INSTITUTIONAL AND CULTURAL CONSTRAINTS ON THE INTERNATIONAL HARMONIZATION OF THE POLLUTER PAYS PRINCIPLE AS A GLOBAL SUSTAINABLE DEVELOPMENT STRATEGY IN THE INDIAN, CHINESE, AND U.S. ENVIRONMENTAL LAW AND POLICY REGIMES

Paul A. Barresi
Department of Social Sciences, School of Arts and Sciences,
Southern New Hampshire University, Manchester, NH 03106, U.S.A.
Corresponding author: p.barresi@snhu.edu

 ISSN 1923-6654 (print)
ISSN 1923-6662 (online). Available at http://www.ssrn.com/link/OIDA-Intl-Journal-Sustainable-Dev.html

Abstract: The Polluter Pays Principle made its international debut in 1972 in a recommendation by the Council of the Organisation for Economic Co-operation and Development ("OECD") to OECD Member States on the international aspects of environmental policies. Fifteen years later, the World Commission on Environment and Development recognized it as an economic strategy for achieving sustainable development. The Polluter Pays Principle requires polluters to bear the costs of the pollution prevention and control measures imposed by public authorities to achieve or to maintain an acceptable level of environmental quality, including the costs of environmental restoration measures, with certain narrowly defined exceptions. Its goals are to encourage the rational use and better allocation of scarce environmental resources and to avoid distortions in international trade and investment by ensuring that the costs of goods and services that cause pollution when produced or consumed reflect the costs of the pollution prevention and control measures required by public authorities.

If the Polluter Pays Principle is to achieve its goals globally, then it must be adopted and implemented effectively by a critical mass of States, especially the States with the world's biggest economies or that stand out for the size of their current or likely future contributions to global environmental challenges such as anthropogenic climate change. India, China, and the United States all fall within this special group. The international harmonization of the adoption and implementation of the Polluter Pays Principle in the environmental law and policy regimes of these three States remains elusive, however, which substantially undermines its goals globally.

In India, the Union Government identified the Polluter Pays Principle as an essential vehicle for integrating environmental considerations into government decision-making more than twenty years ago. It took the Indian Supreme Court, however, in a characteristically activist move, to recognize the principle as a part of Indian law a few years later, albeit in expanded form. Unfortunately, the polluters in the seminal case succeeded in delaying the execution of the Court's final judgment for fifteen years, which highlights how India's unique legal culture and institutions can be as much a hindrance as a help in ensuring that even the Indian variant of the Polluter Pays Principle is implemented effectively.

In China, the Central Government has derived from the Polluter Pays Principle the principle of "who pollutes, who treats," which purportedly serves as one of the pillars of China's environmental law and policy regime. As implemented, the pollution discharge fee system that China has developed to operationalize this derivative expands the Polluter Pays Principle in some respects, but contracts it in others, the net effect being to neutralize its effectiveness as a sustainable

development strategy. Essential elements of the Chinese legal tradition, as well as an institutionalized devolution of power from the Central Government to local governments in recent decades, which has mobilized cultural norms of behavior at the local level, have played crucial roles in producing this result.

In the United States, neither the Federal Government's principal pollution control statutes nor the federal statute that declares a national environmental policy claim to embrace the Polluter Pays Principle per se. Moreover, to the extent that the U.S. environmental law and policy regime embraces the principle implicitly, it also does so inconsistently. The institutional fragmentation of the federal law- and policy-making process, in which special interest groups in civil society play an especially influential role, has produced an environmental law and policy regime that exempts certain types of pollution from some of its most important requirements for reasons that undermine the spirit, if not the letter, of the Polluter Pays Principle. The rise of traditional conservatism as a potent political force nationally in recent decades has helped to perpetuate, if not to exacerbate, this result.

As the examples of India, China, and the United States suggest, harmonizing the adoption and implementation of the Polluter Pays Principle as a global sustainable development strategy in a critical mass of States is at least as much a political and legal challenge as an economic one, even taking into account the special economic circumstances of less developed countries. The political and legal constraints that have blocked this harmonization to date are State-specific, and have both institutional and cultural dimensions. The most likely prescription for overcoming these constraints is sustainability leadership, not in the form of mere calls for economic rationality or the mustering of political will, but in the form of the acquisition and deployment of the institutional and cultural knowledge and skills needed to work each of the relevant municipal law- and policy-making and -implementation systems strategically in order to achieve the desired result.

Keywords: China, environmental law and policy, India, Polluter Pays Principle, United States

Introduction

The Polluter Pays Principle made its international debut in 1972 in a recommendation by the Organisation for Economic Co-operation and Development ("OECD") to its member states on the international aspects of environmental policies (OECD Council, 1972). Fifteen years later, the World Commission on Environment and Development ("WCED") recognized it as an economic strategy for achieving sustainable development (WCED, 1987, pp. 220-21). The Polluter Pays Principle requires polluters to bear the costs of the pollution prevention and control measures imposed by public authorities to achieve or to maintain an acceptable level of environmental quality, including the costs of environmental restoration measures, with narrowly defined exceptions (OECD Council, 1972, annex ¶¶ 4-5; OECD Council, 1974, ¶¶ II(2)-(4), III(2)). Its goals are to encourage the rational use and better allocation of scarce environmental resources and to avoid distortions in international trade and investment by ensuring that the costs of goods and services that cause pollution when produced or consumed reflect the costs of the pollution prevention and control measures required by public authorities (see OECD Council, 1972, annex ¶ 4; OECD Council, 1974, ¶ I(3)). The Polluter Pays Principle does not require polluters to internalize the costs of pollution that public authorities choose to permit, however, and thus does not require polluters to compensate third parties for any injuries caused by that pollution (OECD, 1975, p. 6; cf. OECD Council, 1972, annex ¶ 3). Although the principle implicitly acknowledges the possibility that developing countries might face special challenges in implementing its requirements, it does not elaborate on what those challenges might be (see OECD Council, 1972, annex ¶ 1; OECD Council, 1974, ¶ I(2)).

If the Polluter Pays Principle is to achieve its economic goals globally, and thus to function effectively as a global sustainable development strategy, then it must be adopted and implemented effectively by a critical mass of States, especially the States that have the world's biggest economies or that stand out for the size of their current or likely future contributions to global environmental challenges such as anthropogenic climate change. India, China, and the United States all fall within this special group. The international harmonization of the adoption and implementation of the Polluter Pays Principle in the environmental law and policy regimes of these three States remains elusive, however, which substantially undermines its effectiveness as a global sustainable development strategy.

Parts I, II, and III of this article explore the adoption and implementation of the Polluter Pays Principle in the environmental law and policy regimes of India, China, and the United States, respectively, with an emphasis on how indigenous institutional and cultural factors have diverted it from its intended goals in all three jurisdictions, even to the extent that it has been adopted and implemented explicitly, thus undermining the principle's effectiveness as a global sustainable development strategy. This article concludes by reflecting on some of the lessons to be learned from the disparate fates of the Polluter Pays Principle in the environmental law and policy regimes of these three jurisdictions, and the implications of those lessons for the leadership strategies needed to enhance the principle's effectiveness as a means of achieving sustainable development globally.

I. The Polluter Pays Principle in India

In India, the Union Government identified the Polluter Pays Principle as an essential tool for integrating environmental considerations into government decision-making more than twenty years ago. In 1992, in its Policy Statement for the Abatement of Pollution, the Ministry of Environment and Forests resolved to "integrate environmental considerations into decision making at all levels," including by "ensur[ing] that the polluter pays for the pollution and control arrangements" needed to achieve the Union Government's broader goal of "harmonis[ing] economic development and environmental imperatives" in all sectors of the economy (Ministry of Environment & Forests, 1992, §§ 2.6, 3.3). It took the Indian Supreme Court, however, in a characteristically activist move, to recognize a variant of the Polluter Pays Principle as a part of Indian law a few years later (see Indian Council for Enviro-Legal Action v. Union of India, 1996, ¶¶ 57-67; Vellore Citizens Welfare Forum v. Union of India, 1996, ¶¶ 12-14). In doing so, the Court transformed the Polluter Pays Principle from a policy design principle intended merely to force polluters to internalize the costs of pollution prevention and control measures required by public authorities, including the costs of environmental restoration, into a rationale for imposing strict liability at common law for the costs of restoring damage to the environment and of compensating third parties for environmental injuries caused by hazardous or inherently dangerous activities. The polluters in the seminal case succeeded in delaying the execution of the Court's final judgment for more than fifteen years, however, which highlights how India's unique legal culture and institutions can be as much a hindrance as a help in ensuring that even the Indian variant of the Polluter Pays Principle is implemented effectively (cf. Indian Council for Enviro-Legal Action v. Union of India, 2011).

The Polluter Pays Principle made its debut as a part of Indian law in *Indian Council for Enviro-Legal Action v. Union of India* (1996), otherwise known as the *Bichri Industrial Pollution Case*. In that case, an environmental interest group acting in the public interest sought a judicial writ that would provide relief from the contamination of groundwater and soil under and around the small, agricultural village of Bichri in the State of Rajasthan caused by the unlawful disposal by several chemical companies of thousands of metric tons of untreated, highly toxic sludge and thousands of cubic meters of untreated, toxic process waste waters (Indian Council for Enviro-Legal Action v. Union of India, 1996, ¶¶ 1-5, 51-54, 69(I)). The respondents to the petition included the Union Government, the Government of the State of Rajasthan, the Rajasthan pollution control board, and the chemical companies themselves (see ibid., ¶ 6). The Supreme Court interpreted the petition as a request for the Court to use its writ authority under Article 32 of the Indian Constitution to compel the governmental respondents to fulfill their statutory duties with respect to the prohibited disposal practices on the ground that their failure to do so undermined the villagers' fundamental right to life as guaranteed by Article 21 of the Indian Constitution (see ibid., ¶ 55; cf. INDIA CONST. art. 21, 32, § 2). After a lengthy analysis of the facts and the law, the Court held that Article 21 had been violated, ordered the offending plants to be closed down, directed the Union Government to carry out the necessary remedial measures and the chemical companies to pay for them, and noted that the villagers or any organization acting on their behalf remained free to pursue a claim for damages in the appropriate civil court (Indian Council for Enviro-Legal Action v. Union of India, 1996, ¶¶ 55, 70(1)-(3)).

The Supreme Court's decision rested in part on its recognition of the Polluter Pays Principle as a part of Indian law, but only after the Court also had concluded on the basis of the precedent established by an earlier case that the chemical company respondents were strictly liable for the harm caused by their waste disposal practices (see ibid., ¶¶ 57-66). In the earlier case -- commonly known as the *Oleum*

Leak Gas Case -- the Court held that a business enterprise engaged in a hazardous or inherently dangerous activity is strictly liable for any harm caused thereby, whether or not negligence is involved, and without regard to the exceptions to strict liability recognized historically by the English common law (Mehta v. Union of India, 1987, ¶ 31). The Court relied on its decision in the *Oleum Gas Leak Case* to hold in the *Bichri Industrial Pollution Case* that the chemical company respondents were strictly liable for the harm caused by their actions, and therefore were required to remove the pollutants remaining in the contaminated area and to defray the costs of restoring the soil and ground water, obligations which the Union Government had the statutory power to enforce (see Indian Council for Enviro-Legal Action v. Union of India, 1996, ¶ 66). The Court also purported to hold on the basis of its decision in the *Oleum Gas Leak Case* that the chemical company respondents were strictly liable to compensate the Bichri villagers for the harm caused to them (see ibid.), but ostensibly declined to express a view on whether the Court's writ jurisdiction gives the Court the power to require private parties to pay damages in an otherwise appropriate situation as part of relief granted against the government (see ibid., ¶ 60 n.).[1]

After addressing the strict liability issue, the Court in the *Bichri Industrial Pollution Case* went on to offer the Polluter Pays Principle as an alternative rationale for holding the chemical companies liable for the costs of remediation. First, the Court quoted a lengthy passage from a scholarly explanation of the Polluter Pays Principle, which noted among other things that "'the precise scope of the principle and its implications for those involved in past, or potentially polluting activities have never been satisfactor[il]y agreed'" (Indian Council for Enviro-Legal Action v. Union of India, 1996, ¶ 67 (quoting Shelbourn, 1994)). Then the Court concluded on the basis of the quoted passage that, "according to this principle, the responsibility for repairing the damage is that of the offending industry" (ibid.). Finally, the Court went on to declare that the Polluter Pays Principle was "stated in absolute terms in the Oleum Gas Leak Case," and reaffirmed that "[t]he law declared in [that case] is the law governing this case" (ibid., ¶ 69(V)).

Six months later, in *Vellore Citizens Welfare Forum v. Union of India* (1996) -- otherwise known as the *Tamil Nadu Tanneries Case* -- the Indian Supreme Court solidified the status of its expanded interpretation of the Polluter Pays Principle as a part of Indian law. In that case, an organization acting in the public interest petitioned for judicial relief from the discharge of untreated industrial effluents by tanneries and other industrial enterprises in the State of Tamil Nadu (Vellore Citizens Welfare Forum v. Union of India, 1996, ¶ 1). The Court disposed of the petition in part by requiring the Union Government to implement the Polluter Pays Principle by developing and supervising the implementation by the State Government of an environmental restoration plan; by recovering from the polluters the costs of restoring the environment and of compensating the individuals and families harmed, as well as certain fines; and by disbursing the compensation to the designated recipients (see ibid., ¶¶ 27(1)-(3), (6)-(7)). In doing so, the Court affirmed its expanded interpretation of the Polluter Pays Principle as articulated in the *Bichri Industrial Pollution Case*, claiming that it was implicit in an array of constitutional, statutory, and common law principles already embedded in Indian law, and linked it firmly to the policy goal of sustainable development.

