The Logic and Limits of Environmental Criminal Law in the Global Setting: Brazil and the United States— Comparisons, Contrasts, and Questions in Search of a Robust Theory

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Strict, but arguably unfair and counterproductive, systems of criminal environmental law and enforcement exist in both the United States and Brazil in the twenty-first century. In order to create a sovereignty dividend encompassing the rule of law and evenhanded administrative control in the competitive global setting, both countries should rethink and reform their respective systems of environmental criminal law by seeking answers to several questions of legal philosophy in search of a robust theory.

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Environmental criminal law is the result of a legal evolutionary "process of transformation in response to the public's desire to have a legal system that better reflects the public's environmental protection goals." Criminalizing environmental infractions and seeking appropriate sanctions for serious norm violations of a nation's laws that seek to protect public health and natural resources is a vital role for government to play in a democratic polity. This is the overarching logic of national

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^{1.} Richard J. Lazarus, *Meeting the Demands of Integration in the Evolution of Environmental Law: Reforming Environmental Criminal Law*, 83 GEO. L.J. 2407, 2419 (1995).

environmental criminal law. Yet there is a concomitant overarching limit as well: proper integration of two distinct bodies of law—environmental rules and criminal sanctions—into a balanced mosaic of clear enactment, evenhanded enforcement, and fair construction. In this regard, the legislature, the executive branch, and the judiciary should, "in their respective spheres of responsibility, consider the nature, aims, and limits of criminal law and how they relate to the underlying substantive offenses defined in the environmental statutes."

This Article is divided into three parts. Part I describes the difficulty of accommodating both criminal and environmental law in the environmental crimes programs of the United States over the last two decades and the costs of American nonintegration, which consist of inconsistent, inequitable, and politicized law enforcement. Part II then considers Brazil's experience since the passage of the Environmental Crimes Law (*Lei de Crimes Ambientais*) of 1998 with the active prosecutorial involvement of the Brazilian Ministério Público. Part III, finally, connects the experience of the United States and Brazil in criminally prosecuting environmental crimes. A number of questions of comparison and contrast are raised about fairness, efficacy, and efficiency with some sketchy, tentative answers.

I. ENVIRONMENTAL CRIMINAL LAW IN THE UNITED STATES

American criminal law, writ large, has received some recent theoretical criticism, which is relevant to the shape and functioning of environmental criminal law in the United States. Legal scholar and philosopher, Douglas Husak, in his 2008 book, *Overcriminalization: The Limits of the Criminal Law*, articulates what he calls a theory of "criminal law *minimalism*" to remedy "an injustice of monstrous proportions," wherein the quality of the criminal justice system in the United States has tarnished the "value of [the American] political community." Professor Husak claims that "the injustices associated with overcriminalization affect us all, rich and poor [Americans] alike." As he explains: "The two most distinctive characteristics of both federal and state systems of criminal justice in the United States during the past

^{2.} *Id.* at 2412

^{3.} DOUGLAS HUSAK, OVERCRIMINALIZATION: THE LIMITS OF THE CRIMINAL LAW (2008).

^{4.} *Id.* at vi.

^{5.} Id. at vii.

^{6.} *Id.* at viii.

several years are the dramatic expansion in the substantive criminal law and the extraordinary rise in the use of punishment."

Turning to the specific subject of environmental criminal law in America, the earliest modern federal felony statutes were not enacted until 1980, with additional environmental criminal legislation promulgated by the United States Congress during the 1990s. Before 1980, federal criminal provisions for environmental infractions carried only misdemeanor penalties, "which had little deterrent value and provided little incentive for prosecutors to invest scarce resources in criminal enforcement." Serious implementation issues bedeviled the

7. *Id.* at 3. Other legal theorists have cautioned against overcriminalization. *See, e.g.*, HENRY M. HART, JR. & ALBERT M. SACKS, THE LEGAL PROCESS: BASIC PROBLEMS IN THE MAKING AND APPLICATION OF LAW 35-37 (William N. Eskridge, Jr. & Philip P. Frickey eds., 1994) (warning against knee-jerk criminalization as a social policy tool and pointing out more sophisticated and appropriate mechanisms of social ordering like licensing, civil fines, and statutory contract rights); Robert F. Blomquist, *The Good American Legislator: Some Legal Process Perspectives and Possibilities*, 38 AKRON L. REV. 895, 899-900 (2005) (citing HART & SACKS, *supra, passim*) (discussing potential impacts of new legislation on different actors).

