Environmental regulations and EPA actions have become increasingly improvisational in recent years. This reinvention of environmental law has led to three possible scenarios for the future. The first model is a unilateral one, in which firms are self-regulating entities and the government serves only to encourage and enforce such self-regulation. A second, multilateral model focuses on the involvement of many parties in the regulation process. Finally, the bilateral model stresses bargaining between governmental regulators and the firms being regulated.

Professor Farber concludes that the bilateral bargaining model offers the most promising vision of the immediate future of environmental regulation. Although some additional insights can also be gained from the other two models, Professor Farber believes that the bilateral model strikes the most appropriate balance between flexibility and accountability.

Reinvention is all the rage today. That much is clear. It is also clear what reinvention is designed to replace: a regime purportedly dominated by centralized regulation and punitive sanctions. But what is much less clear is precisely what reinvention means, not to mention how it relates to the existing framework of environmental law.

This essay seeks, if not to find the answers, to at least map the terrain. At present, three different ways of thinking about reinvention are
emerging. Although we do not know the future of reinvention, it seems likely to lie somewhere in the triangle marked out by these models. One model focuses on the potential for self-regulation by firms. In this model, the government's primary role is catalyzing and enforcing such self-regulation. A second model, rather than stressing unilateral action by firms, views reinvention as a multilateral process. This model eventually hopes to produce new, ecosystem-based governance structures. The third model is bilateral. It focuses on bargaining between the regulators and the regulated, with other actors such as public interest groups playing a secondary watchdog role. In these models, or in some combination of them, we must seek the future of reinvention.

Reinvention may conceivably prove to be a flash in the pan rather than a durable evolution in environmental protection. But there are sound reasons for thinking that, on the contrary, reinvention is here to stay. Part I of this essay describes reinvention efforts and explains the reasons for expecting them to persist. Parts II through IV discuss, in turn, the unilateral, multilateral, and bilateral models of reinvention. Part V draws two tentative conclusions. First, reinvention is likely to have a symbiotic relationship with conventional regulation rather than replacing it. Second, at least for the near future, the bilateral bargaining model may be the most fruitful way to conceptualize reinvention. The other two models, however, can play supporting roles by filling gaps in the bargain model.

I. ENVIRONMENTAL PROTECTION—OLD AND NEW

*American Meat Institute v. EPA* exemplifies the “old” environmental law. Under section 301 of the Clean Water Act, pollution sources were directed to achieve certain levels of pollution control by certain dates, based on the EPA’s assessment of the relevant pollution control technology. *American Meat Institute* involved the application of these requirements to the slaughterhouse and meat-packing industries. To ascertain the relevant levels of pollution control, the EPA hired a consultant to research the industry and its current pollution controls. The consultant chose a method called the “three lagoon” system to establish the benchmark of pollution control that the industry should be expected to achieve. Having given the industry an opportunity to comment on proposed standards, the EPA then issued a set of nationwide regulations setting limits on particular pollutants for various categories of plants. These regulations were challenged in court by the industry trade association,
which attacked the EPA’s findings about the levels of control that the three lagoon system could achieve in practice. The Seventh Circuit, however, upheld most of the regulations after a careful study of the record. These numerical limits on the specified water pollutants then became applicable to individual plants, subject to a bevy of sanctions if they failed to comply with their permits.

Contrast this story with that of a key player in a much newer industry. When Intel wanted to build a new plant, it organized a set of stakeholders, including the EPA, state regulatory agencies, and a community advisory panel, to negotiate environmental standards. The team met weekly for most of a year and solicited public comments throughout the process. In the end, Intel agreed to implement an environmental management system aimed at continuous improvement, to reduce water consumption, and to cut waste production. In return, Intel was assigned a “cap” on its emissions levels. So long as it stays within its cap, it may make process changes without state authorization, even if it increases the level of emissions. Intel can also exchange increases in some pollutants for decreases in others. Intel agreed to a monitoring regime so that the stakeholders and the public could assess its progress. The original negotiating team remains charged with overseeing and modifying the agreement, with the government acting as a team facilitator.

The differences between these stories are dramatic. The regulation of the meat industry was top-down, with the EPA calling the tune. The regulations focused on specific pollutants rather than on total environmental impacts, and the EPA imposed rigid, uniform requirements on an entire industry. The Intel permit, in contrast, was much more collaborative. It embraced a more holistic approach toward environmental impacts, and it was specifically tailored to a particular plant. Admittedly, the Intel story has not yet become routine, and perhaps it never will. But it undoubtedly reflects a much different conception of the regulatory process. As we will see, it was not an isolated occurrence, and commentators see in stories like this the germ of a new environmental order.