The Court first rejected the traditional view that "development and ecology" are incompatible, and identified the Brundtland Commission's sustainable development concept as the answer to the perceived conflict between the two (see ibid., ¶ 10). The Court then identified the Polluter Pays Principle as one of the "essential features" of sustainable development (ibid., ¶ 11). As if acknowledging its earlier expansion of the Polluter Pays Principle in the *Bichri Industrial Pollution Case*, the Court went on to define the principle "as interpreted by this Court" to mean that "the absolute liability for harm to the environment extends not only to compensate the victims of pollution but also [to] the cost of restoring the environmental degradation" (ibid., ¶ 12). The Court pointed to its decision in the *Bichri Industrial Pollution Case* as having held the Polluter Pays Principle to be a "sound principle" (ibid.), and offered three grounds for accepting it as a part of Indian law.

First, the Court asserted that the Polluter Pays Principle already had been "accepted as part of the law of the land" as illustrated by Articles 21, 47, 48A, and 51A(g) of the Indian Constitution, and by the many environmental statutes enacted since independence, especially the Water (Prevention and Control of Pollution) Act, 1974; the Air (Prevention and Control of Pollution) Act, 1981; and the Environment (Protection) Act, 1986 (see Vellore Citizens Welfare Forum v. Union of India, 1996, ¶¶ 13-14, 18-19, 21; cf. ibid., ¶ 20). Article 21 of the

Indian Constitution, which was the only judicially enforceable constitutional provision cited by the Court (cf. INDIA CONST. arts. 32, 37; Advisory Panel on Effectuation of Fundamental Duties of Citizens, 2001, ¶ 4.1.2), merely declares that no one shall be deprived of life or personal liberty except in accordance with procedures established by law (INDIA CONST. art. 21). None of the unenforceable constitutional provisions cited by the Court invokes the Polluter Pays Principle either. Article 47 directs the State to raise the nutritional level and the standard of living of the Indian people, and to improve public health (ibid. art. 47). Article 48A directs the State to protect and to improve the environment, and to safeguard India's forests and wildlife (ibid. art. 48A). Article 51A(g) imposes fundamental duties on every Indian citizen to protect and to improve the natural environment, and to have compassion for living creatures (ibid. art. 51A(g)).

The link that the Court claimed to perceive between the Polluter Pays Principle and the cited environmental statutes is similarly obscure. The Environment (Protection) Act, 1986 is a framework statute that delineates in relatively general terms the environmental powers and duties of government and the related obligations of private parties. The air and water pollution statutes established various government boards to implement a relatively conventional pollution prevention and control regime, including the prohibition of certain acts that would cause or would contribute to air or water pollution (see Air (Prevention and Control of Pollution) Act, 1981; Water (Prevention and Control of Pollution) Act, 1974). Like the constitutional provisions cited by the Court, none of these statutes refers to the Polluter Pays Principle per se.

The Court supplemented its creative interpretation of these enactments with an aspirational appeal to customary international law. Once the Polluter Pays Principle is accepted as a part of customary international law, the Court reasoned (thus implicitly acknowledging that the principle has not been accepted as such (cf. Guruswamy, 2003, p. 553)), then it also could be accepted as a part of Indian law given the "almost accepted proposition of law" that any customary international legal rule not inconsistent with municipal law must be considered to be a part of the latter, and to be binding on the courts (Vellore Citizens Welfare Forum v. Union of India, 1996, ¶ 15).

Finally, the Court invoked the English common law. The "inalienable common law right of [a] clean environment," the Court asserted, is the source of the individual's "right to fresh air, clean water and [a] pollution free environment" protected by the various constitutional and statutory provisions to which the Court already had referred (ibid., ¶ 16). In support of this claim, the Court quoted two passages from Blackstone's classic commentaries on the English common law (see ibid.; cf. Blackstone, 1899, pp. 1012-13). The quoted passages refer to the tort of private nuisance, however, which in general terms is merely a wrongful interference with a person's interest in the private use and enjoyment of land (see Black's Law Dictionary, 1979, p. 961). The Court then pointed out that the Indian legal system was founded on the British common law, and concluded on that basis that "the right of a person to [a] pollution free environment," which the Court apparently equated with the Polluter Pays Principle, "is a part of the basic jurisprudence of the land" (Vellore Citizens Welfare Forum v. Union of India, 1996, ¶ 17).

Thus did the Indian Supreme Court recognize and solidify as a part of Indian law an interpretation of the Polluter Pays Principle much broader than the OECD's original formulation. As articulated by the OECD, the principle merely requires polluters to bear the costs of the pollution prevention and control measures imposed by public authorities, including the costs of environmental restoration measures, with narrowly defined exceptions (see OECD Council, 1972, annex ¶¶ 4-5; OECD Council, 1974, ¶¶ II(2)-(4), III(2)). The Polluter Pays Principle does not require polluters to internalize the costs of pollution that public authorities choose to permit, as the OECD specifically pointed out, and thus does not require third parties to be compensated for any injuries caused by that pollution (OECD, 1975, p. 6; cf. OECD Council, 1972, annex ¶3). In the *Bichri Industrial Pollution Case* and the *Tamil Nadu Tanneries Case*, however, the Indian Supreme Court claimed to discern in the principle a requirement that polluters be held strictly liable not merely for the costs of restoring environmental damage caused by hazardous or inherently dangerous activities -- whether legal or illegal -- but for the compensation of the victims of the environmental harm caused by those activities (see, e.g., Vellore Citizens Welfare Forum, 1996, ¶ 22). The Court ultimately justified this expansive interpretation of the Polluter Pays Principle by referring to several constitutional and statutory provisions and a common law tort that on their face seem to have little to do with the Polluter Pays Principle per se, and by referring to the

possibility that the principle might become a part of customary international law in the future (see, e.g., ibid., ¶¶ 12-17, 22).

This result is just one manifestation of the Supreme Court's transformation from an institution barely distinguishable in functional terms from its colonial antecedents into an institutionalized expression of the uniquely Indian cultural identity forged in the crucible of India's independence struggle (cf. Austin, 1966, p. 164). This transformation occurred gradually over the course of decades (see Sathe, 2002, pp. 4, 6), but essentially was complete by the time the Court decided both the *Bichri Industrial Pollution Case* and the *Tamil Nadu Tanneries Case* in 1996, and is generally consistent with the socially revolutionary role intended for the Court by the Constituent Assembly that framed the Indian Constitution (cf. Austin, 1966, p. xi).

The Assembly was broadly representative of Indian society (see ibid., pp. 8-17), and envisioned the courts of an independent India as a weapon in the social revolution that had been intertwined with the national revolution as an integral part of the independence movement (ibid., p. 164; cf. ibid., pp. xii, 26). Although independence would bring the national revolution to an end, the social revolution would continue, the Assembly believed, and must continue if India's independence -- and, therefore, its national identity -- were to be preserved (see ibid., pp. 26-27; cf. ibid., pp. xi, 45). The goal of the social revolution was to lift up the impoverished masses to fulfill their potential as human beings, regardless of caste, religion, or other social circumstances (see ibid., pp. xi, 26, 46). Its genesis lay not merely in the long struggle of the Indian people against their colonial masters, but in British efforts to reinforce the age-old social stratification of Indian society as a means of maintaining control (see ibid., p. 164). In dedicating itself to drafting a Constitution that would be capable of achieving this ambitious goal (see ibid., pp. xi, 33), the Assembly anticipated that the Supreme Court would be a vanguard institution (see, e.g., ibid., p. 169). The Court did not fulfill its intended role immediately after independence, however, undoubtedly in part because of the judicially conservative, essentially British cultural legacy that the Indian bench had inherited from the colonial Raj. The Court's eventual transformation along socially revolutionary lines has had both institutional and cultural dimensions, at least three of which are manifest in the Court's expansive interpretation of the Polluter Pays Principle.

The first of these dimensions is the Court's enthusiastic embrace of the power of judicial review.[2] The courts in common law jurisdictions are much more likely than their civil law counterparts to have this power (see Kempin, 1990, p. 16). Although English courts -- which gave birth to the common law tradition soon after the Norman Conquest -- do not have it, at least when it comes to legislative acts (Sathe, 2002, pp. 1, 29-30; cf. Glendon, Carozza, & Picker, 2008, pp. 157-58), India's British judges embraced the power of judicial review soon after the imposition of the colonial Raj as a bulwark against the Indian legislature's disregard of the limits imposed on it by the constituent acts of the British Parliament (see Sathe, 2002, pp. 1, 29-30; cf., e.g., Empress v. Burah & Book Singh, 1878, ¶¶ 26-46). At the same time, the British tradition of parliamentary supremacy left these judges reluctant to strike down colonial legislation unless it clearly contravened the constituent acts, although judges exercised much less restraint when reviewing the acts of the Indian executive (Sathe, 2002, pp. 1-2, 32).

The framers of the Indian Constitution considered the power of judicial review to be essential if the courts were to function as intended after independence (Austin, 1966, p. 165). They were especially interested in conferring this power on the Supreme Court so that it could play its vital role in advancing the social revolution, largely by using its writ jurisdiction to protect the Fundamental Rights guaranteed by the Constitution (see ibid., pp. 67-68, 165, 169, 173; cf. ibid., pp. 170, 171). The Court interpreted its power of judicial review narrowly in the years immediately after independence (see, e.g., Gopalan v. Madras, 1950; but cf. Sathe, 2002, p. 4), but since then has adopted an increasingly expansive conception (see, e.g., Sathe, 2002, pp. 6-9). This expansive conception manifests itself in part in the form of the Court's willingness to prescribe innovative remedies for violations of the Constitution's Fundamental Rights provisions (see ibid., pp. 198-99, 203, 232; cf. INDIA CONST. art. 32(2)). One of these remedies is the award of compensation to victims in appropriate cases, especially when they are poor and disadvantaged, although if the compensation is merely a token in recognition of the seriousness of the offense, then it does not preclude the victims from seeking full compensation in an ordinary tort suit (see Sathe, 2002, pp. 233-35; cf. Mehta v. Union of India, 1987, ¶¶ 2-3, 7).

This aspect of the Supreme Court's transformation

along socially revolutionary lines was on full display in the *Bichri Industrial Pollution Case* and the *Tamil Nadu Tanneries* Case. In the former, although the Court held in part that, on the basis of its decision in the *Oleum Gas Leak Case*, the chemical company respondents were strictly liable to compensate the villagers for the harm caused to them, the Court also assumed for purposes of argument that it was not authorized by its writ jurisdiction over Fundamental Rights violations to prescribe remedies as against private parties (see Indian Council for Enviro-Legal Action v. Union of India, 1996, ¶¶ 55, 57-60, 66).[3] In its directions to the respondents, the Court merely pointed out that the injured villagers or any organization acting on their behalf were free to seek compensation from the polluters in an ordinary civil suit (ibid., ¶ 70(3)). Six months later, the Supreme Court expressed no such reluctance. In the *Tamil Nadu Tanneries Case*, decided in part on the basis of the precedent established by the *Bichri Industrial Pollution Case* regarding the relevance of the Polluter Pays Principle to the strict liability of polluters for the harm caused by their pollution, the Court ordered the Union Government to collect from the polluters and to pay over to the injured villagers compensation for their injuries (see Vellore Citizens Welfare Forum v. Union of India, 1996, ¶¶ 12, 27(1)-(3), (6)).

The second relevant aspect of the Court's transformation along socially revolutionary lines is its liberalization of the requirements for standing to sue.[4] In order to satisfy the standing to sue doctrine in U.S. federal courts, for example, the plaintiff must have suffered or to be about to suffer imminently a concrete, particularized injury that is traceable to the defendant's conduct and is likely to be redressed by a judicial decision in the plaintiff's favor (Lujan v. Defenders of Wildlife, 1992, pp. 560-61). A mere interest in the subject matter of the litigation as a representative of the public is not enough (Sierra Club v. Morton, 1972). Over time, the Indian Supreme Court has relaxed its own standing requirements (see Sathe, 2002, pp. 16-17), which in their most liberal guise now permit even the Court itself to initiate litigation (*suo motu*), including environmental litigation (see, e.g., Mehta v. Nath, 1997, pmbl. para. 2; cf. Sathe, 2002, pp. 202-03). In relevant part, the Court's liberalization of the requirements for standing to sue also permits socially activist organizations to invoke the Court's jurisdiction on behalf of poor or otherwise marginalized social groups who lack the knowledge and resources to do so on their own (see, e.g., Sathe, 2002, p. 17). This development has spawned a voluminous genre of "public interest" or "social action" litigation (see, e.g., ibid., pp. 18-19, 215, 218, 224-27; cf. ibid., p. 208), including both the *Bichri Industrial Pollution Case* and the *Tamil Nadu Tanneries Case*. Both cases were initiated by socially activist organizations on behalf of groups of poor and powerless villagers whose meager livelihoods were threatened by rich and powerful industrial interests (see, e.g., Indian Council for Enviro-Legal Action v. Union of India, 1996, ¶¶ 1, 4, 70(2); Vellore Citizens Welfare Forum v. Union of India, 1996, ¶ 1, para. 1; cf. Sathe, 2002, pp. 18-19)).

The Court's liberalization of the requirements for standing to sue is in part a cause of and in part a consequence of India's emergent rights-focused culture (cf. Guha, 2007, p. 117), which has been institutionalized most obviously in judicial enforcement of the Fundamental Rights provisions that the framers of the Indian Constitution intended to function as a cornerstone of the social revolution (cf. Austin, 1966, pp. 50, 68). The vanguard role that the framers intended the Court to play in that revolution has provided much of the impetus for the Court to relax the traditional barriers to standing to sue (see Sathe, 2002, p. 202; cf. Austin, 1966, p. 169). The fundamental right to life guaranteed by Article 21 of the Indian Constitution, alleged violations of which are sufficient to invoke the Supreme Court's writ jurisdiction,[5] was at the center of the *Bichri Industrial Pollution Case* (see Indian Council for Enviro-Legal Action v. Union of India, 1996, ¶ 55; cf. INDIA CONST. art. 32(1)-(2)). In the *Tamil Nadu Tanneries Case*, the Court placed that right in the forefront of its argument that the Polluter Pays Principle has been implicit in Indian law for some time (see Vellore Citizens Welfare Forum v. Union of India, 1996, ¶¶ 13-14).