In recent years, there has been an explosion of commentary by individuals at various public policy think tanks on the dangers of overcriminalizing American law. See, e.g., Over-Criminalization of Conduct/Over-Federalization of Criminal Law: Hearing Before the Subcomm. on Crime, Terrorism, & Homeland Sec. of the H. Comm. on the Judiciary, 111th Cong. 20, 32 (2009) (statement of Timothy Lynch, Cato Inst.) (proposing reform of federal criminal law by discarding the maxim that "ignorance of the law is no excuse," restoring the rule of lenity by a statutory command, and "[a]bolish[ing] the doctrine of strict criminal liability"); Exploring the National Criminal Justice Commission Act of 2009: Hearing Before the Subcomm. on Crime & Drugs of the S. Comm. on the Judiciary, 111th Cong. (2009) (statement of Brian W. Walsh, Heritage Found.) (lamenting "[t]he rapid expansion of federal criminal law, beyond almost all prudential and constitutional limits" and pointing out the hodgepodge "of over 4,450 federal criminal offenses" scattered throughout the United States Code and Code of Federal Regulations in a June 11, 2009 congressional testimony); see also Erik Luna, The Overcriminalization Phenomenon, 54 Am. U. L. REV. 703, 708-09 (2004) (describing a "jurisprudential transformation" in American criminal law at the federal and state levels in recent years that "has been exacerbated by the rise of the modern administrative state" with "criminal penalties in areas ranging from environmental protection and securities regulation to product and workplace safety"); Brian W. Walsh & Tiffany M. Joslyn, Without Intent: How Congress Is Eroding the Criminal Intent Requirement in Federal Law, HERITAGE FOUND. (Apr. 2010), http://www. nacdl.org/public.nsf/WhiteCollar/WithoutIntent/\$FILE/WithoutIntentReport.pdf (describing how Congress's criminal lawmaking is badly broken: poor drafting of criminal statutes, inadequate mens rea standards, and overbroad delegations to unaccountable regulators).

^{8.} See Kathleen F. Brickey, Environmental Crime: Law, Policy, Prosecution 4 (2008).

^{9.} *Id. But see* Refuse Act, 33 U.S.C. § 407 (2006). "Although the Act was one of the first to provide criminal penalties for activities that produced pollution, its criminal enforcement scheme was weak and prosecutions were few and far between." BRICKEY, *supra* note 8, at 336 (footnote omitted) (citing Dollar S.S. Co. v. United States, 101 F.2d 638 (9th Cir. 1939); United States v. Alaska S. Packing Co. (*In re* La Merced), 84 F.2d 444 (9th Cir. 1936)). Examples of early federal environmental criminal prosecutions under this statute include *Dollar S.S.*, 101 F.2d 638 (discharging garbage from a ship into Honolulu harbor), and *In re La Merced*, 84 F.2d 444 (discharging oil from a ship into a Seattle, Washington lake). Compare early selective state environmental criminal prosecutions under public nuisance charges: *People v. Corp. of Albany*,

federal enforcement of environmental crimes during the 1980s and 1990s, including a reluctance of prosecutors to prosecute environmental crimes, mistrust between different parts of the federal legal bureaucracy, and chronic case mismanagement. Moreover, beyond enforcement, some scholars contend that the very nature of the environmental crimes statutes passed by Congress are flawed because they fail to balance and fit three key characteristics of environmental law with the theory of criminal law: the "aspirational quality of environmental law," the way that environmental law has evolved over time, and the daunting complexity of environmental law. Yet, cutting the other way, given the practices of a few unscrupulous American businesses to gain a competitive edge by engaging in the illegal dumping of wastes, or violation of other environmental laws, there is "the need for strong deterrent measures to override powerful economic incentives to cut corners."