Traces of this new order could be found even in the heyday of conventional regulation. In theory, pollution control regulation was intended

8. See id. at 466.
11. See id. at 63.
12. See id.
13. See id.
14. See id. at 66.
15. See id.
16. See id.
to unfold the way it did in *American Meat Institute*, with a steady march from statutory mandates to EPA regulations to industry compliance. This process resembles that of turning a classical music score into a live performance. But even in the early days of federal pollution regulation, the process sometimes took a different path, bearing more of a resemblance to jazz improvisation than to classical performance. The history of toxics regulation under the Clean Water Act provides a notable example. As enacted in 1972, the Act required the EPA to promulgate standards providing an “ample margin of safety” for all toxic water pollutants.\(^{18}\) This provision was never implemented as written, in part because it would have resulted in widespread plant closings.\(^{19}\) The EPA was sued for this failure to implement the toxics program and entered into a settlement,\(^{20}\) but the consent decree did not call for regulation under the statutory “ample margin” standard. Instead of basing regulations purely on risk levels, as the statute directed, the consent decree required the EPA to issue regulations based on the available technology in various industries.\(^{21}\) Thus, risk-based standards were replaced, via the consent decree, with more flexible technology-based standards.\(^{22}\) This was a somewhat startling rewrite of the statutory standards by way of litigation, but it received congressional approval a few years later.\(^{23}\)

Although this kind of improvisational approach to statutory implementation boasts precedents going back to the 1970s, it now has acquired much more momentum. The Clinton administration has shown particular interest in renegotiating regulatory standards. The Endangered Species Act provides an example.\(^{24}\) As originally enacted, the statute was an all-but-absolute ban on the destruction of individual members of endangered species.\(^{25}\) But this ban led to what seemed to be an untenable situa-


\(^{19}\) See id. at 352.

\(^{20}\) See id. at 353.

\(^{21}\) See id.

\(^{22}\) See id. at 367–69.

\(^{23}\) See Clean Water Act § 307(a)(2), 33 U.S.C. § 1317(a)(2) (1994) (first sentence). Because the amendment was not entirely identical with the consent decree, the consent decree was held not to be superseded. See Environmental Defense Fund v. Costle, 636 F.2d 1299 (D.C. Cir. 1980).

Another interesting example from the same era involved mobile source standards under the Clean Air Act. In *International Harvester Co. v. Ruckelshaus*, 478 F.2d 615, 648–50 (D.C. Cir. 1973), the court vacated the EPA’s refusal to grant waivers to the leading car companies. Although the statute squarely placed the burden on the companies to show that pollution control technology was unavailable, the court, in effect, switched the burden of proof, ruling against the EPA because the feasibility of compliance was unproven. See id. at 642, 648. On remand, the EPA essentially took the court’s hint to ignore the statutory criteria for waivers. The EPA adopted a clever alternative approach, relaxing the national standards for automobile pollution (as requested by the manufacturers) but using its power under another provision to authorize California to impose a more rigorous standard. See ROGER W. FINDLEY & DANIEL A. FARBER, CASES AND MATERIALS ON ENVIRONMENTAL LAW 310–13 (5th ed. 1999).


tion. Individual landowners were faced with bans on development to save the last few members of a species, while the government seemed powerless to intervene at an earlier time to protect the habitat on which the species relied. An obscure 1982 amendment proved to be the key to the solution. The amendment allows the Secretary of the Interior to issue a permit to "take" members of an endangered species (e.g., by modifying their habitat). The permit can be issued only if the taking is incidental to a project, a habitat conservation plan (HCP) is in place, and there will be no appreciable harm to the prospects of the species for survival. On its face, this seems like a minor exception, likely aimed at situations where legitimate hunting or fishing activity posed some risk of accidental harm to members of endangered species. In fact, however, the provision has served as the basis for a sweeping new approach to protecting endangered species—not unlike a jazz performer who takes a few bars in an old song and builds them into a brilliant new performance.

Putting aside the jazz metaphor, there is no question that HCPs have assumed a life of their own, with dramatic effect. For instance, the HCPs for southern California cover a 39,000 acre tract in coastal Orange County and over 150,000 acres in the San Diego area. This planning process, involving state and local officials, large landowners, environmental groups, and federal officials, was triggered by a federal threat to list the California gnatcatcher as an endangered species. Listing the gnatcatcher potentially could have frozen growth in much of the remaining prime development land in southern California. In lieu of listing, the Interior Department proposed to delegate regulation to the local planning groups. As the responsible federal official explained: "If the Department approves these plans, they will be implemented in lieu of the normal Endangered Species Act regulations." Thus, local negotiations have replaced top-down federal protection of endangered species.

Another recent example of regulatory renegotiation is provided by the recent agreement of the automobile industry to introduce, ahead of the statutory deadline, a new level of pollution control in cars sold across the country. This concession arose out of complex negotiations among multiple parties: the industry; environmentalists; the Northeast States, which were threatening to invoke their powers under another portion of

27. See id. at 367–68.
30. See George Frampton, Ecosystem Management in the Clinton Administration, 7 DUKE ENVT'L. L. & POL’Y F. 39, 41–42 (1996).
31. See id.
32. See id.
33. Id. at 42.
the statute to deal with regional ozone problems; the state of California, which plays a pivotal role in regulating car pollution; and the EPA.  

These examples are part of a much broader EPA effort to "reinvent" environmental regulation. The best known example is Project XL, in which the Agency negotiates with individual sources to reduce their net environmental impact below what could be achieved by full compliance with existing regulatory standards. As described by some early enthusiasts, Project XL had "the potential to make truly revolutionary changes in the way companies are regulated in the United States." Project XL was supposed to foster company-created pilot projects based on performance standards rather than "one size fits all" technology-based controls. Advocates for XL hoped to foster technological innovation and reduce compliance costs, with increased use of pollution prevention, multimedia approaches, and market-based controls. More simply, the idea was to excuse some supposedly less significant regulatory violations in exchange for agreements to transcend the standards in more important respects—thus the motto: "If it isn't illegal, it isn't XL."