The third relevant aspect of the Supreme Court's transformation along socially revolutionary lines is its freewheeling style of jurisprudence. By definition, courts in common law jurisdictions have the power not only to interpret enacted law (see, e.g., Glendon et al., 2008, pp. 277-78, 288-94; Kempin, 1990, pp. 15-16, 17, 116-19), but to make law on their own, which is known as common law (see, e.g., Holmes, 1881/1963). The principle of *stare decisis* constrains any inclination that these courts otherwise might have to use this power too innovatively, however, by requiring judges to adhere to judicial precedents in pending cases, albeit more so in some common law jurisdictions than in others (see, e.g., Glendon et al., 2008, pp. 278-79; cf. Black's Law

Dictionary, 1979, p. 1261). The Indian Supreme Court's willingness to make new law is almost in a class by itself, however, including -- or perhaps especially -- in environmental cases. Even among courts in common law jurisdictions, the Indian Supreme Court stands out for the extent to which it seems to feel free to seek out and to incorporate into Indian law fully formed legal principles from other jurisdictions, whether in their original or expanded form (see, e.g., Mehta v. Nath, 1997; cf. Barresi, 2012b, pp. 56-57, 62-63); to engage in leaps of logic when interpreting judicial precedents, including from other jurisdictions (see, e.g., Mehta v. Nath, 1997, ¶ 33; cf. Barresi, 2012b, pp. 68-69, 68 n. 187, 69 n. 189); and to engage in equally freewheeling exegeses of the essence and implications of Indian enacted law (see, e.g., M. I. Builders v. Sahu, 1999, ¶ 51; cf. Barresi, 2012b, pp. 57-58, 58 n. 106, 61-62). All three practices were vividly on display in one or the other or both of the *Bichri Industrial Pollution Case* and the *Tamil Nadu Tanneries Case*. In general, the result of the Supreme Court's unconstrained jurisprudential style has been to protect the poor and marginalized masses from rich and powerful elites, as these two cases show. This result is not necessarily inconsistent with the views of the Constitution's framers, who seem to have intended the Supreme Court not merely to play a leading role in the social revolution in the immediate post-independence period, but to ensure that Indian law would remain responsive to the changing needs of that revolution over time (cf. Austin, 1966, pp. 169, 175).

Notwithstanding the Supreme Court's recognition of an expansive interpretation of the Polluter Pays Principle as a part of Indian law, the impact of that interpretation has been limited by the epic delays to which the judicial process in India is prone (cf. Galanter, 1986, p. 296; Rosencranz & Yurchak, 1996, p. 517). One study revealed that in tort cases, for example, plaintiffs were forced to wait almost thirteen years on average for a final judicial resolution of their claims (Galanter, 1986, p. 296). Procedural rules with colonial-era roots that permit determined defendants to file numerous interlocutory appeals are partly to blame for this permissiveness (see ibid., p. 297). Indian courts' prolific use of their own power to issue writs and other types of orders in disposing of these appeals also plays an important role, however, as the Supreme Court itself acknowledged in the *Bichri Industrial Pollution Case* (see Indian Council for Enviro-Legal Action v. Union of India, 1996, ¶ 70(6)).[6] That case dragged on for fifteen years before the Supreme Court finally disposed of the last interlocutory appeal (see Indian Council for Enviro-Legal Action v. Union of India, 2011, ¶¶ 1, 231). Thus, in view of the principle that justice delayed is justice denied (cf. Smith, 1880, p. 361 (quoting William Ewart Gladstone in the British Parliament on March 16, 1868)), some of the same uniquely Indian institutional and cultural factors that have given rise to a judicial interpretation of the Polluter Pays Principle much broader than the OECD's original formulation have conspired to limit its impact as applied.

II. The Polluter Pays Principle in China

In China, the Central Government has derived from the Polluter Pays Principle the principle of "who pollutes, who treats," which purportedly serves as one of the pillars of China's environmental law and policy regime (see Zhang Kunmin & Jin Ruilin, 1992, pp. 80-84). Although China does subsidize the pollution control efforts of state enterprises (see ibid., pp. 81-82, 83-84), its status as a less developed country arguably permits it to do so by the terms of the Polluter Pays Principle itself (see OECD Council, 1972, annex ¶ 1; OECD Council, 1974, ¶ I(2)). What has diverted the Polluter Pays Principle from its intended function in China is less this qualification of the principle's requirements in a less-developed-country context than the ineffectiveness of the main legal strategy that China has adopted to implement those requirements.

In accordance with the Chinese derivative of the Polluter Pays Principle, the permanent version of China's Environmental Protection Law (*falü*),[7] which establishes the basic parameters for the elaboration of China's environmental law regime (cf. Zhang Kunmin & Jin Ruilin, 1992, pp. 1, 37-38), requires polluters to take "responsibility" for preventing and controlling their pollution (Environmental Protection Law of the People's Republic of China, 1989, arts. 24, 28). It does so in part by imposing fees for any pollutant discharged in excess of the amount permitted by law, the revenues from which must be used to finance pollution prevention and control measures (ibid. art. 28). On a similar note, China's Solid Waste Law asserts that the State implements the principle "that any entity or individual causing [pollution by solid wastes] shall be responsible for it in accordance with law," and declares that "[t]he manufacturers, sellers, importers and users shall be responsible for the prevention and control of solid wastes [sic] pollution produced thereby" (Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Wastes,

2004, art. 3, para. 1, art. 5). These formulations of the Chinese derivative of the Polluter Pays Principle substantially improve upon the formulation in the trial version of the Environmental Protection Law, which the permanent version superseded after the trial period (compare Environmental Protection Law of the People's Republic of China (for Trial Implementation), 1979, with Environmental Protection Law of the People's Republic of China, 1989, art. 47). In accordance with the principle of "whoever causes pollution shall be responsible for its elimination," the trial version of the statute purported to require historical sources of pollution to "make plans to actively eliminate" it, but also permitted them to apply to the authorities for approval to transfer the polluted property to someone else or to move their operations elsewhere (Environmental Protection Law of the People's Republic of China (for Trial Implementation), 1979, art. 6, para. 2).

In 1982, the State Council[8] promulgated provisional regulations for implementing the pollution discharge fee system through which China implements its derivative of the Polluter Pays Principle (Zhang, 2008, pp. 24-25). In 2003, administrative regulations (*fagui*) expanded this system beyond the scope contemplated by the permanent version of the Environmental Protection Law by imposing fees not only on discharges of pollutants that exceed legal limits, but also on discharges that comply with them (Guo Jinlong, 2012, p. 45; Wang Jinnan, n.d.). These regulations also changed the basis for calculating the fees in ways likely to make them reflect more closely the total environmental impact of any given discharge (see Zhang, 2008, pp. 25-26). The regulations implementing this system require that some of the fees collected be returned to some sources of pollution to finance pollution control measures (ibid., p. 26). The rest of the fees remain available to finance the work of the local Environmental Protection Bureaus ("EPBs") (ibid.),[9] which are charged by statute with enforcing all environmental laws in China (Song Ying, 2002, p. 231).

Unfortunately, this discharge fee system has not been very effective as a means of implementing the Chinese derivative of the Polluter Pays Principle. At least on the surface, three factors have played pivotal roles in producing this result. First, the pollution discharge fee rates generally have been set too low to motivate polluters to reduce their pollution, which sometimes leads even some EPBs to view the payment of fees as a legitimate alternative to complying with the discharge limits (Zhang, 2008, pp. 27-28). Second, although the 2003 State Council regulations reaffirm the Central Government's longstanding policy requiring all non-tax fees collected by government agencies to be paid over to local finance bureaus instead of being retained by the agencies themselves, and although supplementary rules issued jointly by the Central Government's Ministry of Finance and State Environmental Protection Administration[10] further prohibit the local finance bureaus from basing the annual allocations of funds to EPBs on the amount of fees and fines collected, those fees and fines have become the primary source of EPB revenue throughout China (Zhang, 2008, pp. 26-27, 28-29). Third, EPBs rarely collect the full amount of the fees for which polluters are liable, notwithstanding the fact that the fee rate is so low, either because of the intervention of officials in the local governments of which the EPBs are a part or as a result of informal negotiations between polluters and the EPBs themselves (ibid., pp. 29-31).

Beneath these superficial problems, however, lurk two, more fundamental institutional and cultural factors. The first is the Chinese legal tradition. A legal tradition is "a set of deeply rooted, historically conditioned attitudes about the nature of law, about the role of law in the society and the polity, about the proper organization and operation of a legal system, and about the way law is or should be made, applied, studied, perfected, and taught" (Merryman & Pérez-Perdomo, 2007, p. 2). Legal traditions are thus cultural phenomena, which like all cultural phenomena are remarkably enduring over time (cf. Gerring & Barresi, 2009, p. 252).

The Chinese legal tradition predates the oldest Western legal tradition by as many as several centuries, and has had as much influence throughout East Asia as its Western counterparts have had elsewhere (see Head & Wang, 2005, pp. 3-4).[11] Its historical trajectory is inseparable from that of the form of Confucianism out of which it emerged. This form of Confucianism -- known to scholars as Imperial Confucianism -- was synthesized by the scholar Dong Zhongshu (Tung Chung-shu) (ca. 179-104 B.C.E.) during the golden age of the Former Han Dynasty some 2100 years ago (see Head & Wang, 2005, pp. 78-79, 86-87). It implies a distinctly Confucian legal tradition, which rests on a basic moral distinction between Confucian behavioral norms -- or *li* -- and law. The *li* are not just morally valid, but universally so, because they were derived by the ancient scholars from human nature and the cosmic order (Bodde & Morris, 1973, pp. 20-21).

Law has no moral validity, however, because it was fashioned out of whole cloth by modern humans merely to serve as a source of political power (ibid., p. 21). As a result, unlike in Western legal traditions, in the Confucian legal tradition to resort to the law as a means of maintaining social or political order is tantamount to an admission of moral failure on the part of individuals, society, and the State (see Michael, 1962, pp. 124-26, 128; cf. Reischauer & Fairbank, 1960, p. 84). Law is intended merely to serve as a fallback strategy to restore social and cosmic harmony by punishing the rare social deviant who fails to conform to the *li* (see Bodde & Morris, 1973, pp. 3, 4; Michael, 1962, p. 128). As one would expect in a society steeped in a legal tradition with these features, most of the subjects of the Chinese emperors considered the law to be morally bankrupt, inherently unpleasant, and all but irrelevant to their daily lives (see Reischauer & Fairbank, 1960, p. 84; cf. Bodde & Morris, 1973, pp. 3-4, 5-6; Fairbank, Reischauer, & Craig, 1965, p. 624; Peerenboom, 2002, p. 39).

The form of Confucianism synthesized by Dong Zhongshu remained the official ideology of the Chinese State for more than 2000 years, until shortly before the collapse of the last imperial dynasty in 1912 (see, e.g., Sharman, 1934, pp. 70-71; cf. Fairbank, Reischauer, & Craig, 1965, pp. 639-41). Although efforts to restore this form of Confucianism to official status failed repeatedly during the nominally republican era that followed (see Ch'ên, 1961, pp. 14, 15, 200; Fairbank, Reischauer, & Craig, 1965, pp. 640-41, 646, 649-50, 691-92, 706, 712-13; Fenby, 2004, pp. 246-47, 248; Reinsch, 1922, p. 23; cf. Chiang Kai-shek, 1947, pp. 13-14, 156-57, 186-87, 190-93; Sun Yat-sen, n.d., pp. 41-44), Confucian attitudes toward law persisted at all levels of Chinese society (see Chiang Kai-shek, 1947, p. 203; Reinsch, 1922, pp. 208-09; cf. Chiang Kai-shek, 1947, pp. 209, 214; Fenby, 2004, pp. 184, 232). Their persistence mirrored the persistence of the Confucian behavioral norms that continued to serve as the principal cultural pivot around which the daily lives of most ordinary Chinese people revolved, notwithstanding the rapidly fading salience of their historically important imperial dimensions (cf., e.g., Reinsch, 1922, p. 24). Mao Zedong (Mao Tse-tung) considered Chinese culture to be so suffused with Confucianism, even in Republican China, that long before he proclaimed the founding of the People's Republic in 1949 he resolved to stamp it out (see Mao, 1954, pp. 1, 1 n. 1, 59-60).

Mao's anti-Confucian crusade, which culminated in the chaos of the Cultural Revolution (1966-76), ultimately came to naught (see Chow, 2003, pp. 44-45; Ho, 2006, p. 92). In fact, some of his most recent successors have presided over an official Confucian revival. Hu Jintao (Hu Chin-t'ao), who served as both General Secretary of the Chinese Communist Party's Central Committee (2002-12) and China's President (2003-13), and his Premier Wen Jiabao (Wen Chia-pao) (2003-13), as well as the Communist Party in general, have played crucial roles in bringing this revival about (see Confucius and the Party Line, 2003; Confucius Makes a Comeback, 2007; Kissinger, 2011, pp. 490-91, 563 n. 3). Since 2004, for example, China's Central Government has helped to establish more than 300 Confucius (Kung Fuzi or K'ung-fu-tzu) Institutes at colleges and universities in more than ninety countries worldwide (see, e.g., Liu Chang, 2010). These institutes promote core Confucian values such as benevolence, righteousness, and harmony, if not Confucianism per se, as essential attributes of traditional Chinese culture (see ibid.; Rectification of Statues, 2011). In 2011, the authorities went as far as to erect a huge bronze statue of Confucius in Tiananmen (T'ien-an Men) Square -- within hailing distance of Mao's mausoleum -- before moving it to another location a few months later (Jacobs, 2011; Rectification of Statues, 2011).