The United States' federal environmental criminal laws, unfortunately, impose potential liability for conduct without insisting on strict mens rea requirements of knowledge of wrongfulness, which is common in other criminal statutes.¹³ Moreover, as pointed out in a 1991 law review article, the expansion of "public welfare offenses," for environmental and other business regulatory matters, has created the burgeoning risk of legitimate business actors "becom[ing] unavoidably

¹¹ Wend. 539 (N.Y. Sup. Ct. 1834) (prosecuting city for contributing to the Hudson River pollution by dead animal carcasses, mud, and rubbish); *Seacord v. People*, 13 N.E. 194, 201 (Ill. 1887) (charging a hog-rendering business for emission of "noxious odors and gases" leading to surrounding community air pollution). I rely on BRICKEY, *supra* note 8, at 336, where these case examples are discussed. *See* DOUGLAS BRINKLEY, THE WILDERNESS WARRIOR: THEODORE ROOSEVELT AND THE CRUSADE FOR AMERICA 242 (2009) (describing the law-and-order attitude of Roosevelt in 1891 when he coauthored an essay that attacked corporate greed and urged strict criminal penalties for "all poachers and despoilers" of national forest reserves).

^{10.} Richard J. Lazarus, *Assimilating Environmental Protection into Legal Rules and the Problem with Environmental Crime*, 27 Loy. L.A. L. Rev. 867, 875 (1994) (citing Jonathan Turley, George Washington Univ. Nat'l Law Ctr., Preliminary Report on Criminal Environmental Protection by the U.S. Department of Justice 5-6 (Oct. 19, 1992)).

^{11.} See, e.g., Lazarus, supra note 1, at 2423-24; Richard J. Lazarus, The Reality of Environmental Law in the Prosecution of Environmental Crimes: A Reply to the Department of Justice, 83 GEO. L.J. 2539, 2543-44 (1995); Christopher H. Schroeder, Cool Analysis Versus Moral Outrage in the Development of Federal Environmental Criminal Law, 35 WM. & MARY L. REV. 251, 252-53 (1993); cf. Kathleen F. Brickey, Environmental Crime at the Crossroads: The Intersection of Environmental and Criminal Law Theory, 71 Tul. L. Rev. 487, 498-504 (1996) (pointing out that the complexity of environmental law contributes to uncertainty about what is compliant behavior and raises the question of the appropriateness of environmental criminal liability).

^{12.} BRICKEY, *supra* note 8, at 19.

^{13.} Lazarus, *supra* note 10, at 881-83 ("Congress made virtually *all* 'knowing' and some 'negligent' violations of environmental pollution control standards, limitations, permits, and licenses subject to criminal as well as to civil sanctions.").

'entangled' with the criminal law." As observed by Professor John C. Coffee:

If the disposal of toxic wastes, securities fraud, the filling-in of wetlands, the failure to conduct aircraft maintenance, and the causing of workplace injuries become crimes that can be regularly indicted on the basis of negligence or less, society as a whole may be made safer, but a substantial population of the American workforce . . . becomes potentially entangled with the criminal law. Today, most individuals can plan their affairs so as to avoid any realistic risk of coming within a zone where criminal sanctions might apply to their conduct. Few individuals have reason to fear prosecution for murder, robbery, rape, extortion or any of the other traditional common law crimes. Even the more contemporary, white collar crimes—price fixing, bribery, insider trading, etc.—can be easily avoided by those who wish to minimize their risk of criminal liability. At most, these statutes pose problems for individuals who wish to approach the line but who find that no bright line exists. In contrast, modern industrial society inevitably creates toxic wastes that must be disposed of by someone. Similarly, workplace injuries are, to a degree, inevitable. As a result, some individuals must engage in legitimate professional activities that are regulated by criminal sanctions; to this extent, they become unavoidably "entangled" with the criminal law. That is, they cannot plan their affairs so as to be free from the risk that a retrospective evaluation of their conduct, often under the uncertain standard of negligence, will find that they fell short of the legally mandated standard. Ultimately, if the new trend toward greater use of public welfare offenses continues, it will mean a more pervasive use of the criminal sanction, a use that intrudes further into the mainstream of American life and into the everyday life of its citizens than has ever been attempted before.¹⁵