The remedial area has provided another fertile ground for innovative types of environmental protection. Environmental statutes provide a battery of enforcement measures including injunctions, civil penalties, and criminal sanctions. The EPA has also created another enforcement measure, the supplemental environmental project (SEP). A SEP is an environmentally desirable measure that a violator agrees to implement in place of a portion of the penalty that it would otherwise have to pay. From 1992 to 1994, the EPA negotiated more than 700 SEPs, with an estimated cost exceeding $190 million. A case study of ten SEPs found some significant pollution prevention efforts.

34. See Taly Jolish, Negotiating the Smog Away: How the Northeast States, the Automakers, and EPA Developed the National Low Emission Vehicle Program (Apr. 29, 1998) (unpublished manuscript, on file with the University of Illinois Law Review).

35. For a description of these efforts (and their debatable validity under current law), see Bradford C. Mank, The Environmental Protection Agency's Project XL and Other Regulatory Reform Initiatives: The Need for Legislative Authorization, 25 ECOLOGY L.Q. 1, 13–19 (1998).


38. See Ginsberg & Cummis, supra note 37, at 10,061.


41. See Caldart & Ashford, supra note 17, at 188.

42. See id. at 190.

43. See id. As Caldart and Ashford explained:

So long as the penalty does not fall below the acceptable minimum, EPA will (depending on the assessed merits of the project) credit up to eighty percent of the after-tax cost of most ap-
Settlements have also been used in imaginative ways in private litigation. Under the Clean Water Act, citizens may sue to collect civil penalties payable to the government. In settlements, however, instead of paying fines to the government, environmental groups have obtained agreements to use funds for mitigation projects, in several cases exceeding $1 million. This practice now has explicit recognition in the citizen suit provision of the Clean Air Act, which provides that penalties partially may be applied to mitigation projects rather than being paid to the government.

Without the benefit of a crystal ball, no one can be certain whether these moves toward more regulatory flexibility are flukes or harbingers of the future of environmental law. But several reasons exist for expecting further movement in the same direction. First, the frustrations attending conventional regulation are familiar, perhaps enough so as to require no citation. Conventional regulation seems particularly poorly suited to problems involving interactions among multiple sources or types of environmental disruption. Thus, reinvention seems to respond to a legitimate policy need. Second, although reinvention is new in its explicit development of regulatory flexibility, the regulatory system has always had a considerable amount of flexibility just below the surface, as exemplified by the toxics consent decree. Thus, reinvention is a natural outgrowth of tendencies that have always existed (sometimes covertly) within the regulatory system. Third, reinvention has a broad political appeal. It provides environmentalists with a way to assuage critics of regulation. Simultaneously, it gives those critics an affirmative alternative to existing regulation rather than requiring them to assume the role of “environment bashers.” So long as the political equilibrium requires accommodation between supporters and opponents of environmental regula-

proved SEPs (net of any savings, such as reduced operations costs, that the SEP may offer to the violator) against the amount of the penalty. In order to encourage certain types of projects, however, the agency revised its policy in 1995 to offer a credit of up to 100% for SEPs judged to be “of outstanding quality” according to a set of specified criteria. EPA reports that, between Fiscal Years 1992 and 1994, it negotiated more than 700 SEPs. Of these, approximately fourteen percent were pollution prevention SEPs, with an estimated total value of approximately $57 million. EPA estimates that these pollution prevention SEPs will reduce the discharge of toxic chemicals and the production of hazardous waste by a total of some 65 million pounds.

Id. For a critique of the program, see generally David A. Dana, The Uncertain Merits of Environmental Enforcement Reform: The Case of Supplemental Environmental Projects, 1998 Wis. L. REV. 1181.

45. See Scott M. DuBoff, The 1990 Amendments and Section 304: The Specter of Increased Citizen Suit Enforcement, 7 NAT. RESOURCES & ENVTL., Fall 1992, at 34, 35. Creative remedies have long placed judges in a policy-making role in some types of public law litigation such as school desegregation and prison reform cases. See Colin S. Diver, The Judge as Political Powerbroker: Superintending Structural Change in Public Institutions, 65 VA. L. REV. 43, 44 (1979).
tion, rather than allowing a clear-cut victory to one side or the other, reinvention will be a politically attractive platform.

If reinvention is likely to continue, we need ways to understand and shape the process. In the growing literature on reinvention, three different models can be identified. As we attempt to conceptualize the developments now taking place in environmental regulation, these three models seem to be our best sources of guidance. They are considered in turn in the next three sections.

II. UNILATERALISM: THE SELF-REGULATION MODEL

The first model stresses the potential for firms to take the initiative in controlling environmental problems rather than grudgingly complying with administrative directives. In the most utopian version of the self-regulation model, environmental law would be completely unnecessary because pollution sources would spontaneously “clean up their acts.” It is doubtful that anyone is this optimistic about the possibilities of self-regulation. A more modest version of the model would stress that industry and other sources of environmental problems have strong motives to improve their environmental records. In this model, the government’s most important role is to strengthen the forces promoting effective self-regulation, particularly by increasing the generation and distribution of information about environmental performance. Of course, except for the most optimistic advocate of self-regulation, government’s role also must include disciplining the occasional bad actor who proves unresponsive to this more nurturing approach.

