to economic development projects use the regulatory and legal process to extort exactions or drive development away.

Whatever the merits of the debate concerning which level of government should best deal with particular kinds of environmental regulation, my comparative case studies suggest that in procedural terms, the system is rather a mess. The complicated overlay of simultaneously applicable federal, state and local laws and procedures generates high levels of legal indeterminacy, malleability, and transaction costs. Regulation is often experienced as enormously frustrating, alienating, and adversarial, which in turn reduces the possibility of more expeditious and more cooperative modes of governance. Legal complexity and malleability provide incentives—to regulated entities, opponents of development projects, and governmental officials alike—to “game the system,” using the threat of lawsuits or extended regulatory procedures to extract concessions from those who can’t afford the costs or the delays of litigation.

These procedural problems, I have tried to show, are not the inevitable consequences of federalism. Other federalist systems avoid them. They arise and persist in the U.S. because our interest groups and politicians—and perhaps the electorate at large—want to have it both ways. They prize local democracy.


51. See, e.g., Swire, supra note 49, at 105-06.
They want to allow local and state governments discretion to make the difficult tradeoffs between environmental protection and economic development. They do not want a federal bureaucracy that would supplant local and state environmental agencies. Or in any case, they do not want to levy the taxes that would finance that bureaucracy.

But at the same time, local governments are not trusted to give adequate protection to environmental values. There are good reasons for this. The American system of financing local government through local property taxes gives local governments, or at least those which are revenue-starved, plenty of incentives to favor economic interests, often disproportionately, or to fail to staff adequately their environmental regulation agencies. Hence the American brand of federalism retains local control over land use, waste management, water supplies, and the like, but it gives specialized state and federal environmental agencies powers to veto projects approved by local governments. It insists on close regulation of state environmental agencies by federal agencies in accordance with federal laws. And it gives both business and environmental interests rights to take their disputes with state and local government to federal court. In sum, American environmental federalism simultaneously relies on local discretion and micromanages it from the center.

If trying to have it both ways generates problems, one logical remedy would be to adopt true centralization—to create a much larger federal bureaucracy, enforcing preemptive federal law through local field offices—instead of what Richard Stewart has labeled a "self-contradictory attempt at central planning through litigation." The political implausibility of that scenario has led some to advocate the opposite: true decentralization. In such a regime, state and local governments would not be conscripted to enforce federal laws, which they did not make; instead, state and local governments would both make and enforce policies concerning the large number of environmental problems that are basically local in impact.

The true decentralization scenario, on the other hand, raises


53. See Butler & Macey, supra note 48, at 51, 66 (noting that, in contrast to current approaches, the range of circumstances in which localities could be conscripted is limited solely to the case of interstate externalities when there are no other options).
the prospect that revenue problems will compel local governments to make excessive concessions to economic interests. By "excessive," I mean that concessions may be more lenient than even a cost-benefit analysis would suggest, or unfair on distributional grounds, or contrary to their local constituents' true preferences. That concern suggests a modified version of true decentralization in which the federal government's environmental role would emphasize not close policy supervision, but the provision of research, expertise, and financial aid. These could take the form of substantial block grants, and perhaps some programmatic grants, to support state and local environmental analysis, monitoring, enforcement, open space acquisition, construction of water treatment facilities, ecosystem management, and so on.

This scenario, too, faces major political obstacles. Even if it were to come about, the political history of federal block grants is not encouraging. There are always pressures by those dissatisfied with local decisions to lobby for closer federal supervision or preemption, either directly or through the courts. And there are always incentives for Presidents and Members of Congress to seek political credit by passing new laws that narrow local discretion and subject it to tighter legal review. The most likely scenario, therefore, is a continuing schizophrenic effort to combine local governance with federal legal control—with its inevitable legacy of legal complexity, uncertainty, and adversarial legalism.

This is not the worst of all worlds. Hyperpluralism and high legal transaction costs are better than too little pluralism and too little responsiveness to environmental concerns. Even in a contentious system, most disputes eventually get settled, often sensibly.54 But "eventual" settlement, as the comparative case studies discussed earlier indicate, is very inefficient: it delays the implementation of both environmental and economic measures, and it produces high legal process costs and uncertainties. That is the substantial price Americans pay for a brand of federalism that tries to guarantee local responsiveness and central control at the same time.