Furthermore, the responsible corporate officer doctrine, first comprehensively enunciated by the United States Supreme Court in *United States v. Dotterweich*, ¹⁶ has exacerbated and further problematized the enforcement of federal environmental criminal law against high-ranking business executives, even when they delegate environmental responsibilities to other inferior officers and are typically minimally involved in environmental compliance issues for their business organizations.¹⁷

Finally, a searing critique has emerged in recent years in the United States, in light of the overbreadth and vagueness of federal environmental criminal statutes, low culpability standards, and enormous prosecutorial

^{14.} John C. Coffee, Jr., *Does "Unlawful" Mean "Criminal"?: Reflections on the Disappearing Tort/Crime Distinction in American Law*, 71 B.U. L. REV. 193, 219-20 (1991).

^{15.} *Id.*

^{16. 320} U.S. 277 (1943).

^{17.} BRICKEY, *supra* note 8, at 68, 78.

discretion, that the modern state of federal prosecution of individuals and businesses for environmental infractions is seriously flawed.¹⁸ This view, however, is countered by a more sanguine perspective that takes comfort in multiple levels of "administrative scrutiny"¹⁹ by enforcement officials at the United States Environmental Protection Agency (EPA) and the United States Department of Justice (DOJ) and a plethora of written guidance policies and memoranda.²⁰

II. ENVIRONMENTAL CRIMINAL LAW IN BRAZIL

As an alternative to lackluster administrative enforcement conducted by Brazilian environmental agencies, "Brazilian public prosecutors became significant actors in the enforcement of environmental laws and regulations in the 1980s." As members of the Ministério Público, or procuracy, which under the 1988 Federal Constitution is "an independent branch of government empowered to defend environmental interests and other diffuse and collective interests ... as well as carry out its more traditional prosecutorial activities in the area of criminal law," the Brazilian procuracy at the state and federal levels is empowered by law to exercise independent discretion in bringing both criminal and civil actions for environmental

^{18.} See, e.g., Lazarus, supra note 1, at 2487-88 (citing Dotterweich, 320 U.S. at 285; John C. Coffee, Jr., Paradigms Lost: The Blurring of the Criminal and Civil Law Models—And What Can Be Done About It, 101 YALE L.J. 1875, 1889 (1992); Coffee, supra note 14, at 219-20; Susan W. Hedman, Expressive Functions of Criminal Sanctions in Environmental Law, 59 GEO. WASH. L. REV. 889 (1991)) (arguing that the "Al Capone" model, wherein "prosecutors are blindly trusted to exploit the full sweep of the criminal law only against those who are truly culpable and not against the morally innocent," is flawed mainly because of "[t]he demoralization problem," because "many individuals must live in fear of possible criminal prosecution and depend on governmental goodwill to maintain their freedom" in light of the prospect that "many legitimate, unavoidable activities are among those subject to possible prosecution").

^{19.} See, e.g., BRICKEY, supra note 8, at 359; Kathleen F. Brickey, The Rhetoric of Environmental Crime: Culpability, Discretion, and Structural Reform, 84 IOWA L. REV. 115, 126-31 (1998); Kathleen F. Brickey, Wetlands Reform and the Criminal Enforcement Record: A Cautionary Tale, 76 WASH. U. L.Q. 71, 76-84 (1998).