Advocates of this approach can point to some precedents. Although environmental law has generally focused on coercive regulatory schemes, efforts at industrial self-regulation do exist. One is Responsible Care, the Chemical Manufacturer’s Association program for reducing pollution. The program was adopted in response to Bhopal and the increased disclosures about toxic releases required by federal law. It stresses pollution prevention, linked to a program akin to “total quality management” for increasingly rigorous control of accidents. Although the pro-

48. See Ian Ayres & John Braithwaite, Responsive Regulation: Transcending the Deregulation Debate 110-19 (1992). Professors Ayres and Braithwaite are well aware, however, that the threat of more traditional enforcement measures is also needed. See id. at 120-21.

49. For additional examples, see John R. Ehrenfeld, Cultural Structure and the Challenge of Sustainability, in Better Environmental Decisions: Strategies for Governments, Businesses, and Communities 223, 234-42 (Ken Sexton et al. eds., 1999).


51. See id. at 27-28.

52. See id. at 28.
gram is ambitious, the results are as yet unclear. Another example is the EPA’s 33/50 program, a voluntary scheme to reduce emission of toxic chemicals by thirty-three percent in the first phase and fifty percent in the second phase. Emissions for the chemicals in question fell twice as much as those for other toxic chemicals. Finally, advocates look to schemes in which the government uses inspections and other means such as reporting requirements and plans for usage reduction to inform firms of how to improve their practices, rather than acting punitively. Some of these schemes have apparently had some success.

The key question, of course, is what motivations exist for polluters to undertake these voluntary actions. One reason might be that business people themselves, like other Americans, believe in the importance of environmental protection. A related argument is that environmental protection actually saves a company money because it leads to more efficient production processes. But the motivation need not be internal to the firm. Consumers may favor “green” firms, or investors may disfavor firms with environmental violations, putting market pressure on firms to avoid environmental misconduct. Disclosure requirements could help catalyze these effects. Firms might also be motivated by a desire to avoid the potential for future tort liability, or they might attempt to head off potentially onerous government regulation by creating a favorable environmental record.

The policy implications of this model are substantial. If industry is motivated to pursue environmental quality, then the government might well focus on facilitating self-regulation rather than on coercion. This would mean a de-emphasis on enforcement and more stress on disclosure and on problem solving—and, in general, a less adversarial and more collaborative relationship between government and industry. Most im-

53. See id. at 27–29.
56. See Fung et al., supra note 50, at 24–26 (describing the Massachusetts scheme for improving industry ability to control toxics); Mark Seidenfeld, Empowering Stakeholders: Limits on Collaboration as the Basis for Flexible Regulation 99–100 (unpublished manuscript, on file with the University of Illinois Law Review).
58. See Seema & Cason, supra note 55, at 272.
59. See AYRES & BRAITHWAITE, supra note 48, at 22–34, 90.
60. See id. at 19–29, 47–49.
mediately, this model would seemingly support claims for a self-audit privilege for industry.61

Rena Steinzor has been one of the most outspoken critics of the self-regulation model.62 Surveys show that business leaders are pro-environmental in the abstract, but Steinzor argues that this environmental support holds little practical relevance.63 Many managers view their own company's environmental compliance costs as unduly high and also view environment-related positions to be career dead-ends.64 Thus, their abstract support for the environment does not translate into concrete business decisions. Steinzor calls attention to a probing study of corporate culture by Robert Jackall in the 1980s.65 As Steinzor reports, Jackall found that corporate managers faced an unstable system that stressed loyalty to patrons and avoidance of blame for mistakes.66 In this highly stressful environment, middle managers could not afford to take a long-term view but focused instead on more immediate business issues.67 Moreover, Steinzor reports, corporate accounting systems do not link environmental costs and benefits in an effective way with day-to-day operating expenses, relegating environmental expenditures to the category of overhead.68 In the industries most affected by environmental regulation, managers often feel embattled and victimized by regulations rather than supported.69 As Steinzor admits, notable exceptions do exist. These exceptions, however, involve extraordinary leadership "at the highest levels in a corporation by people who possess a far-sighted vision of how to position their firms strategically in response to economic and social trends," a kind of visionary leadership that can hardly be created by government fiat.70

Like Steinzor, Clifford Rechtschaffen stresses the ideological opposition to environmental regulation by most business leaders who do not view environmental regulations as having the same legitimacy as laws designed to protect the integrity of the marketplace.71 Although firms seek to avoid tort liability and hope to obtain "important benefits from being

62. See, e.g., Steinzor, supra note 17.
63. See id. at 156–57.
64. See id. at 157.
66. See Steinzor, supra note 17, at 159.
67. See id. at 159–61.
68. See id. at 167.
69. See id. at 162.
70. Id. at 163.
publicly perceived as environmentally responsible entities,"72 Rechtschaffen doubts that "these considerations by themselves will result in widespread compliance with environmental laws."73

This skepticism about self-regulation finds support in two elementary economic principles. First, firms are rational maximizers of profits rather than charitable institutions.74 To the extent that managers attempt to implement public-spirited impulses, therefore, shareholders will take steps to bring them back under control. The second, related principle is that environmental harms are externalities that do not enter into firms' profitability.75 "This is, in fact, the key economic justification for environmental regulation."76 Putting these two principles together teaches us that firms will largely ignore environmental considerations as they seek to maximize their profits.