Confucian attitudes toward the law have been just as resilient as other key aspects of Confucius's legacy (see Chow, 2003, p. 45; Keller, 1994, pp. 712, 714-15; Yu Xingzhong, 1989, p. 32). As a result, most citizens of the People's Republic are almost as averse to law as a means of resolving disputes or solving social problems as were their imperial ancestors (see, e.g., Keller, 1994, p. 712; Yu Xingzhong, 1989, p. 50). The popularity of the "human-flesh search engine" (*renrou sousuo yinqing*) as a means by which groups of ordinary people punish social deviants by identifying and shaming them online, so as to mobilize others to isolate them socially and to punish them otherwise offline, offers a uniquely digital-age illustration of the extent to which ordinary Chinese people rely on non-legal means to enforce social norms (see Downey, 2010). On a related note, social science survey research also suggests that the extent to which Chinese environmental officials view the policies expressed through China's environmental laws as legitimate is more important in determining the extent to which those officials are likely to enforce the policies than the fact that the latter have been expressed through law (see Lo, Fryxell, &

Wong, 2006, pp. 399, 402, 403). This result is precisely what one would expect in a society with a legal tradition in which law has no inherent moral significance.[12]

Given this cultural milieu, it should be no surprise that polluters and government officials alike routinely flout the requirements of the pollution discharge fee system through which China's environmental laws purport to implement the Chinese derivative of the Polluter Pays Principle. Institutional factors also play a role, however. In a post-Mao pattern that in some ways evokes aspects of China's imperial governance tradition, the Central Government has devolved substantial power to local governments (compare Peerenboom, 2002, pp. 189, 241, with Lubman, 1999, pp. 16-17). This institutionalized devolution of power has mobilized cultural norms of behavior at the local level in ways that have undermined even further the effectiveness of the pollution discharge fee system. Local EPBs rarely collect the full amount of the discharge fees for which polluters are liable, either because officials in the local governments of which the EPBs are a part intervene or as a result of informal negotiations between polluters and the EPBs themselves (Zhang, 2008, pp. 29-31). Local officials intervene in part by adopting policies that establish "enterprise quiet days" (*qiye anjing ri*), which restrict to only a few days per month EPBs' authority to conduct on-site inspections of polluting enterprises that play key roles in the local economy and, thus, in the generation of local tax revenue (ibid., p. 51). Local officials also often set upper limits on the pollution discharge fees that EPBs may collect from such enterprises, or ask EPBs to reduce or to waive both fees and fines (ibid., p. 52). Local policies that seek to lure profitable enterprises from elsewhere in China by promising them reduced pollution discharge fees also commonly play a role in undermining the discharge fee system (see ibid., pp. 52-53). These interventions are partly the result of official policies that reward local officials for pursuing economic growth at almost any cost, notwithstanding the requirements of environmental laws (see Gu & Sheate, 2005; Standaert, 2011; Zhang, 2008, p. 51; cf. Wang Canfa, 2007, p. 171).[13] They also are a function of *guanxi* (*kuanhsi*) and *renqing* (*jench'ing*), however (see, e.g., Zhang, 2008, pp. 30, 53).

Guanxi and *renqing* refer roughly to the interpersonal connections and to the human feelings of obligation and indebtedness, respectively, around which the full spectrum of interpersonal and organizational relationships at all levels of Chinese society has revolved since remote antiquity (see, e.g., ibid., pp. 54-55). Both *guanxi* and *renqing* are also among the extralegal factors that most modern Chinese citizens believe should temper the application of the law, much as their imperial forebears did (cf. Keller, 1994, pp. 714-15). In the context of the pollution discharge fee system intended to implement the Chinese derivative of the Polluter Pays Principle, *guanxi* and *renqing* often motivate local government officials to intervene with EPBs in order to protect particular enterprises from substantial fees and fines, and often motivate EPBs to take into account both the requests of those officials and the pleas of the enterprises themselves in implementing the law (see Zhang, 2008, pp. 55-56). The result is a pollution discharge fee system that in practice bears little resemblance to what the law requires and, thus, undermines its effectiveness as a means of implementing China's derivative of the Polluter Pays Principle.

Thus, China's environmental law and policy regime purports to embrace a derivative of the Polluter Pays Principle that on its face is at least arguably as close to the OECD's original formulation as reasonably could be expected given the special economic challenges faced by less developed countries. A combination of institutional and cultural factors has rendered the Chinese derivative almost wholly ineffective in achieving the goals of the Polluter Pays Principle, however, by almost completely undermining the effectiveness of the pollution discharge fee system through which that derivative is implemented.

III. The Polluter Pays Principle in the United States

Unlike India and China, the United States is an OECD member country, and was an OECD member country when the OECD recommended that its members integrate the Polluter Pays Principle into their environmental policies (see Organization for Economic Co-operation and Development, n.d.). At least one enforcement official in at least one U.S. presidential administration has invoked the Polluter Pays Principle as a rationale for setting the civil penalties imposed in administrative enforcement proceedings high enough to recapture from violators of certain federal environmental statutes the economic benefit of noncompliance (see Libber, 1998, p. 1). Nevertheless, neither the principal U.S. pollution control statutes nor the National Environmental Policy Act, which in precatory language declares a comprehensive national

environmental policy (National Environmental Policy Act of 1969, Pub. L. No. 91-190, § 101, 83 Stat. 852, 852-53 (codified at 42 U.S.C. § 4321)), claim to embrace the Polluter Pays Principle per se. The U.S. Congress has prefaced most of these statutes with declarations of the policies that they were meant to implement,[14] none of which explicitly invokes the Polluter Pays Principle (see Clean Air Act, Pub. L. 88-206, § 1, 77 Stat. 392, 392-93 (1963) (codified as amended at 42 U.S.C. § 7401); Federal Water Pollution Control Act, Pub. L. 92-500, sec. 2, § 101, 86 Stat. 816, 816-17 (1972) (codified as amended at 33 U.S.C. § 1251); Ocean Dumping Act, Pub. L. 92-532, § 2, 86 Stat. 1052, 1052 (codified as amended at 33 U.S.C. § 1401); National Environmental Policy Act of 1969, Pub. L. No. 91-190, § 101, 83 Stat. 852, 852-53 (codified at 42 U.S.C. § 4331); Noise Control Act of 1972, Pub. L. 92-574, § 2, 86 Stat. 1234, 1234 (codified at 42 U.S.C. § 4901); Pollution Prevention Act of 1990, Pub. L. 101-508, tit. VI, subtit. F, § 6602, 104 Stat. 1388-321, 1388-321 (codified at 42 U.S.C. § 13101); Resource Conservation and Recovery Act of 1976, Pub. L. 94-580, sec. 2, § 1003, 90 Stat. 2795, 2798 (codified as amended at 42 U.S.C. § 6902); Surface Mining Control and Reclamation Act of 1977, Pub. L. 95-87, § 102, 91 Stat. 447, 448-49 (codified at 30 U.S.C. § 1202)). Moreover, the pollution control statutes are replete with exceptions or exclusions for certain industries or their products, with the oil and gas extraction, mining, agricultural, and silvicultural industries ranking high on the list (see, e.g., Clean Air Act § 112(n)(4), 42 U.S.C. § 7412(n)(4) (2006); Federal Water Pollution Control Act §§ 404(f)(1)(A), (1)(C), (1)(E), 502(14), 33 U.S.C. §§ 1344(f)(1)(A), (1)(C), (1)(E), 1362(14) (2006); Comprehensive Environmental Response, Compensation and Liability Act § 101(14), 42 U.S.C. § 9601(14) (2006); Resource Conservation and Recovery Act §§ 3001(b)(2), (3)(A)(i)-(ii), (3)(C), 8002(f), (m)-(n), (p), 9001(10)(H), 42 U.S.C. §§ 6921(b)(2), (3)(A)(i)-(ii), (3)(C), 6982(f), (m)-(n), (p), 6991(10)(H) (2006)). If not necessarily inconsistent with the letter of the Polluter Pays Principle, these exceptions and exclusions are at least in tension with its spirit because they are less a reflection of a legislative judgment about environmental hazards than a testament to the ability of special interest groups in civil society to shape the outcomes of the U.S. law- and policy-making process (cf., e.g., Cohen, 1992, pp. 113-28). Pollution from agricultural activities, for example, is the leading known, non-natural source of water-quality impairment of rivers and streams in the United States (see U.S. Environmental Protection Agency, 2002, p. 14 fig. 2.5).

The Comprehensive Environmental Response, Compensation and Liability Act of 1980 ("CERCLA") offers an especially vivid illustration of how institutional and cultural factors have diverted the Polluter Pays Principle from its intended purpose in the United States, even to the extent that the U.S. environmental law and policy regime embraces that principle implicitly. In general, CERCLA holds a broad array of responsible parties liable for the costs of removing, remediating, and otherwise responding to releases or threatened releases of hazardous substances to the environment, even if those releases or threatened releases occurred before enactment of the statute (see, e.g., CERCLA § 107(a), 42 U.S.C. § 9607(a) (2006)). The federal courts have interpreted this liability as strict liability (see, e.g., New York v. Shore Realty Corp., 1985, p. 1042; Violet v. Picillo, 1986, p. 1290; cf. CERCLA § 101(32), 42 U.S.C. § 9601(32) (2006)).[15] They also have interpreted CERLCA liability as joint and several, which means that all of the costs of responding to a given release or threatened release of hazardous substances may be recovered from any responsible party or parties, even if there are one or more other responsible parties (see, e.g., O'Neill v Picillo, 1989, pp. 178-79; United States v. Chem-Dyne Corp., 1983, p. 808). The responsible party or parties from whom the response costs are recovered may seek contribution from any other responsible party or parties for the latter's fair share in a subsequent civil lawsuit (see CERCLA § 113(f), 42 U.S.C. § 9613(f) (2006)).

At first glance, CERCLA might seem to be a robust example of the Polluter Pays Principle in action, especially given its retroactive liability provisions. Two features of the statutory scheme belie this conclusion, however. The first is the so-called "petroleum exclusion" in the statute itself (see CERLCA, Pub. L. 96-510, § 101(14), 94 Stat. 2767, 2769 (codified as amended at 42 U.S.C. § 9601(14))),[16] which as interpreted by the U.S. Environmental Protection Agency ("USEPA") and the federal courts excludes from CERCLA's scope both crude oil and virgin petroleum products (see Knopf, 1993, pp. 4, 14-15, 19-21). Although the Federal Water Pollution Control Act ("FWPCA") and the Oil Pollution Act of 1990 hold responsible parties liable or otherwise impose financial penalties on them for discharges or substantial threats of discharges of oil to certain surface waters or adjoining shorelines, neither of those statutes ever

have applied to discharges of oil onto uplands, unless those uplands happen to be natural resources owned or managed by the Federal Government (see FWPCA, Pub. L. 92-500, sec. 2, § 311, 86 Stat. 816, 862-71 (1972) (codified as amended at 42 U.S.C. § 1321); Oil Pollution Act of 1990, Pub. L. 101-380, §§ 1002-04, 104 Stat. 486, 489-93 (codified as amended at 33 U.S.C. §§ 2702-04)). Similarly, although the leaking underground storage tank provisions added to the Resource Conservation and Recovery Act of 1976 ("RCRA") by the Hazardous and Solid Waste Amendments of 1984 ("HSWA") provide for holding owners and operators of underground storage tanks liable for releases of petroleum to ground water, surface water, or subsurface soils, they do not impose liability for releases of petroleum to the environment in other settings (see HSWA, Pub. L. 98-616, sec. 601(a), §§ 9001(5), 9003, 98 Stat. 3221, 3278, 3279-82 (codified as amended at 42 U.S.C. §§ 6991(8), 6991b); cf. RCRA, Pub. L. 94-580, 90 Stat. 2795 (codified as amended at 42 U.S.C. §§ 6901-6992k)). Thus, neither CERCLA nor its allied statutes requires the polluter to pay for the environmental harm caused by releases or threatened releases of virgin petroleum to upland soils from extraction operations or refineries, or by releases or threatened releases of virgin petroleum products from tanker trucks transporting them throughout the United States, unless the uplands happen to be federally owned or managed resources.

The second feature of CERCLA's statutory scheme that impairs its effectiveness as a vehicle for implementing the Polluter Pays Principle is the financial mechanism for paying for certain types of response actions. The Hazardous Substance Response Revenue Act of 1980 ("HSRRA"), which was enacted in tandem with CERCLA, levied environmental taxes on refiners, users, and exporters of domestic crude oil; importers of petroleum products; and the manufacturers, producers, and importers of certain chemicals (HSRRA, Pub. L. 96-510, tit. II, subtit. A, sec. 211(a), §§ 4611, 4661, 94 Stat. 2796, 2797-98, 2798-99 (codified as amended at 26 U.S.C. §§ 4611, 4661)). These taxes were paid into a revolving Hazardous Substance Response Trust Fund (HSRRA, Pub. L. 96-510, tit. II, subtit. B, §§ 221(a), (b)(1)(A), 94 Stat. 2796, 2801 (codified at 42 U.S.C. §§ 9631(a), (b)(1)(A) (repealed 1986))), which in 1987 became the Hazardous Substance Superfund, otherwise known simply as "the Superfund" (see Superfund Revenue Act of 1986, Pub. L. 99-499, tit. V, §§ 517(c), (e), 100 Stat. 1760, 1774; cf. ibid., sec. 517(a), §§ 9507(a), (b)(1), 100 Stat. 1760, 1772 (codified at 26 U.S.C. §§ 9507(a), (b)(1))). In relevant part, the tax revenue served as seed money to pay for the Federal Government's responses to releases or threatened releases of hazardous substances to the environment in the first instance, with the Superfund being replenished with the response costs subsequently recovered from the responsible parties under CERCLA's liability provisions (see HSSRA, Pub. L. 96-510, tit. II, subtit. B, §§ 221(b)(1)(B), (c)(1)(A), 94 Stat. 2796, 2801 (codified at 42 U.S.C. §§ 9631(b)(1)(B), (c)(1)(A) (repealed 1986)); Superfund Revenue Act of 1986, Pub. L. 99-499, tit. V, sec. 517, §§ 9507(b)(2), (c)(1)(A)(i), 100 Stat. 1760, 1772; cf. CERCLA, Pub. L. 96-510, § 111(a)(1), 94 Stat. 2767, 2788-89 (codified at 42 U.S.C. § 9611(a)(1))). As a practical matter, the taxes paid into the Superfund ultimately were consumed only in covering the costs incurred by the Federal Government in responding to releases or threatened releases of hazardous substances at sites for which the responsible parties could not be found or were insolvent, and therefore could not reimburse the Superfund. These "orphan" sites comprise about thirty percent of the sites on USEPA's nationally prioritized list of sites slated for cleanup (Ramseur & Reisch, 2006, pp. 3, 12). As the Administrator of USEPA noted critically when President Ronald Reagan signed the legislation reauthorizing the Superfund in 1986 (see Thomas, 1986), the Superfund taxes thus stretched the Polluter Pays Principle beyond its intended scope by requiring a broad array of potential polluters, including potential polluters whose potential pollution -- namely, petroleum -- CERCLA specifically excludes from its scope, to pay for actual pollution by certain parties responsible for releases or threatened releases of hazardous substances to the environment.