^{20.} See, e.g., Memorandum from Assistant Adm'r James Strock, Office of Enforcement and Compliance Assurance, U.S. EPA, to the Reg'l Adm'rs (Dec. 3, 1990), reviewed in BRICKEY, supra note 8, at 341; Memorandum from Earl E. Devaney, Dir. Office of Criminal Enforcement, U.S. EPA, The Exercise of Investigative Discretion, to All EPA Employees Working in or in Support of the Criminal Enforcement Program (1994), reviewed in BRICKEY, supra note 8, at 341-46; U.S. DEP'T OF JUSTICE, FACTORS IN DECISIONS ON CRIMINAL PROSECUTIONS FOR ENVIRONMENTAL VIOLATIONS (1991), available at http://www.justice.gov/enrd/3058.htm; U.S. DEP'T OF JUSTICE, UNITED STATES ATTORNEYS MANUAL: PRINCIPLES OF FEDERAL PROSECUTION §§ 9-27.001, .110, .230, .300 (1980), available at http://www.justice.gov/usao/eousa/foia_reading_room/usam/title9/27mcrm.htm.

^{21.} Lesley K. McAllister, Making Law Matter: Environmental Protection & Legal Institutions in Brazil 4 (2008).

^{22.} *Id.* (internal quotation marks omitted).

infractions.²³ "While prosecutors first became involved in environmental enforcement in the state of São Paulo in the 1980s, prosecutorial activity diffused to other states in the 1990s and became the dominant mode of environmental enforcement throughout" Brazil during that decade.²⁴ The following is an illustration of this trend:

In the Amazonian state of Pará, lawsuits brought by federal and state prosecutors halted the construction of an interstate shipping canal and a major hydroelectric plant, both of which were priority infrastructure projects for the state government. Between 1998 and 2002, federal prosecutors in Pará also filed a series of criminal and civil suits against loggers as well as federal environmental agency officials that exposed corruption and fraud in the harvest and sale of mahogany. The caseload of federal prosecutors in Pará is indicative of the priority placed on environmental prosecution: in 2001, over half of civil cases and about one-third of criminal cases concerned environmental harm.²⁵

Brazil moved in the direction of prosecutorial enforcement of its environmental laws out of frustration, as a developing country, in failing to achieve goals of environmental protection through agency regulation.²⁶

23. *Id.* at 5.

24. *Id.*

25. Id

26. *Id.* at 1-2. According to a recent digest of Brazilian environmental law:

Liability, from an environmental law standpoint, and as established in article 225 of the Federal Constitution, refers to three independent areas: civil, criminal and administrative liability.

According to Federal Law 6,938/81, strict civil liability for environmental damages prevails in Brazil. It is sufficient that the damage exists and that there is a chain of causation between the damage and the polluter or degradation source for the obligation to compensate to exist.

The tendency is to apply the entire risk theory to strict liability, whereupon the classic exclusions of liability clauses are not applied to environmental civil liability. That is to say, the lawfulness of the practice does not exempt the agent from liability.

Also, civil liability is joint and several in environmental law. The liability for the recovery of environmental damages is imputed to all those persons who, in any way, have contributed to the occurrence either directly or indirectly. Federal Law 6,938/81 defines a polluter as any private or public individual or legal entity that is directly or indirectly responsible for an activity that causes environmental degradation.

There is no definition in law for the concept of environmental damage, although the concepts of environmental degradation and pollution are defined

Criminal liability is established by Federal Law 9,605/98, which prescribes the crimes and respective sanctions. Mention should be made to the fact that the Federal Government is exclusively responsible for legislating criminal law matters. Penalties may be applied to individuals and to legal entities alike. The criminal liability of legal entities does not exclude the liability of individual offenders, co-offenders or accessories to the fact, covering all those who have contributed, either through acts or by omissions, to the crime, be they officers, administrators, members of the board of directors or technical bodies, auditors, managers, employees or agents.