These basic ideas are not, of course, the last word in economic thought. As it turns out, there may be some economic pressure on corporations toward responsible environmental behavior.77 Moreover, the ability of shareholders to control managers is imperfect, leaving some room for managers to seek goals other than profit maximization. Indeed, as we have seen, critics of the self-regulation model concede the possibility of such exceptional corporate behavior; they merely doubt that the behavior is sufficiently widespread to make much practical difference.78 The critical question, then, is an empirical one—are there significant pressures on corporations toward responsible environmental behavior apart from the direct sanctions regulation provides?

For those not naturally inclined to a sympathetic attitude toward business, it may come as something of a surprise that the self-regulation model has significant empirical support.79 Environmental compliance (and overcompliance, in the sense of exceeding government regulations) has been the subject of considerable research by environmental economists. A recent review of the literature reveals important findings. Investors react negatively to disclosures of higher-than-expected toxic emissions, perhaps because of fears of future liability,80 and firms are also rewarded for superior environmental performance.81 Firms respond to

72. Id.
73. Id. at 1196.
75. See FINDLEY & FARBER, supra note 23, at 47.
76. See id. at 47-49.
77. See supra notes 57-59 and accompanying text.
78. See supra notes 62-73 and accompanying text.
79. See Wayne B. Gray & Mary E. Deily, Compliance and Enforcement: Air Pollution Regulation in the U.S. Steel Industry, 31 J. ENV'T ECON. & MGMT. 96, 110 (1996) (finding that, controlling for firm characteristics, compliance was also influenced by corporate "attitude").
80. See Lyon & Maxwell, supra note 54, at 17-21.
81. See id. at 20.
investor pressure by improving their environmental performance.\textsuperscript{82} Larger firms and firms with high research and development budgets are the most likely to undertake voluntary efforts.\textsuperscript{83} The likelihood and extent of corporate voluntary actions are also increased by the perceived level of future government regulation and by the strength of community, environmental, and industry pressure.\textsuperscript{84}

These and similar findings suggest that self-regulation is not a chimera. They do not, however, show that it is a panacea. Not all of the effects are dramatic in magnitude, and at least some effects seem linked with a fear of adverse government action. Certainly, the evidence is not strong enough to justify a decision to jettison conventional regulation in favor of reliance on the good intentions of industry. After all, some of those good intentions are probably prompted by the desire to head off potential future regulations or tort liability.\textsuperscript{85} Nevertheless, the existence of these effects suggests that more could be done (strengthening disclosure requirements, for instance) to promote self-regulation.

Even if we do not rely on self-regulation as the mainspring of environmental policy, these empirical findings are also relevant to the other two models of reinvention. Those models similarly assume some degree of cooperation and goodwill on the part of regulated parties, though less than the self-regulation model. Thus, these empirical findings provide some support for the feasibility of the other two models.

III. MULTILATERALISM: THE GOVERNANCE MODEL

The HCPs discussed in part I somewhat resemble the traditional government function of land-use planning. The governance model focuses on this analogy between traditional forms of regulation and negotiated frameworks such as HCPs. Thus, rather than envisioning self-regulation by firms, we might see them instead as partners in the regulatory effort, joining with regulators to devise effective programs for environmental protection. Compared to the self-regulation model, this model gives a more prominent role to regulation and initiative by government, but like the self-regulation model, it views the relationship between government and industry as collaborative.

Besides HCPs, some other examples of the governance model have been identified. For instance, the Chesapeake Bay Program is an ambitious effort to address nonpoint source pollution. The Chesapeake Bay Agreement was signed in 1983 by the EPA; the governors of Maryland, Virginia, and Pennsylvania; and the mayor of the District of Columbia.\textsuperscript{86}
The agreement was amended once in 1987, to provide more detailed commitments, and again in 1992. Directives issued pursuant to the agreement address matters such as toxic reduction, habitat restoration, wetlands protection, and agricultural runoff. Recent efforts have involved tributary teams composed of government officials, scientists, private sector representatives, and public volunteers. A somewhat similar venture has now begun in the San Francisco Bay area, combined with elements of the HCP approach.

Some of the most interesting examples of the governance model have emerged spontaneously at the local level. For instance, in the midst of the spotted-owl dispute, a group of citizens formed the Applegate Partnership, its board including environmentalists, timber interests, and representatives of local government. The partnership was apparently quite successful in solving local watershed issues but foundered over the more conflictual issue of logging plans. Failing to provide a negotiated solution, the partnership became a participant in federally sponsored "adaptive management" planning, a process that seems to have had some success (at least in the locality).

Professors Fung, Karkkainen, and Sabel see in these instances the germs of a potential revolution in environmental protection. Here is one of their possible scenarios:

Consider in this connection the possible convergence of the EPA’s efforts at decentralization and integration of programs with the spread of HCPs. Suppose, as one of our interlocutors did, that the EPA ... continues to delegate implementation authority over existing programs to the states. The latter, unable to exercise the delegated authority directly themselves for want of adequate administrative capacities, look to pass the responsibility to yet lower-level units. Their search ends nearly as soon as it began with the discovery of HCPs, proliferating in number and expanding in scope. Soon the HCPs, coordinated, perhaps, by field agents and other structures provided by the Department of the Interior, are in fact administering most EPA programs, and amalgamating them with others relevant to the management of complex ecosystems.

The professors also sketch some other scenarios in which this kind of networked environmental management might emerge from the San Francisco Bay program or from existing toxic reduction programs.