The Superfund taxes expired at the end of 1995 (Ramseur & Reisch, 2006, p. 11; cf. Omnibus Budget Reconciliation Act of 1986, Pub. L. 99-509, § 8032(c)(3), 100 Stat. 1874, 1958 (codified at 26 U.S.C. § 4661(c)); Omnibus Budget Reconciliation Act of 1990, Pub. L. 101-508, §§ 11231(a)(1)(B), (b), 104 Stat. 1388, 1388-444 to 1388-445 (codified at 26 U.S.C. § 4611(e)(3))). All efforts to revive them legislatively since then have failed (see, e.g., Preston & Bruninga, 2004; Valverde, 2010). As a result, the Superfund has been deprived of its most important source of funding, and essentially ran out of money in 2003 (Ramseur & Reisch, 2006, p. 11). Almost all of the costs of the Superfund program have been met since 2003 through annual appropriations by the U.S. Congress from the U.S. Treasury's general fund (see

ibid., p. 11). Thus, the costs of responding to releases or threatened releases of hazardous substances at orphan sites has been shifted from potential polluters -- including potential polluters whose potential pollution CERCLA specifically excludes from its scope -- to U.S. taxpayers in general.

The fate of the Polluter Pays Principle under CERCLA illustrates the inconsistency with which it has been adopted and implemented -- albeit implicitly -- in the U.S. environmental law and policy regime. Both institutional and cultural factors are responsible for this inconsistency. With respect to the former,[17] both the U.S. Constitution and the rules and traditions of the U.S. Congress have created an extremely fragmented law- and policy-making process that looks from the inside like a system of multiple veto points, and from the outside like a system of multiple access points. It is this combination of veto points and access points that lead to statutory exceptions and exclusions like CERCLA's petroleum exclusion.

Constitutionally, the U.S. Federal Government is based on the separation of powers (see U.S. CONST. art. I, § 1, art. II, § 1, art. III, § 1; cf. Madison, 1961a), which vests the legislative power in the U.S. Congress and the executive power in the President of the United States (U.S. CONST. art. II, § 1). The Federal Government also is based on elaborate subordinate distributions of power that create, among other things, a bicameral legislature consisting of a House of Representatives and a Senate (see, e.g., ibid. art. I, § 1, § 7, cl. 1, art. II, § 2, cl. 2; cf. Madison, 1961c, p. 322). These subordinate distributions of power add another layer of fragmentation to the basic separation of powers within which an equally elaborate system of checks and balances can work to preserve the separation (see Madison, 1961c; cf. Madison, 1961b). For example, in order for a bill to become a law, it must be passed by both the House and the Senate and signed by the President (U.S. CONST. art. I, § 7, cl. 2), or must be enacted by the Congress over the President's veto by a two-thirds vote of both houses (ibid. art. I, § 7, cl. 2). The members of the House, the members of the Senate, and the President are chosen at fixed intervals by different groups of electors in separate elections, however (compare ibid. art. I, § 2, cl. 1 (House), with ibid. art. I, § 3, cls. 1-2, amend. XVII, § 1 (Senate), and ibid. art. II, § 1, cl. 2, amend. XII (President)), which makes them responsive to different constituencies. The Constitution also prohibits anyone from serving in the legislative and executive branches of the Federal Government at the same time (see ibid. art. I, § 6, cl. 2), which means that the President must draw his cabinet from somewhere other than the legislature (cf. ibid. art. II, § 2, cl. 2). Thus, the separation of powers, subordinate distributions of power, and checks and balances encourage the officials in the Federal Government who must work together if policy proposals are to be enacted into law to work against each other much of the time (cf. Madison, 1961c).

This tendency is exacerbated by House and Senate rules and traditions, which fragment the law- and policy-making institutions of the Federal Government even further. The most important of these rules and traditions are the ones that create elaborate committee systems in both houses of the Congress for reviewing, revising, and often killing bills (see Deering & Smith, 1997), as well as the Senate rule that makes it hard for bare majorities to pass legislation by requiring a three-fifths vote of the full Senate to end debate and to force a final vote on nearly any pending matter (see Kearny & Heineman, 1997). As a result, proposals for policy change must run a legislative gantlet riddled with access points that give special interest groups in civil society many opportunities to intervene in the process so as to influence its outcomes, and with veto points that give law- and policy-makers at least as many opportunities to stop proposals for policy change from being enacted into law (cf. Schlozman & Tierney, 1986, pp. 301-10, 323-30; Smith, 1988, pp. 58-63).

Partly as a result, the enactment of major federal environmental statutes is relatively rare. After a flurry of major enactments in the 1970s, environmental legislation slowed in the 1980s (see Kraft, 2000, pp. 22-25, 27-30), and essentially stopped after 1990 (cf. Clean Air Act Amendments of 1989, Pub. L. 101-549, 104 Stat. 2399 (1990) (codified at 42 U.S.C. §§ 7401-7671q)), as the fate of numerous proposals to enact global climate change legislation since then has shown (cf., e.g., Najor, 2003; Najor, 2005; Scott, 2008). On the relatively rare occasions when environmental bills have been enacted into law, they typically include exceptions and exclusions for the special interests that must be placated if any bill is to survive the many veto points embedded in the law- and policy-making process, which the civil society organizations that represent those interests routinely seek to trigger through the many access points that enable them to intervene. Although access to the law- and policy-making process and influence in the law- and policy-making process are not necessarily the same thing, political

insiders and social scientists alike long have recognized the substantial impact that special interest groups in civil society can have on legislative outcomes, including in the environmental arena, depending on the issues and the strategies employed by the interest groups themselves (see, e.g., Cohen, 1992, pp. 113-28; Schlozman & Tierney, 1986, pp. 310-17; Smith, 1988, pp. 216-71).

Culture also plays an important role in the inconsistency with which the Polluter Pays Principle has been adopted and implemented in the U.S. environmental law and policy regime. One of the most important cultural factors -- as exemplified by the fate of the Superfund taxes -- is the rise of traditional conservatism as a potent force in American national politics. Traditional conservatives are one of the three ideologically and culturally defined social groups that compete for control of the U.S. law- and policy-making process,[18] with modern conservatives and modern liberals being the other two.[19] Traditional conservatives are especially concentrated in the thinly populated states of the American South, Midwest, and Intermountain West (see Glaeser & Ward, 2006, pp. 10-15), and have been a major political force nationally since 1980 (see, e.g., Silverstein, 1994, pp. 112-15).

Traditional conservatives believe that human beings are not rational enough naturally to live virtuous lives without guidance from a source external both to themselves and to the State (see, e.g., Will, 1983, pp. 19, 66-96, 145, 155). They also consider the traditional moral teachings instilled by religious and other civil institutions to be the most important political values because they provide human beings with the external guidance that they need to live virtuous lives (see, e.g., ibid., pp. 19-20, 119-20, 151). The proper role of the traditionally conservative State is to prevent society from degenerating into chaos by promoting these traditional moral teachings, in part by promoting and protecting the religious and other civil institutions that instill those teachings in the first instance, so as to nurture a virtuous citizenry (see, e.g., ibid., pp. 55, 78, 145, 150, 151-52, 163).

Two features of American traditional conservatism are especially relevant in environmental contexts. The first is the Calvinist content of the traditional moral teachings at the ideology's core. John Calvin was a radical, sixteenth-century cleric who played a central role in the Protestant Reformation (Ganoczy, Foxgrover, & Schmitt, 2004). Both his own teachings (cf. Calvin, 1559/1845/2008) and the general understanding of the Christian Bible that he was the first to expound (cf. Miller, 1956, p. 49) shaped both the religious cultures and the general world views of all four waves of British colonists who settled what is now the eastern part of the United States in the seventeenth and eighteenth centuries (see generally Fischer, 1989), ultimately infusing American culture with many of its most distinctive qualities (cf. de Tocqueville, 1835/1835/1862/1945, p. 301; Miller, 1956, p. 49). The Puritan Calvinists from East Anglia who colonized what is now the northeastern corner of the United States in the first half of the seventeenth century (see Fischer, 1989, pp. 21-24, 31-36, 112) played the most important role in shaping American political culture in general (see de Tocqueville, 1835/1835/1862/1945, p. 301). Nevertheless, the mostly Presbyterian Calvinists from the borderlands where England, Ireland, and Scotland meet, who in much greater numbers settled the high country from southwestern Pennsylvania to Georgia in the first three-quarters of the eighteenth century (see Fischer, 1989, pp. 605-08, 615-18, 621-39, 703-08, 797), did the most to shape the moral content of American traditional conservatism because it was they and their descendants who moved into and established the cultural trajectory of much of the American South, Midwest, and Intermountain West (cf. ibid., pp. 633-34, 812, 882-95).

Following their Calvinist forebears, who attributed a moral dimension to wealth acquired through work (see, e.g., ibid., pp. 155-56), American traditional conservatives believe that the rich are the morally good people because they made the good moral choices that made them rich, and that the poor are morally bad people because they made the bad moral choices that made them poor (see Lakoff, 1996, pp. 189-92; cf., e.g., Will, 1983, p. 123). Accordingly, American traditional conservatives also believe it to be immoral for government to restrict unduly the economic activities of the rich, or to tax the fruits of those activities to alleviate the poverty of the poor (see, e.g., Contract *from* America, n.d.; Lakoff, 1996, p. 189; Republican Contract with America, n.d.; Rosenberg, Olasky, & Eicher, 2002). These beliefs almost always lead American traditional conservatives not merely to oppose environmentally protective public policies, but to be overtly hostile to them, because of the economic costs that they would impose on businesses or consumers, even when those costs would be outweighed by the economic benefits generated for society as a whole (see, e.g., Cook, 2009; Geman, 2011). What at first glance might appear to be an economic argument against

environmentally protective public policies is in fact a moral one.

The second feature of American traditional conservatism of special relevance in environmental contexts is the traditionally conservative belief that human beings are not rational enough naturally to live virtuous lives without guidance from a source external both to themselves and to the State. It is this foundational belief that leads American traditional conservatives to discount the validity of science, including in environmental contexts, when its fruits suggest policy prescriptions that contravene the dictates of the Calvinist moral teachings that American traditional conservatives believe provide the external guidance that human beings need to live virtuous lives (cf. Will, 1983, pp. 31-32). Perhaps the most consequential manifestation of this phenomenon in environmental law and policy contexts is the widespread belief among American traditional conservatives that anthropogenic global climate change is not real, notwithstanding the mountain of scientific evidence to the contrary (cf., e.g., Broder, 2010; Inhofe, 2005; McClure & Stiffler, 2007; Pew Research Center for the People and the Press, 2009). One prominent climate change skeptic, for example, who from 2003 to 2013 served as either the Chair or the senior minority party member of the Senate's Environment and Public Works Committee (see Inhofe, n.d.), which has jurisdiction over all environmental legislation introduced into the Senate (see generally U.S. Senate, n.d.), has denounced global warming as "the greatest hoax ever perpetrated on the American people" (Inhofe, 2005). Climate scientists have been complicit in perpetrating this hoax, he has claimed, because of their eagerness to obtain research grants (Little, 2010).

These features of American traditional conservatism have assumed an increasingly important role in U.S. environmental law- and policy-making as traditional conservatives increasingly have come to dominate one of the two major U.S. political parties -- the Republican Party -- since 1980 (cf. Silverstein, 1994, pp. 112-15), the year in which the Superfund taxes first were imposed (see HSRRA, Pub. L. 96-510, tit. II, subtit. A, sec. 211(a), §§ 4611, 4661, 94 Stat. 2796, 2797-98, 2798-99 (codified as amended at 26 U.S.C. §§ 4611, 4661)). By the time those taxes expired at the end of 1995, the ideological transformation of the Republican Party at the national level essentially was complete, at least in the House of Representatives, where in the 1994 elections Republicans won a majority of seats for the first time in forty years, under traditionally conservative leadership (see, e.g., Clymer, 1994a; Dowd, 1994; cf. Clymer, 1994b). The fate of the Superfund taxes since then illustrates how traditional conservatives have helped to perpetuate, if not to exacerbate, the inconsistency with which the Polluter Pays Principle has been adopted and implemented in the U.S. environmental law and policy regime. Although the Congress had reauthorized the Superfund taxes twice -- in both 1986 and 1990 (see, e.g., Lazzari, 1996) -- before the traditionally conservative ascendancy reached new heights nationally as a result of the 1994 elections, all legislative efforts to revive them since those elections have failed (see, e.g., Preston & Bruninga, 2004; Valverde, 2010). On a related note, the only traditional conservative to serve as President of the United States since the Superfund taxes first were imposed in 1980 -- George W. Bush (cf. Bush, 1999) -- has been the only President to oppose their extension or reinstatement (see, e.g., Browner, 2002; Department of the Treasury, 2012).[20]

As the fate of these taxes and CERCLA's petroleum exclusion illustrate, the inconsistency with which the Polluter Pays Principle has been adopted and implemented in the U.S. environmental law and policy regime, albeit implicitly, is the result of both institutional and cultural factors. Extremely fragmented law- and policy-making institutions all but ensure that environmental statutes such as CERCLA will be riddled with exceptions or exclusions that, if not necessarily at odds with the letter of the Polluter Pays Principle, are at least inconsistent with its spirit. Notwithstanding these exceptions and exclusions, the Superfund taxes stretched the Polluter Pays Principle beyond its intended scope in the CERLCA context by imposing the costs of remediating certain types of pollution at certain sites on enterprises that were not responsible for it as a factual matter and, in some cases, could not be held responsible for it as a legal matter -- at least under CERCLA -- because of CERCLA's petroleum exclusion. The repeated refusal of the Congress to reinstate the Superfund taxes after they expired in 1995 has swung the liability pendulum almost as far in the opposite direction, however, by foisting most of the cost of remediating certain types of contaminated sites on ordinary U.S. taxpayers, rather than on polluters or would-be polluters of any kind. The ascendancy of traditional conservatives as a potent force in American national politics since 1980, with the transformation of the Republican Party nationally along traditionally conservative lines essentially being complete by the time the Superfund

taxes expired at the end of 1995, strongly suggests that the U.S. environmental law and policy regime is not likely to embrace the Polluter Pays Principle any more consistently than it already has done anytime soon.