For the criminal liability of natural persons the theory of the traditional criminal offence is applied, whereas in a concrete case, it is necessary to ascertain the 'dolus'

One American scholar has praised Brazil's turn toward environmental prosecution by arguing that her book

tells an atypical story about environmental law in a developing country. It tells the story of how the involvement of legal actors in environmental protection in Brazil made environmental law more effective. It finds that the involvement of legal institutions—particularly prosecutors and courts—helped develop a robust, effective environmental regulatory system in Brazil. Legal institutions brought a degree of legal fidelity and sanctioning power that environmental regulatory agencies lacked, and prosecution of environmental cases worked to dispel the longstanding notion of impunity for environmental harm.²⁷

and 'culpa' of the agent. With regard to legal entities, though with significant resistance from various authors, it has been understood that the principles of strict criminal liability apply, to the extent that it would be impossible to ascertain the existence of 'dolus' or 'culpa' in an act or omission committed by a legal entity.

Administrative liability results from the violation of administrative rules, submitting the wrongdoer to sanctions of an administrative nature, such as admonishment, a simple fine, interdiction of the activity, suspension of benefits and others. Administrative liability is based on the capacity of public legal entities to impose conduct on citizens. Administrative violations and their respective sanctions may be regulated by federal, state or municipal law, in accordance with the exercise of the power of each of these entities

Eduardo Damião Gonçalves & Taís Cristina Tesser, *Brazil, in* ENVIRONMENT IN 30 JURISDICTIONS WORLDWIDE 23, 25-26 (Carlos de Miguel Perales ed., 2009), http://www.bkbg.com.br/LinkClick.aspx?fileticket=UZDhjHj53dQ%3D&tabid=121.

MCALLISTER, supra note 21, at 2 (emphasis added). For general discussions of various aspects of Brazilian environmental law and enforcement, see Antonio Herman Benjamín, Cláudia Lima Marques & Catherine Tinker, The Water Giant Awakes: An Overview of Water Law in Brazil, 83 Tex. L. Rev. 2185, 2189 (2005), which provides a "panoramic view of the legal treatment of waters in Brazil beginning with the earliest laws of the Portuguese colonial days and continuing through modern water legislation and regulation." See Nicholas A. Robinson, Why Environmental Legal Developments in Brazil & China Matter: Comparing Environmental Law in Two of Earth's Largest Nations, in International Environmental Law Coursebook 313 (2006) (describing Brazil's rich and diverse environment, the relatively recent emergence of Brazilian environmental law under a democratic civil law system, the role of the Ministério Público under recent Brazilian statutory law, and the environmental challenges facing Brazil); Colin Crawford & Guilherme Pignataro, The Insistent (and Unrelenting) Challenges of Protecting Biodiversity in Brazil: Finding "The Law That Sticks", 39 U. MIAMI INTER-AM. L. REV. 1 (2007) (discussing the details of Brazil's amazing biodiversity and potential legal approaches to protecting this ecological heritage); Humberto Dalla Bernardina de Pinho, The Role of the Department of Public Prosecutions in Protecting the Environment Under Brazilian Law: The Case of "Favelas" in the City of Rio de Janeiro, 24 GA. St. U. L. REV. 735 (2008) (discussing the evolution of Brazilian environmental law, the role of public prosecutions in protecting the right to a healthy environment in the overcrowded slums of Rio, and general principles of Brazilian environmental criminal enforcement); Edesio Fernandes, Law, Politics and Environmental Protection in Brazil, 4 J. ENVTL. L. 41 (1992) (describing general historical background of the law and politics of environmental protection in Brazil); Janelle E. Kellman, The Brazilian Legal Tradition and Environmental Protection: Friend or Foe, 25 HASTINGS INT'L & COMP. L. REV. 145 (2002) (explaining tensions between Brazilian law and effective environmental protection); Cristina Schwansee Romano, Land and Resource Management: Brazilian Government Policies Towards the Amazon Rain Forest: From a Developmental Ideology to an Environmental But one wonders whether a full bore national strategy that emphasizes environmental criminal enforcement will meet Brazil's interests in the second decade of the twenty-first century as Brazil seeks to accelerate and deepen its global trading and global business connections.²⁸ Could it be that the blunt and unnuanced legal tools of environmental criminalization and environmental prosecution will need to be reformed and refined in the coming years?²⁹