87. See id. at 33–34.
88. See id. at 34.
89. See id. at 31–38.
90. See id. at 53–58.
92. See id. at 1398–1401.
93. See id. at 1400–03.
94. Fung et al., supra note 50, at 59.
95. See id. at 59–60.
It is an open question whether HCPs, or any of the other examples discussed above, actually will evolve into genuine governance structures. But assuming this evolution is at least a possibility, it will raise some delicate problems of institutional design. Clearly, such structures must include at least federal agencies and private firms; local governments and environmental groups are other likely participants. But the role of each of these participants is problematic.

The problems are most obvious with respect to private firms and parallel those discussed under the self-governance model. To the extent that firms pursue their immediate economic interests, their collaboration with regulators may come at the expense of environmental quality. As Jody Freeman explains, critics fear that "agencies may be tempted to broker deals among repeat players, without attention to the larger public interest." 96 "Worse yet," she adds, critics fear the process "will inevitably weaken regulation because negotiations tend to favor powerful groups." 97 Without safeguards, joint governance could simply perpetuate the worst forms of regulatory capture. 98

The role of the federal agency is also problematic. Today, agencies operate in a web of procedural requirements, substantive limitations, and judicial oversight. The informality of joint governance may free agencies from these restrictions, diminishing their accountability and undercutting their democratic legitimacy. In the worst-case scenario, collaborative governance could merely provide a front for unrestricted discretion by federal bureaucrats. 99

Local government participation also raises problems. To the extent that they achieve a dominant role, local interests (perhaps captured by industry) might outweigh national interests. If local governments were considered to be adequate guardians of environmental interests, federal legislation would have been unnecessary in the first place. Moreover, such intensive collaboration between different levels of government and other interests might diminish accountability. In New York v. United States, 100 where state participation was mandated by federal legislation, Justice O'Connor worried that democratic accountability would suffer because of the inability of citizens to identify which elected officials had ultimate policy responsibility. 101 It is easy to imagine that HCPs or other forms of collaborative governance would cause even greater citizen confusion. If you dislike the content of a local HCP, precisely whom should you vote against in the next election?

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96. Freeman, supra note 10, at 83. Interactions between the agency and a repeat player could also be more benign, with short-term concessions to the repeat player to obtain greater public benefits later.
97. Id.
98. See id. at 83–85.
99. See id. at 86–89.
100. 505 U.S. 144 (1992).
101. See id. at 169.
The final group of participants includes representatives of the "public interest" such as environmental groups. Here, again, problems abound. To prevent capture of the governance process by special interests, public participation seems critical. Yet, it is unclear how representatives of the public interest should be selected. What grounds do we have for believing that leaders of any particular group will act so as to further the interests of the general public? Indeed, there may be pressures on these leaders to disrupt the process so as to dramatize their idealistic commitments to members. In addition, it is unclear how these representatives of the public are supposed to interact with government officers, who are themselves supposed to be representing the public interest. Finally, given the resource limitations of many public interest groups, some kind of public funding is probably necessary to allow effective participation, but the sources of funding and the control over disbursement remain unknown.

These questions about the roles of particular actors have implications for the process as a whole. Because the roles of individual actors are unclear, the process could become chaotic and ineffectual. If the various actors vigorously reflect diverse interests and viewpoints, consensus may be unattainable and decisionmaking stymied. When a consensus does turn out to be possible, the reason may only be that key interests were excluded from the process, increasing its efficiency but undermining its legitimacy. Moreover, consensus is difficult to reach in a goldfish bowl, so an effective process may also require insulation from public scrutiny and publicity, again undermining legitimacy.

In short, serious concerns exist about the workability, transparency, and accountability of the new governance structures. Another, perhaps even more fundamental, question relates to political equality. Although the process is imperfect, we do have an elaborate set of political institutions that purport to give every voter an equal representation in government. It is questionable whether we can expect the same degree of equality in a system where decisions are made by a hodgepodge of government officials and affected interests. How the new governance structure would reflect traditional democratic norms remains unclear.

At this point, whether today's reinvention efforts will evolve into genuine governance structures is purely speculative. The practical and normative barriers to such an evolution are formidable. But this is not to say that those barriers are insurmountable. A recent innovation in local government provides one possible model, the business improvement district (BID). BIDs are organizations run by local businesses and landowners but empowered to collect taxes for the purposes of providing municipal services. Over a thousand BIDs now exist across the country, many

created in the past decade. They have been hailed as trailblazers in solving urban problems. At the same time, they have given rise to concerns about their relationship with traditional governance structures, their inclusiveness, and their democratic legitimacy. At least part of the solution to these concerns probably involves more vigorous oversight from local governments. Although hard evidence of the success of BIDs is still scarce and concerns about their operation are still being addressed, they do provide some ground for hope about the future of HCPs and similar regional environmental ventures.

Although new environmental governance structures may be emerging, they are still far from reality. In the meantime, the governance model may be most useful as a reminder that reinvention is not merely a means toward increased efficiency but also a mechanism for exercising political authority. As such, reinvention must be sensitive to political norms of fairness and inclusion, not just to the economic norm of improved efficiency.