IV.Harmonizing the Adoption and Implementation of the Polluter Pays Principle Internationally as a Global Strategy for Achieving Sustainable Development

The goals of the Polluter Pays Principle are to encourage the rational use and better allocation of scarce environmental resources and to avoid distortions in international trade and investment by ensuring that the costs of goods and services that cause pollution when produced or consumed reflect the costs of the pollution prevention and control measures required by public authorities (see OECD Council, 1972, annex ¶ 4; OECD Council, 1974, ¶ I(3)). By forcing producers to internalize the costs of certain environmental externalities, the Polluter Pays Principle can function as a strategy for achieving sustainable development (see WCED, 1987, pp. 220-21). If the Polluter Pays Principle is to function in this way globally, however, then it must be adopted and implemented effectively by a critical mass of States, especially the States that have the world's biggest economies or that stand out for the size of their current or likely future contributions to global environmental challenges such as anthropogenic climate change.

This harmonization remains elusive, as the disparate fates of the Polluter Pays Principle in the environmental law and policy regimes of India, China, and the United States make clear. Whether adopted and implemented explicitly or implicitly, belatedly or in a timely fashion, over-broadly, under-broadly, inconsistently, or hardly at all, the Polluter Pays Principle has been diverted from its intended purpose in all three jurisdictions. Without a much greater degree of harmonization in the adoption and implementation of the Polluter Pays Principle internationally, especially among these three States, it is not likely to be of much use as a global sustainable development strategy.

There are at least three lessons to be learned from this lack of harmonization. First, the Indian, Chinese, and U.S. experiences with the Polluter Pays Principle make clear that harmonizing the adoption and implementation of that principle internationally is as much a political and legal challenge as an economic one, even taking into account the special economic circumstances of less developed countries. Second, these experiences highlight how State-specific the constraints on harmonization are, as well as the extent to which they have both institutional and cultural dimensions. Third, the State-specific nature of these constraints makes clear that overcoming them anywhere will require sustainability leadership, but not in the form of mere calls for economic rationality or the mustering of political will, which often seem to dominate the global sustainable development discourse (cf., e.g., Ascher, 1999, p. 279; Weiss, 1989, p. 291). Rather, it will require the acquisition and deployment of the institutional and cultural knowledge and skills needed to work each of the relevant municipal law- and policy-making and -implementation systems strategically in order to achieve the desired result (see Barresi, 2012a).

REFERENCES

[1] Advisory Panel on Effectuation of Fundamental Duties of Citizens, National Commission to Review the Working of the Constitution. (2001). *A Consultation Paper on Effectuation of Fundamental Duties of Citizens*. New Delhi, India: National Commission to Review the Working of the Constitution. Retrieved November 24, 2013, from http://lawmin.nic.in/ncrwc/finalreport/v2b1-7.htm

[2] Air (Prevention and Control of Pollution) Act, 1981, No. 14, Acts of Parliament, 1981 (India), *available as amended at* http://www.envfor.nic.in/legis/air/air1.html.

[3] Ascher, W. (1999). *Why Governments Waste Natural Resources: Policy Failures in Developing Countries*. Baltimore, MD: Johns Hopkins University Press.

[4] Austin, G. (1966). *The Indian Constitution: Cornerstone of a Nation*. Oxford, UK: Clarendon Press.

[5] Barresi, P. A. (2008). Navigating the Ideological and Cultural Landscapes of Environmental Policy-Making in the United States. *Interdisciplinary Environmental Review, 10,* 1-32.

[6] Barresi, P. A. (2011). US-China Relations and the Fate of the UN Framework Convention on Climate Change: Traditional Conservatism as an Ideological and Cultural Constraint on US Participation in a Successor to the Kyoto Protocol on Chinese Terms. *Chinese Journal of International Law, 10,* 609-649.

[7] Barresi, P. A. (2012a). Environmental Leaders as Strategists Skilled in Working the Law- and

Policy-Making Systems: Lessons from China, India, the United States and the United Nations. In D. R. Gallagher (Ed.), *Environmental Leadership: A Reference Handbook*. (Vol. 1, pp. 568-576). Thousand Oaks, CA: Sage.

[8] Barresi, P. A. (2012b). Mobilizing the Public Trust Doctrine in Support of Publicly Owned Forests as Carbon Dioxide Sinks in India and the United States. *Colorado Journal of International Environmental Law and Policy, 23,* 39-75.

[9] Barresi, P. A. (2013). The Chinese Legal Tradition as a Cultural Constraint on the Westernization of Chinese Environmental Law and Policy: Toward a Chinese Environmental Law and Policy Regime with More Chinese Characteristics. *Pace Environmental Law Review, 30,* 1156-1221.

[10] *Black's Law Dictionary* (5th ed.). (1979). St. Paul, MN: West.

[11] Blackstone, W. (1899). *Commentaries on the Laws of England* (Vol. 2, containing Bks. 3 & 4, 4th ed., J. D. Andrews, Ed.). Chicago: Callahan.

[12] Bodde, D., & Morris, C. (1973). *Law in Imperial China*. Philadelphia, PA: University of Pennsylvania Press.

[13] Broder, J. M. (2010, October 20). Climate Change Doubt Is Tea Party Article of Faith. *The New York Times*. Retrieved January 16, 2011, from http://www.nytimes.com/2010/10/21/us/politics/21climate.html

[14] Browner, C. M. (2002, March 1). Polluters Should Have to Pay. *The New York Times*. Retrieved November 28, 2013, from http://www.nytimes.com/2002/03/01/opinion/polluters-should-have-to-pay.html

[15] Bush, G. W. (1999). *A Charge to Keep*. New York: William Morrow.

[16] Bush, G. (with Gold, V.). (1987). *Looking Forward: An Autobiography*. Garden City, NY: Doubleday.

[17] Calvin, J. (2008). *Institutes of the Christian Religion* (1559 rev. ed., H. Beveridge, Trans.). Peabody, MA: Hendrickson. (Original translation published in 1845) (Original work published 1559)

[18] Central Intelligence Agency. (2013, September 25). China. In *The World Factbook*. Retrieved October 27, 2013, from https://www.cia.gov/library/publications/the-world-factbook/geos/ch.html

[19] Ch'ên, J. (1961). *Yuan Shih-k'ai*. London: George Allen & Unwin.

[20] Chiang Kai-shek. (1947). *China's Destiny* (Wang Chung-hui, Trans.). New York: Macmillan.

[21] Chow, D. C. K. (2003). *The Legal System of the People's Republic of China in a Nutshell*. St Paul, MN: West Group.

[22] Clean Air Act, Pub. L. 88-206, 77 Stat. 392 (1963) (codified as amended at 42 U.S.C. §§ 7401-7671q).

[23] Clean Air Act Amendments of 1989, Pub. L. 101-549, 104 Stat. 2399 (1990) (codified at 42 U.S.C. §§ 7401-7671q).

[24] Clinton, President B. (1996). *Between Hope and History*. New York: Random House.

[25] Clymer, A. (1994a, November 10). The 1994 Elections: Congress -- The Overview; G.O.P. Celebrates Its Sweep to Power; Clinton Vows to Find Common Ground. *The New York Times*. Retrieved November 28, 2013, from http://www.nytimes.com/1994/11/10/us/1994-elections-congress-overview-gop-celebrates-its-sweep-power-clinton-vows.html

[26] Clymer, A. (1994b, November 15). The 1994 Elections: New Analysis; In House and Senate, 2 Kinds of G.O.P. *The New York Times*. Retrieved November 28, 2013, from http://www.nytimes.com/1994/11/15/us/the-1994-election-news-analysis-in-house-and-senate-2-kinds-of-gop.html

[27] Cohen, R. E. (1992). *Washington at Work: Back Rooms and Clean Air* (2nd ed.). Boston: Allyn & Bacon.

[28] Comprehensive Environmental Response, Compensation and Liability Act of 1980, Pub. L. 96-510, 94 Stat. 2767 (codified as amended at 42 U.S.C. §§ 9601-9675).

[29] Confucius and the Party Line. (2003, May 24). *The Economist, 367*(8325), 38.

[30] Confucius Makes a Comeback. (2007, May 19). *The Economist, 383*(8529), 48.

[31] CONSTITUTION OF THE PEOPLE'S REPUBLIC OF CHINA (1982, as amended 1988, 1993, 1999 & 2004), *translated at* http://english.people.com.cn/constitution/constitution.html.

[32] Contract *from* America. (n.d.). Retrieved May 4, 2011, from http://www.thecontract.org/the-contract-from-america/

[33] Cook, S. D. (2009, February 20). Legislation: Energy and Commerce Committee Divided Over Legislation, Cites Costs, Job Losses.

Environment Reporter, 40, 377.

[34] de Tocqueville, A. (1945). *Democracy in* America (P. Bradley, Ed.). (Vol. 1). New York: Vintage Books. (Original work published 1835, translated by H. Reeve 1835, and retranslated by F. Bowen 1862)

[35] Deering, C. J., & Smith, S. S. (1997). *Committees in Congress*. Washington, DC: CQ Press.

[36] Department of the Treasury. (2012). *General Explanations of the Administration's Fiscal Year 2013 Revenue* Proposals. Washington, DC: Author. Retrieved November 28, 2013, from http://www.treasury.gov/resource-center/tax-policy/Documents/General-Explanations-FY2013.pdf

[37] Dowd, M. (1994, November 10). The 1994 Elections: Leaders -- The G.O.P. Leader; G.O.P.'s Rising Star Pledges to Right Wrongs of the Left. *The New York Times*. Retrieved November 28, 2013, from http://www.nytimes.com/1994/11/10/us/1994-elections-leaders-gop-leader-gop-s-rising-star-pledges-right-wrongs-left.html

[38] Downey, T. (2010, March 3). China's Cyberposse. *The New York Times Magazine*. Retrieved September 14, 2012, from http://www.nytimes.com/2010/03/07/magazine/07Human-t.html

[39] Empress v. Burah & Book Singh, (1878) I.L.R. 3 (Cal.) 64, *available at* http://indiankanoon.org/doc/600234/.

[40] Environment (Protection) Act, 1986, No. 29, Acts of Parliament, 1986 (India), *available* at http://envfor.nic.in/legis/env/env1.html.

[41] Environmental Protection Law of the People's Republic of China (adopted by the Standing Comm. Nat'l People's Cong., Dec. 26, 1989, promulgated by Order No. 22 of the President P.R.C., Dec. 26, 1989, effective Dec. 26, 1989), *translated in* ECOLEX, http://www.ecolex.org (Legislation ID number: LEX-FAOC003551).

[42] Environmental Protection Law of the People's Republic of China (for Trial Implementation) (adopted in principle by the Standing Comm. Nat'l People's Cong., Sept. 13, 1979, effective Sept. 13, 1979), *translated in* ASIAN LEGAL INFO. INST., LAWS OF THE PEOPLE'S REPUBLIC OF CHINA, http://www.asianlii.org/cn/legis/cen/laws/eplotproc564/.

[43] Fairbank, J. K., Reischauer, E. O., & Craig, A. M. (1965). *A History of East Asian Civilization, Vol. 2. East Asia: The Modern Transformation.* Boston: Houghton Mifflin.

[44] Federal Water Pollution Control Act, Pub. L. 92-500, 86 Stat. 816 (1972) (codified as amended at 33 U.S.C. §§ 1251-1387).

[45] Fenby, J. (2004). *Chiang Kai-Shek: China's Generalissimo and the Nation He Lost*. New York: Carroll & Graf.

[46] Fischer, D. H. (1989). *Albion's Seed: Four British Folkways in America.* New York: Oxford University Press.

[47] Galanter, M. (1986). When Legal Worlds Collide: Reflections on Bhopal, the Good Lawyer, and the American Law School. *Journal of Legal Education, 36,* 292-310.

[48] Ganoczy, A., Foxgrover, D. L. (Trans.), & Schmitt, J. (Trans.). (2004). Calvin's Life. In D. K. McKim (Ed.), *The Cambridge Companion to John Calvin* (pp. 3-24). New York: Cambridge University Press.

[49] Geman, B. (2011, January 7). Republican Appropriator Takes Quick Aim at 'Scary' EPA and 'Its Bloated Budget'. *The Hill*. Retrieved November 30, 2013, from http://thehill.com/blogs/e2-wire/136723-republican-appropriator-takes-quick-aim-at-scary-epa

[50] Gerring, J. (1997). Ideology: A Definitional Analysis. *Political Research Quarterly, 50,* 957-994.

[51] Gerring, J., & Barresi, P. A. (2009). Culture: Joining Minimal Definitions and Ideal-Types. In D. Collier & J. Gerring (Eds.), *Concepts and Method in Social Science: The Tradition of Giovanni Sartori* (pp. 241-268). New York: Routledge.