Consciousness?, 1998 Y.B. COLO. J. INT'L ENVTL. L. & POL'Y 65, 86 (arguing that during the 1990s Brazil was not adequately enforcing its environmental laws that seek to protect the Amazon and was "oblivious to a range of new and insidious threats from timber and agricultural interests"); Al Zachary Lazarus, Comment and Case Note, A War Worth Fighting: The Ongoing Battle To Save the Brazilian Amazon, 9 L. & Bus. Rev. Am. 399, 401-09 (2003) (discussing seven major causes of ongoing twenty-first-century deforestation in the Brazilian Amazon: cattle ranching, pharmaceutical firms seeking the discovery of new drugs, development schemes, domestic energy needs, timber harvesting, mining, and "Brazil's [i]deology of [d]evelopmentalism"); Adriana Lieders, Note, A New Chapter in Brazil's Oil Industry: Opening the Market While Protecting the Environment, 13 GEO. INT'L ENVIL. L. REV. 781 (2001) (discussing an overview of oil exploration and environmental compliance in Brazil and urging greater involvement of multinational corporate investment). For general environmental law issues in Latin America, see Lila Katz de Barrera-Hernandez & Alastair R. Lucas, Environmental Law in Latin America and the Caribbean: Overview and Assessment, 12 GEO. INT'L ENVIL. L. REV. 207 (1999) (reviewing numerous Latin American environmental laws from multiple nations including Argentina, Brazil, Chile, Mexico, and Peru); Guillermo Malm Green, Environmental Legislation in Argentina, 20 INT'L L. PRACTICUM 159, 159 (2007) ("Environmental protection started developing as a modern concept in 1993 with the enactment of the Hazardous Waste Law."); John R. Nolon, Fusing Economic and Environmental Policy: The Need for Framework Laws in the United States and Argentina, 13 PACE ENVTL. L. REV. 685 (1996) (urging more coherent and efficient environmental laws in Argentina and the United States); Felipe Páez, Environmental Framework Laws in Latin America, 13 PACE ENVIL. L. REV. 625, 625 (1996) (examining "the framework [environmental] laws adopted by Brazil, Chile, Mexico, and Venezuela" in the late twentieth-century); cf. Carolina Pett G. Goncalves & Alexandre L. Ribeiro do Valle, Brazilian Laws and Climate Changes, 39 INT'L L. NEWS, Fall 2010, at 26 (discussing Brazilian laws potentially impacting climate change); Paulo Prada, For Brazil, It's Finally Tomorrow: How the Country of the Future Has at Last Made It—And What Remains To Be Done, WALL St. J., Mar. 29, 2010, at R1 (detailing a journalistic overview of Brazil's global role and domestic challenges).

28. Cf. Martin N. Baily, Matthew J. Slaughter & Laura D'Andrea Tyson, The Global Jobs Competition Heats Up, WALL St. J., July 1, 2010, at A19 (discussing a new study wherein corporate leaders say the U.S. business environment for multinational companies is losing its edge when compared to countries like China, India, and Brazil, recommending "farsighted policy initiatives" as essential for long-term national economic performance); Brazil's Foreign-Aid Programme: Speak Softly and Carry a Blank Cheque, ECONOMIST, July 17, 2010, at 42 (describing how Brazil, in search of "soft-power influence," is turning itself into one of the world's biggest aid donors).

29. See Henri Acselrad, Grassroots Reframing of Environmental Struggles in Brazil, in Environmental Justice in Latin America: Problems, Promise, and Practice 75, 93 (David V. Carruthers ed., 2008). As noted by the author:

The struggles for environmental justice that occur in Brazil may be grouped as follows: struggles in defense of rights to culturally specific environments, such as those of traditional communities at the front-line of expanding capitalist and market activities; struggles in defense of rights to equitable environmental protection against market-led socio-territorial segregation and environmental inequality; struggles in defense of rights to equitable access to environmental resources and against the