IV. BILATERALISM: THE BARGAIN MODEL

Negotiation already plays a prominent role in several innovative schemes, including Project XL (exemplified by the Intel agreement) and HCPs. Even earlier, Congress made an effort to institutionalize regulatory negotiation. In the Negotiated Rulemaking Act of 1990, Congress provided a formal framework for a consensus-based process of rule-making. This process involves assembly of a committee of stakeholders such as industry, agency staff, and citizen groups. If the committee reaches consensus, the agency typically initiates a rule-making proceeding to consider any objections to the rule, leading generally to its ultimate adoption.

Another existing arena for bargaining involves deals between the EPA and the states, rather than the EPA and the private sector. Environmental statutes often call for states to assume enforcement authority, subject to federal supervision. In reality, supervision is often lax, and states often are able to openly deviate from federal mandates. For instance, the EPA has admitted its unwillingness to impose strict deadlines

104. See id.
105. See id. at 366–71.
106. See id. at 371.
107. See id. at 458–59.
108. See Briffault, supra note 103, at 370.
112. See id. at 1199–1216.
or sanctions on state agencies regulating air pollution.\textsuperscript{113} As John Dwyer has explained, there are strong pressures against the full exercise of federal authority in this area because a "successful federal air pollution control program requires the willing participation of state administrative agencies."\textsuperscript{114} Thus, according to Dwyer, "Congress and EPA can quell minor revolts among state agencies, but widespread dissatisfaction—manifested in the time-honored 'go-slow' approach—will bring EPA and even Congress to the bargaining table."\textsuperscript{115} As a result, Dwyer says, "the states have been able to work compromises with EPA rather than be slavishly subject to federal dictates."\textsuperscript{116}

Given the important role that bargaining already plays in environmental regulation,\textsuperscript{117} it is not difficult to imagine negotiation emerging as the dominant form of environmental protection. For instance, Don Elliott suggests the possibility of replacing "command and control" with "command and covenant."\textsuperscript{118} Under this approach, as exemplified by Project XL and similar efforts, the government still sets minimum acceptable levels of environmental quality. Rather than dictating the method of reaching those levels, however, "implementing agencies (whether states, local districts, or individual factories) are empowered to design their own enforceable alternative compliance methods or covenants, provided that they demonstrate that the alternative achieves equivalent or better environmental performance."\textsuperscript{119} According to Elliott, "[t]his approach essentially allows private parties to 'contract around' inefficient government regulations by substituting a more efficient alternative for achieving an equivalent level of environmental performance."\textsuperscript{120}

Two major criticisms of the bargain model exist. First, if we cannot count on full compliance with supposedly clear-cut national standards, we might also be unwise to assume that deals with individual sources will provide a firmer basis for further enforcement efforts. Indeed, monitoring and enforcement problems might be even greater with more flexible,
result-oriented requirements for sources than with simpler, technology-based standards.\textsuperscript{121}

Second, regulatory bargaining raises substantial problems of transparency and accountability.\textsuperscript{122} To ensure the transparency and accountability of conventional regulation, society has adopted a variety of procedures ranging from the constitutional requirements for legislation (bicameralism and presentment) to the Administrative Procedure Act’s requirements for rulemaking and judicial review. The bargaining model erodes these guarantees.\textsuperscript{123} Negotiation may not provide the usual opportunities for public input or the normal mandates for deliberative decisionmaking. In short, bargaining efforts take place very much in the shadow of the law, not in the light of public deliberation. In one way or another, the same problems have plagued various reinvention efforts, which have been repeatedly criticized for their lack of procedural regularity and public accountability.\textsuperscript{124} These problems are not insurmountable, but efforts to provide more accountability and transparency may hamper the collaborative process that is at the heart of reinvention.\textsuperscript{125}

The most serious problem with the bargain model is the accountability issue. One solution is to move closer to the governance model by involving a broader range of stakeholders in the negotiations. As we saw in discussing the governance model, this solution has both practical difficulties (by making negotiations much more cumbersome) and normative problems (by diluting the responsibility of the agency as a representative of the overall public interest).\textsuperscript{126}

An alternative approach to accountability may be better. Instead of mandating broad involvement by stakeholders in the initial bargaining, we might require full disclosure, then give other stakeholders at least limited rights to upset bad deals. One model for these upset rights would be the citizen suit, where state enforcement efforts can be displaced if

\begin{itemize}
  \item \textsuperscript{121} Currently, the informal and partially illicit nature of creative compliance measures is a disincentive for sources to enter into those bargains. But it is also a strong incentive to keep those bargains, once made, because a breach of the bargain can easily lead the regulator to revert to the formally binding regulatory standards. Thus, the source may have some reluctance to initiate a second round of negotiation over how fully to implement the bargain resulting from the first round. But when the bargain itself is given full formal recognition, it may become the starting point for yet another round of negotiation, leading to further slippage. See generally Farber, supra note 47.
  
  \item \textsuperscript{122} See id. at 321.
  
  \item \textsuperscript{123} As Ayres and Braithwaite put it, “cooperation corrupts.” Ayres & Braithwaite, supra note 48, at 56.
  
  \item \textsuperscript{124} See Freeman, supra note 10, at 77–87. On the general issue of public participation in environmental decisions, see Bruce A. Williams & Albert R. Matheny, Democracy, Dialogue, and Environmental Disputes: The Contested Languages of Social Regulation 61–63 (1995).
  