[52] Glaeser, E. L., & Ward, B. A. (2006). Myths and Realities of American Political Geography. Harvard Institute of Economic Research Discussion Paper No. 2100 (KSG Working Paper No. RWP06-007). Retrieved October 31, 2010, from Social Science Research Network (SSRN) web site: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=874977

[53] Glendon, M. A., Carozza, P. G., & Picker, C. B. (2008). *Comparative Legal Traditions in a Nutshell* (3rd ed.). St. Paul, MN: Thomson/West.

[54] Gopalan v. Madras, A.I.R. 1950 S.C. 27 (India), *available at* http://indiankanoon.org/doc/1857950.

[55] Gu, L., & Sheate, W. R. (2005). Institutional

Challenges for EIA Implementation in China: A Case Study of Development Versus Environmental Protection. *Environmental Assessment, 36*, 125-142.

[56] Guha, R. (2007). *India After Gandhi*. New York: HarperCollins.

[57] Guo Jinlong. (2007). Water Environmental Protection Legislation and Policies in China. In *International Forum on Water Environmental Governance in Asia* (pp. 44-49). Tokyo: Ministry of the Environment, Japan. Retrieved March 22, 2013, from http://www.wepa-db.net/pdf/proceeding_2.pdf

[58] Guruswamy, L. (2003). *International Environmental Law in a Nutshell*. St. Paul, MN: Thomson/West.

[59] Hazardous and Solid Waste Amendments of 1984, Pub. L. 98-616, 98 Stat. 3221 (codified as amended at 42 U.S.C. §§ 6901-6992k).

[60] Hazardous Substance Response Revenue Act of 1980, Pub. L. 96-510, tit. II, subtit. A, 94 Stat. 2796, 2797 (codified as amended at 26 U.S.C. §§ 4611-4681).

[61] Hazardous Substance Response Revenue Act of 1980, Pub. L. 96-510, tit. II, subtit. B, 94 Stat. 2796, 2801 (repealed 1986).

[62] Head, J. W., & Wang, Y. (2005). *Law Codes in Dynastic China*. Durham, NC: Carolina Academic Press.

[63] Ho, D. D. (2006). To Protect and Preserve: Resisting the Destroy the Four Olds Campaign, 1966-1967. In J. W. Esherick, P. G. Pickowicz, & A. G. Walder (Eds.). The Chinese Cultural Revolution as History (pp. 64-95). Stanford, CA: Stanford University Press.

[64] Holmes, O. W. (1963). *The Common Law* (Mark DeWolfe Howe, Ed.). Boston: Little, Brown. (Original work published 1881)

[65] INDIA CONST.

[66] Indian Council for Enviro-Legal Action v. Union of India, A.I.R. 1996 S.C. 1446, *available at* www.elaw.org/node/1377.

[67] Indian Council for Enviro-Legal Action v. Union of India, July 18, 2011, *available at* indiankanoon.org.doc/1356184.

[68] Inhofe, U.S. Senator J. M. (2005, January 4). Climate Change Update. Retrieved November 26, 2013, from http://www.inhofe.senate.gov/newsroom/speech/climate-change-update

[69] Inhofe, U.S. Senator J. M. (n.d.). Environment and Public Works Committee Archive. Retrieved November 26, 2013, from http://www.inhofe.senate.gov/epw-archive

[70] Jacobs, A. (2011, April 22). Confucius Statue Vanishes Near Tiananmen Square. *The New York Times*. Retrieved April 26, 2011, from http://www.nytimes.com/2011/04/23/world/asia/23confucius.html

[71] Kearney, E. N., & Heineman, R. A. (1997). The Senate Filibuster. *Perspectives on Political Science, 26*(1), 5-9.

[72] Keller, P. (1994). Sources of Order in Chinese Law. *American Journal of Comparative Law, 42*, 711-759. Reprinted in P. Keller (Ed.). (2001). *Chinese Law and Legal Theory* (pp. 239-287). Burlington, MA: Ashgate Dartmouth.

[73] Kempin, F. G., Jr. (1990). *Historical Introduction to Anglo-American Law in a Nutshell* (3rd ed.). St. Paul, MN: West.

[74] Kissinger, H. (2011). *On China*. New York: Penguin Press.

[75] Knopf, C. D. (1993). What's Included in the Exclusion: Understanding Superfund's Petroleum Exclusion. *Fordham Environmental Law Journal, 5*, 3-42.

[76] Kraft, M. E. (2000). U.S. Environmental Policy and Politics: From the 1960s to the 1990s. In O. L. Graham, Jr. (Ed.), *Environmental Politics and Policy, 1960s-1990s* (pp. 17-42). University Park, PA: Pennsylvania State University.

[77] Lakoff, G. (1996). *Moral Politics: What Conservatives Know That Liberals Don't*. Chicago: University of Chicago Press.

[78] Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Wastes (adopted as amended by the Standing Comm. Nat'l People's Cong., Dec. 29, 2004, promulgated by Order No. 77 of the President P.R.C., Oct. 29, 1996, effective April 1, 2005), *translated in* ASIAN LEGAL INFO. INST., LAWS OF THE PEOPLE'S REPUBLIC OF CHINA, http://www.asianlii.org/cn/legis/cen/laws/lotprocotpacoepbsw1034/.

[79] Lazzari, S. (1996). *Taxes to Finance Superfund* (Congressional Research Service Rep. No. 96-774). Washington, DC: Congressional Research Service. Retrieved November 28, 2013, from http://cnie.org/NLE/CRSreports/waste/waste-31.cfm

[80] Legislation Law of the People's Republic of China (adopted by the Nat'l People's Cong., March 15, 2000, promulgated by Order No. 31 of the President P.R.C., March 15, 2000, effective July 1, 2000), art. 3, *translated in*

ASIAN LEGAL INFO. INST., LAWS OF THE PEOPLE'S REPUBLIC OF CHINA, http://www.asianlii.org/cn/legis/cen/laws/ll145/.

[81] Libber, J. (1998). Making the Polluter Pay: EPA's Experience in Recapturing a Violator's Economic Benefit from Noncompliance. In International Network for Environmental Compliance and Enforcement (INECE), *Fifth International Conference on Environmental Compliance and Enforcement* (Vol. 1, pp. 465-487). Retrieved March 22, 2013, from http://www.inece.org/5thvol1/libber.pdf

[82] Little, A. (2010, February 25). Inhofe and Running: James Inhofe, Senate's Top Skeptic, Explains His Climate-Hoax Theory. *Grist*. Retrieved December 16, 2010, from http://www.grist.org/article/2010-02-25-james-inhofe-senate-top-skeptic-explains-climate-hoax-theory

[83] Liu Chang. (2010, August 14). No Need to Fuss Over Confucius Institutes. *China Daily*. Retrieved March 7, 2011, from http://www.chinadaily.com.cn/cndy/2010-08/14/content_11152936.htm

[84] Lo, C. W-h., Fryxell, G. E., & Wong, W. W. (2006). Effective Regulations with Little Effect? The Antecedents of the Perceptions of Environmental Officials on Enforcement Effectiveness in China. *Environmental Management, 38*, 388-410.

[85] Lubman, S. B. (1999). *Bird in a Cage: Legal Reform in China After Mao*. Stanford, CA: Stanford University Press.

[86] Lujan v. Defenders of Wildlife, 504 U.S. 555 (1992).

[87] M. I. Builders v. Sahu, A.I.R. 1999 S.C. 2468, *available at* http://judis.nic.in/supremecourt/chejudis.asp.

[88] Madison, J. (1961a). *The Federalist No. 47*. In C. Rossiter (Ed.), *The Federalist Papers* (pp. 300-308). New York: NAL Penguin.

[89] Madison, J. (1961b). *The Federalist No. 48*. In C. Rossiter (Ed.), *The Federalist Papers* (pp. 308-313). New York: NAL Penguin.

[90] Madison, J. (1961c). *The Federalist No. 51*. In C. Rossiter (Ed.), *The Federalist Papers* (pp. 320-325). New York: NAL Penguin.

[91] Mao Tse-tung. (1954). *On New Democracy*. Peking, P.R.C.: Foreign Languages Press.

[92] Marbury v. Madison, 5 U.S. (1 Cranch) 137 (1803).

[93] McClure, R., & Stiffler, L. (2007, January 11). Federal Way Schools Restrict Gore Film: 'Inconvenient Truth' Called Too Controversial. *Seattle Post-Intelligencer*. Retrieved January 16, 2011, from http://www.seattlepi.com/local/299253_inconvenient11.html

[94] Mehta v. Nath, (1997) 1 S.C.C. 388, *available at* http://judis.nic.in/supremecourt/chejudis.asp.

[95] Mehta v. Union of India, A.I.R. 1987 S.C. 1086, *available at* www.elaw.org/node/1322.

[96] Merryman, J. H., & Pérez-Perdomo, R. (2007). *The Civil Law Tradition* (3rd ed.). Stanford, CA: Stanford University Press.

[97] Michael, F. (1962). The Role of Law in Traditional, Nationalist and Communist China. *The China Quarterly, 1962*(9), 124-148.

[98] Miller, P. (1956). *Errand Into the Wilderness*. Cambridge, MA: Belknap Press.

[99] Ministry of Environment and Forests, Government of India, Policy Statement for Abatement of Pollution (Res. No. H. 11013(2)/90-CPW) (Feb. 26, 1992), *available at* http://envfor.nic.in/downloads/about-the-ministry/introduction-psap.pdf.

[100] Najor, P. (2003, October 31). Climate Change: Senate Rejects Language to Limit Emissions of Greenhouse Gases from Utilities, Industry. *Environment Reporter, 34*, 2381.

[101] Najor, P. (2005, June 3). Climate Change: Incentive to Push Technology Added to Bill by McCain, Lieberman on Greenhouse Gases. *Environment Reporter, 36*, 1118.

[102] National Environmental Policy Act of 1969, Pub. L. No. 91-190, 83 Stat. 852 (1970) (codified as amended at 42 U.S.C. §§ 4321-4370h).

[103] New York v. Shore Realty Corp., 759 F.2d 1032 (2d Cir. 1985).

[104] Noise Control Act of 1972, Pub. L. 92-574, 86 Stat. 1234 (codified as amended at 42 U.S.C. §§ 4901-4918).

[105] Obama, B. (2007). *The Audacity of Hope*. Edinburgh, NY: Canongate.

[106] Ocean Dumping Act, Pub. L. 92-532, 86 Stat. 1051 (1972) (codified as amended at 33 U.S.C. §§ 1401-1445).

[107] Oil Pollution Act of 1990, Pub. L. 101-380, 104 Stat. 486 (codified as amended at 33 U.S.C. §§ 2701-2762).

[108] Omnibus Budget Reconciliation Act of 1986, Pub. L. 99-509, 100 Stat. 1874.

[109] Omnibus Budget Reconciliation Act of 1990, Pub. L. 101-508, 104 Stat. 1388.

[110] O'Neill v Picillo, 883 F.2d 176 (1st Cir.

1989), *cert. denied sub nom.*, American Cyanamid Co. v. O'Neil, 493 U.S. 1071 (1990).

[111] Org. Econ. Co-operation & Dev. [OECD] Council, *Recommendation of the Council on Guiding Principles Concerning International Economic Aspects of Environmental Policies*, OECD Doc. C(72)128 (May 26, 1972), *available at* http://acts.oecd.org/Instruments/ShowInstrumentView.aspx?InstrumentID=4&Lang=en&Book=False, *and reprinted in* ORG. ECON. CO-OPERATION & DEV., THE POLLUTER PAYS PRINCIPLE 11 (1975).

[112] Org. Econ. Co-operation & Dev. [OECD] Council, *Recommendation of the Council on the Implementation of the Polluter-Pays Principle*, OECD Doc. C(74)223 (Nov. 14, 1974), *available at* http:// http://acts.oecd.org/Instruments/ShowInstrumentView.aspx?InstrumentID=11.

[113] Organic Law of the Local People's Congresses and Local People's Governments of the People's Republic of China (adopted by the Nat'l People's Cong., July 1, 1979, promulgated by Order No. 1 of the Chairman Standing Comm. Nat'l People's Cong., July 4, 1979, effective Jan. 1, 1980, as amended for the fourth time by the Standing Comm. Nat'l People's Cong., Oct. 27, 2004), *translated in* ASIAN LEGAL INFO. INST., LAWS OF THE PEOPLE'S REPUBLIC OF CHINA, http://www.asianlii.org/cn/legis/cen/laws/olotlpcalpgotproc908/.

[114] Organization for Economic Co-operation and Development. (n.d.). List of OECD Member Countries - Ratification of the Convention on the OECD. Retrieved November 3, 2013, from http://www.oecd.org/general/listofoecdmembercountries-ratificationoftheconventionontheoecd.htm

[115] Organization for Economic Co-operation and Development. (1975). *The Polluter Pays Principle*. Paris: Author.

[116] Peerenboom, R. (2002). *China's Long March Toward Rule of Law*. Cambridge, UK: Cambridge University Press.

[117] Pew Research Center for the People and the Press. (2009, October 22). *Modest Support for "Cap and Trade" Policy: Fewer Americans See Solid Evidence of Global Warming* [Press Release]. Washington, DC: Author. Retrieved January 16, 2011, from http://people-press.org/reports/pdf/556.pdf

[118] Pollution Prevention Act of 1990, Pub. L. 101-508, tit. VI, subtit. F, 104 Stat. 1388-321 (codified at 42 U.S.C. §§ 13101-13109).

[119] Preston, M., & Bruninga, S. (2004, March 12). Superfund: Amendment to Reinstate Industry Tax to Support Trust Fund Defeated in Senate. *Environment Reporter, 35,* 536.

[120] Ramseur, J. L., & Reisch, M. (2006). *Superfund: Overview and Selected Issues* (Congressional Research Service Rep. No. RL33426). Washington, DC: Congressional Research Service.