  \item \textsuperscript{125} The mixed experience with an earlier version of reinvention, negotiated rulemaking, may be illuminating. See generally Coglianese, supra note 110, at 1261; William Funk, Bargaining Toward the New Millennium: Regulatory Negotiation and the Subversion of the Public Interest, 46 Duke L.J. 1351, 1355 (1997).
  
  \item \textsuperscript{126} See supra notes 96–103 and accompanying text.
\end{itemize}
they are clearly inadequate.\footnote{127} Provided citizen suits are costly enough to discourage casual use, they may form an important check on unduly lax cooperative agreements by making those agreements contestable when serious objections exist. For this reason, Ayres and Braithwaite may be wrong to condemn citizen suits that overturn cooperative agreements between regulators and firms.\footnote{128} Another procedural analogue is provided by the fairness hearing in class-action settlements. An ex post remedy might be less cumbersome than requiring everyone to have a negotiating role ex ante. An upset procedure could make bargains more responsible by forcing the industry and the EPA to consider the prospect of a potential upset action but without all the drawbacks of multilateral negotiations.

V. CLOSING THOUGHTS ABOUT THE FUTURE OF REINVENTION

There are promising ideas for reinvention, but it is premature to celebrate their triumph. Current approaches do not exist solely because people lacked the imagination to think of anything better. If purely voluntary efforts had led to fully satisfactory results, we would never have adopted the current regulatory system in the first place. The standard-setting process offers uniform treatment, accountability, and deliberation, at least in theory. In short, the existing administrative state itself evolved as a solution to the governance problem. Similarly, markets are great at efficiently processing information and can do so much more efficiently than individualized negotiation.\footnote{129} So we should not expect reinvention to completely displace either market mechanisms such as transferable permits or conventional regulation. The threat of conventional regulation may be particularly important in providing a stimulus to self-regulation or a fallback to the failure of multilateral or bilateral negotiations.

The existing approaches, however, have their own problems. We should welcome experimentation with new techniques—and if the experiments are successful, we can expect them to multiply and thrive in a kind of "survival of the fittest" competition among methods of environmental protection. Or, to change metaphors, it may be better to think in terms of a regulatory ecology in which different regulatory approaches both compete with and support each other—so that, for instance, conventional regulation may provide the starting point for bargains of various kinds.\footnote{130}

\footnote{127} Citizen suits are expressly permitted under 33 U.S.C. § 1365 (1994).
\footnote{128} See Ayres & Braithwaite, supra note 48, at 108.
\footnote{130} Cf. Ayres & Braithwaite, supra note 48, at 128 (calling for a mix of strategies forming a "regulatory pyramid"); Neil Gunningham & Darren Sinclair, Regulatory Pluralism: Designing Policy
The bilateral bargaining model, however, comes closer than the other two models to capturing the essence of the reinvention question, at least for the near future. First, the notion of bargaining leaves room both for the idea of good-faith cooperation, which is key to the self-regulation model, and the idea of the adversary relationship found in conventional regulation. This seems more realistic than assuming that the forces shaping corporate behavior will automatically produce optimum results. Bargaining is part contest and part cooperation, a reasonable balance of optimism and pessimism about the motivation of stakeholders.

Second, the bargain model strikes a balance between the unilateralism of the self-regulation model and the ambitious multilateralism of the collaborative governance model, with an approach that is basically bilateral but with room for participation by additional parties. Multilateral interactions are more complicated and difficult both to conduct and to understand. A simpler model is better for that reason. The bargain model also keeps at the forefront the importance of conventional regulation as providing a baseline for the reinvention effort, since existing entitlements automatically factor into any model of bargaining.

Finally, the bargain model reminds us that the outcome of reinvention may or may not be an improvement over the status quo, depending on how we expect the bargaining process to work. If bargaining works to prompt information exchange, it may produce beneficial new solutions. If, however, bargaining works only to produce compromise, it can be at best only a safeguard against unrealistic regulatory standards. The negotiation process has no particular intrinsic value. Its primary value is its ability to produce improved outcomes by drawing on the creativity and goodwill of the parties. But we cannot expect this happy outcome to be inevitable, and we must structure negotiations carefully if we expect beneficial results.

Thus, the bargain model seems closer to the mark than its alternatives. It does not, however, provide a complete picture of the possibilities of reinvention. It misses or de-emphasizes some of the insights of the other models. The self-regulation model usefully highlights the potential power of disclosure requirements and the importance of changing internal corporate cultures, structures, and incentives. The governance model gives more attention than the bargain model to the possibility for

Mixes for Environmental Protection, 21 LAW & POL’Y 49 (1999) (discussing the desirability of various mixes).

131. Adoption of the bargain model would also affect the way we think about regulatory standards. These standards should be designed with an eye to the way they will shape future bargaining. For instance, a standard that specifies an "optimal" level of pollution control might lead to bargaining breakdowns because the regulated party lacks sufficient incentive to make a deal or might lead to the wrong level of pollution control after negotiations between the source and the regulatory agency.

132. See AYRES & BRAITHWAITE, supra note 48, at 108 (noting that existing regulations serve as baselines for negotiation).

133. See supra Part II.
creating new long-term structures.\textsuperscript{134} It also demands that we attend more carefully to the potentially undemocratic dimensions of reinvention, reminding us that even reinvented regulation is still an exercise of government power. These two models offer useful correctives to the bargain model. Among the three models we should have at least a rough notion of where to look for the future of reinvention.

\textsuperscript{134} See supra Part III.