[121] Reagan, R. (1983). A Time for Choosing -- 1964 (The Speech). In A. A. Balitzer & G. M. Bonetto (Eds.), *A Time for Choosing: The Speeches of Ronald Reagan, 1961 - 1982* (pp. 39-57). Chicago: Regnery Gateway.

[122] Rectification of Statues. (2011, January 22). *The Economist*, 398(8717), 52.

[123] Reinsch, P. S. (1922). *An American Diplomat in China*. Garden City, NY: Doubleday, Page.

[124] Reischauer, E. O., & Fairbank, J. K. (1960). *A History of East Asian Civilization: Vol. 1. East Asia: The Great Tradition*. Boston: Houghton Mifflin.

[125] Republican Contract with America. (n.d.). Retrieved May 4, 2011, from http://www.house.gov/house/Contract/CONTRACT.html

[126] Resource Conservation and Recovery Act of 1976, Pub. L. 94-580, 90 Stat. 2795 (codified as amended at 42 U.S.C. §§ 6901-6992k).

[127] Rosenberg, J. C., Olasky, M., & Eicher, N. (2002, December 7). An Interview with Tom Delay. *World Magazine, 17*(47).

[128] Rosencranz, A., & Yurchak, K. D. (1996). Progress on the Environmental Front: The Regulation of Industry and Development in India. *Hastings International and Comparative Law Review, 19,* 489-527.

[129] Sathe, S. P. (2002). *Judicial Activism in India*. New Delhi: Oxford University Press.

[130] Schlozman, K. L., & Tierney, J. T. (1986). *Organized Interests and American Democracy*. New York: Harper & Row.

[131] Scott, D. (2008, June 13.) Legislation: With Senate Debate on Climate Change Over, Boxer, Democrats Turn Focus to Next Year. *Environment Reporter, 39,* 1147.

[132] Sharman, L. (1934). *Sun Yat-sen: His Life and Its Meaning*. New York: John Day.

[133] Shelbourn, C. (1994). Historic Pollution -- Does the Polluter Pay? *Journal of Planning and Environmental Law, 1994*, 703-709.

[134] Sierra Club v. Morton, 405 U.S. 727 (1972).

[135] Silverstein, M. (1994). *Judicious Choices: The New Politics of Supreme Court Confirmations*. New York: W. W. Norton.

[136] Smith, G. B. (1880). *The Life of the Right Honourable William Ewart Gladstone*. New York: G. P. Putnam's Sons.

[137] Smith, H. (1988). *The Power Game: How Washington Works*. New York: Random House.

[138] Song Ying. (2002). The Chinese Environmental Lawmaking Framework. *Chinese Journal of International Law, 1*, 225-233.

[139] Standaert, M. (2011, March 2). Enforcement: Enforcement of Environmental Laws in China Hindered by Local Officials' Focus on Growth. *International Environment Reporter, 34*, 255.

[140] Steuart Transp. Co. v. Allied Towing Corp., 596 F.2d 609 (4th Cir. 1979).

[141] Sun Yat-sen. (n.d.). *San Min Chu I: The Three Principles of the People* (Frank W. Price, Trans.) (Commission for the Compilation of the History of the Kuomintang, Ed.). Taipei, Taiwan: China Publishing.

[142] Superfund Revenue Act of 1986, Pub. L. 99-499, tit. V, 100 Stat. 1760.

[143] Surface Mining Control and Reclamation Act of 1977, Pub. L. 95-87, 91 Stat. 447 (codified as amended at 30 U.S.C. §§ 1201, 1202, 1211).

[144] Thomas, Administrator L. M. U.S. Environmental Protection Agency. (1986, Oct. 17). Superfund Amendments and Reauthorization Act [Press Release]. Retrieved November 9, 2013, from http://www2.epa.gov/aboutepa/epa-history-superfund-amendments-and-reauthorization-act

[145] United States v. Chem-Dyne Corp., 572 F. Supp. 802 (S.D. Ohio 1983).

[146] U.S. CONST.

[147] U.S. Environmental Protection Agency. (2002). National Water Quality Inventory - 2000 Report. Washington, DC: Author. Retrieved November 3, 2013, from http://water.epa.gov/lawsregs/guidance/cwa/305b/2000report_index.cfm

[148] U.S. Senate. (n.d.). About the Senate Committee System. Retrieved January 26, 2014, from http://www.senate.gov/general/common/generic/about_committees.htm

[149] Valverde, J. (2010, June 25). Superfund: Administration Urges Congress to Enact Bill to Reinstate Long-Expired Superfund Tax. *Environment Reporter, 41*, 1406.

[150] Vellore Citizens Welfare Forum v. Union of India, A.I.R. 1996 S.C. 2715, *available at* www.ielrc.org/content/e9607.pdf.

[151] Violet v. Picillo, 648 F. Supp. 1283 (D.R.I. 1986).

[152] Vyshinsky, A. Y. (1951). The Fundamental Tasks of the Science of Soviet Socialist Law. In H. W. Babb (Trans.), *Soviet Legal Philosophy* (pp. 303-341). Cambridge, MA: Harvard University Press. (Original work published in Russian 1938)

[153] Wang Canfa. (2007). Chinese Environmental Law Enforcement: Current Deficiencies and Suggested Reforms. *Vermont Journal of Environmental Law, 8*, 159-193.

[154] Wang Jinnan. (n.d.). The Development of Pollution Charge in China. Retrieved March 19, 2013, from www.caep.org.cn/english/paper/The-Development-of-Pollution-Charge-in-China.pdf

[155] Water (Prevention and Control of Pollution) Act, 1974, No. 6, Acts of Parliament, 1974 (India), *available as amended at* http://indiacode.nic.in.

[156] Weiss, E. B. (1989). *In Fairness to Future Generations: International Law, Common Patrimony, and Intergenerational Equity*. Tokyo, Japan: United Nations University.

[157] Will, G. F. (1983). *Statecraft as Soulcraft: What Government Does*. New York: Simon & Schuster.

[158] World Commission on Environment and Development. (1987). *Our Common Future*. New York: Oxford University Press.

[159] Yang Xi. (2008, March 10). *SEPA Gets Stronger*. Retrieved October 19, 2013, from http://www.china.org.cn/environment/news/2008-03/10/content_12143406.htm

[160] Yu Xingzhong. (1989). Legal Pragmatism in the People's Republic of China [Comment]. *Journal of Chinese Law, 3*, 29-51.

[161] Zhang Kunmin, & Jin Ruilin (Eds.). (1992). *A Course in China's Environmental Protection Law*. Beijing: Tsinghua University Press.

[162] Zhang, X. (2008). Enforcing Environmental Regulations in Hubei Province, China: Agencies, Courts, Citizens. *Dissertation Abstracts International - B, 69/10*. (UMI No.

3332961).

[1] After assuming for purposes of argument in the text of the opinion that it did not have the power to require private parties to pay damages in the case at bar, the Court explained in a footnote, albeit somewhat paradoxically, "It is not open to the Court, in an appropriate situation, to award damages against private parties as part of relief granted against public authorities. This is a question upon which we do not wish to express any opinion in the absence of a full debate at the Bar" (Indian Council for Enviro-Legal Action v. Union of India, 1996, ¶¶ 60, 60 n.).

[2] The power of judicial review is the power of the courts to invalidate the unlawful acts of the executive or legislature, especially but not exclusively on constitutional grounds (see, e.g., Marbury v. Madison, 1803).

[3] In a footnote, the Court elaborated on its position, albeit somewhat paradoxically. For an explanation, see *supra* note 1.

[4] Standing to sue refers to the circumstances that make it appropriate for a particular party to bring a particular claim before a particular court (cf. Black's Law Dictionary, 1979, pp. 1260-61).

[5] Strictly speaking, the Supreme Court may issue "directions or orders or writs" to enforce the Fundamental Rights (INDIA CONST. art. 32(2)).

[6] On a related note, the Court also observed that environmental criminal prosecutions in India often never reach any conclusion as to the guilt or innocence of the defendant, either because the courts are overwhelmed with work or because the authorities fail to appreciate the significance of the cases (Indian Council for Enviro-Legal Action v. Union of India, 1996, ¶ 70(6)).

[7] This article romanizes Chinese names and other Chinese nouns according to the *pinyin* system, which if in the text are followed parenthetically in the first instance by the Wade-Giles equivalent, if different. One name has become so familiar to Western audiences as a Latinized equivalent of the Chinese (i.e., Confucius) that this article uses the more familiar form, followed parenthetically in the first instance by both the *pinyin* and the Wade-Giles romanizations, in that order. The diacritical marks indicating the tones that would distinguish among what otherwise would be homonyms in spoken Chinese have been omitted from all romanizations.

[8] China's State Council functions as both the executive body of the national legislature -- the National People's Congress -- and the highest organ of state administration (CONSTITUTION OF THE PEOPLE'S REPUBLIC OF CHINA, 1982, art. 85).

[9] China's constitution parses the State into a network of eleven different types of administrative subunits (see CONSTITUTION OF THE PEOPLE'S REPUBLIC OF CHINA, 1982, art. 30; cf. Central Intelligence Agency, 2013). All of these subunits qualify as "local" under Chinese law (cf., e.g., Organic Law of the Local People's Congresses and Local People's Governments of the People's Republic of China, 2004, art. 18, paras. 1-2).

[10] Since 2008, the State Environmental Protection Administration has been the Ministry of Environmental Protection (Yang Xi, 2008).

[11] For a much more extensive exploration of the Chinese legal tradition and its implications for Chinese environmental law and policy, from which the following summary was derived, see Barresi (2013).

[12] Ironically, the socialist legal theory on which the Chinese authorities continue to claim that China's legal system is based (see, e.g., CONSTITUTION OF THE PEOPLE'S REPUBLIC OF CHINA, 1982, art. 5) merely reinforces traditional Confucian attitudes toward law. Since the 1950s, Chinese scholars have embraced as a central tenet of Chinese socialist legal theory the purely instrumental conception of law developed by Josef Stalin's chief prosecutor, Andrei Ianuar'evich Vyshinskii (1883-1954) (see Keller, 1994, pp. 720-21; Yu Xingzhong, 1989, pp. 36-37). According to Vyshinskii's conception, law is merely the means by which the State pursues the interests of the ruling class (see Vyshinsky, 1938/1951, p. 336). From a socialist theoretical perspective, law in China is thus merely the expression of the current policy norms of the Chinese Communist Party (Keller, 1994, p. 721), with no inherent moral significance.

[13] Ironically, the effect of these interventions on the effectiveness of the pollution discharge fee system arguably is consistent with the general thrust of China's Legislation Law, which governs the enactment, revision, and nullification of all other statutes, regulations, and rules, and declares that "[l]aws shall be made in compliance with the . . . principle[] of taking economic development as the central task" (Legislation Law of the People's Republic of China, 2000, art. 3).

[14] For the statutes that lack any declaration of congressional policy, see the Comprehensive Environmental Response, Compensation and Liability Act of 1980, Pub. L. 96-510, 94 Stat. 2767 (codified as amended at 42 U.S.C. §§ 9601-9675), which holds responsible parties liable for the costs of removing, remediating, and otherwise responding to releases or threatened releases of hazardous substances to the environment (see, e.g., ibid., § 107(a), 94 Stat. 2767, 2781 (codified as amended at

42 U.S.C. § 9607(a))); and the Oil Pollution Act of 1990, Pub. L. 101-380, 104 Stat. 486 (codified as amended at 33 U.S.C. §§ 2701-2762), which holds responsible parties liable for discharges or substantial threats of discharges of oil to certain surface waters or adjoining shorelines (see, e.g., ibid., § 1002(a), 104 Stat. 486, 489 (codified at 33 U.S.C. § 2702(a))).

[15] CERCLA's standard of liability is the same as that under the oil and hazardous substance liability provisions of the Federal Water Pollution Control Act (see CERCLA, Pub. L. 96-510, § 101(32), 94 Stat. 2767, 2772 (codified at 42 U.S.C. § 9601(32)); cf. Federal Water Pollution Control Act, Pub. L. 92-500, sec. 2, § 311, 86 Stat. 816, 862-71 (1972) (codified as amended at 33 U.S.C. § 1321)), which the federal courts have interpreted as imposing strict liability (see, e.g., Steuart Transp. Co. v. Allied Towing Corp., 1979, p. 619).

[16] This exclusion also applies to natural gas, natural gas liquids, liquefied natural gas, synthetic gas usable for fuel, and mixtures of natural gas and synthetic gas useable for fuel (CERCLA, Pub. L. 96-510, § 101(14), 94 Stat. 2767, 2769 (codified as amended at 42 U.S.C. § 9601(14))).

[17] The following exploration of the institutional factors of special relevance in this context was prepared largely as part of a much bigger project undertaken while on sabbatical from Southern New Hampshire University in spring 2010.

[18] By "ideology," I mean a coherent set of descriptive and prescriptive beliefs in a given domain of experience that motivate and legitimate individual or group behaviors, and persist over time. By "culture," I mean the set of descriptive and prescriptive beliefs and associated behaviors that together define a distinct way of life for the members of a given social group in a given domain of experience, and are transmitted socially between generations. These definitions fall squarely within the scope of the ordinary social science usage of the corresponding terms, notwithstanding the proliferation of definitions of the ideology and culture concepts in the social sciences (cf. Gerring, 1997; Gerring & Barresi, 2009).

[19] For a brief analysis of the implications for environmental law- and policy-making in the United States of the ideologies and cultures that motivate all three groups, see Barresi (2008). For a much more extensive exploration of the content and environmental implications of American traditional conservatism than is presented here, see Barresi (2011).

[20] Ronald Reagan was a modern conservative, as is George H. W. Bush (compare, e.g., Bush with Gold, 1987, and Reagan, 1983, with Barresi, 2008, pp. 9-10, 13-14). Both Bill Clinton and Barack Obama are modern liberals (compare, e.g., Clinton, 1996, and Obama, 2007, with Barresi, 2008, pp. 10-12).