III. THE NORMATIVE FUNCTIONS OF STATE REGULATION OF ENVIRONMENTAL PROTECTION IN THE ERA OF SPREADING GLOBALIZATION

Both the United States and Brazil should be cognizant of maintaining and enhancing the key functions of a state in "fulfill[ing] their citizens' aspirations for inclusion and development" in the competitive global milieu of the twenty-first century. While both the United States and Brazil are leading free market countries, they should both carefully consider the potential impacts of criminal environmental law and enforcement on attracting international business investment and economic growth. Of ten critical functions of a modern state,³¹ two are

concentration of fertile land, water resources and safe ground in the hands of powerful market interests; and also struggles in defense of the rights of future populations. How do the movement's representatives make a logical connection between present struggles and future rights? By proposing to freeze the mechanisms that shift the environmental costs of development onto the poorest sectors of society. What these movements are trying to show is that the overall pressure on the environment will continue so long as environmental evils can be transferred to the poor.

Id.; GLOBAL ISSUES IN ENVIRONMENTAL LAW 193 n.4 (Stephen C.. McCaffrey & Rachael E. Salcido eds., 2009):

The law in the United States has used criminal provisions in environmental law sparingly, although increasingly their utility is being recognized. Another interesting approach to biodiversity conservation in Brazil is the designation of certain environmental crimes carrying severe fines and potential for imprisonment, including provisions for "crimes against animals" and "crimes against plants." (How does the very concept of a "crime against plants" in Brazil differ from the way U.S. laws treat destruction of wildlife?)

A section of Brazilian law delineates "crimes against environmental authorities" and includes punishment for those issuing false or misleading information to authorities, including withholding information. Further, public officials who issue licenses in violation of environmental laws [in Brazil] face imprisonment for up to three years.

Id.; see also Crawford & Pignataro, supra note 27; John Charles Kunich, Fiddling Around While the Hotspots Burn Out, 14 GEO. INT'L ENVIL. L. REV. 179, 220 (2001) (noting that provisions of Brazilian environmental criminal law "begin to address what has been recognized as a major problem in Brazil where much of the responsibility for enforcement lies with state and local authorities and powerful interests are in opposition" with many public officials in fear for their lives).

- 30. ASHRAF GHANI & CLARE LOCKHART, FIXING FAILED STATES: A FRAMEWORK FOR REBUILDING A FRACTURED WORLD 124 (2008).
- 31. *Id.* at 124-63 (discussing ten critical functions of every nation state). These ten functions are (1) rule of law, (2) a monopoly on the legitimate means of violence, (3) administrative control, (4) sound management of public finances, (5) investments in human capital, (6) creation of citizenship rights through social policy, (7) provisions of infrastructure services, (8) formation of a market, (9) management of public assets, and (10) effective public borrowing. *Id.* While the recent worldwide economic crisis has raised the specter of some deficiencies in advanced nations, like the United States, Japan, and some European countries, in achieving basic economic functions, such as sound management of public finances and effective public borrowing, these issues are beyond the scope of this Article.

pertinent to the matter of criminal environmental law and enforcement: a robust, clear, and fair rule of law,³² and a predictable and functional administrative control of key economic sectors of the nation.³³

First, "[t]he rule of law is a 'glue' that binds all aspects of the state, the economy, and society."³⁴ In this regard, "[e]ach of the state's functions is defined by a specific set of rules that creates the governance arrangements—decision rights, processes, accountabilities, freedoms, and duties—for that function. Rules provide both resources that enable innovation to occur and constraints that limit behavior."³⁵ The rule of law in a country requires system coherence. Thus,

[t]he test of coherence . . . is . . . how laws relate to one another as a body of rules and the extent to which alignment of the system is achieved. When new laws are promulgated, they must clearly state which laws are repealed, where contradictions exist, which laws have precedence, and how conflicts can be resolved.³⁶

Without a finely-tuned rule of law system—effectively coordinating legislative, executive, and judicial branches of law—"the legal system can... become a quagmire of contradictory rules and processes." Both Brazil and the United States need to ponder and address whether their respective existing criminal environmental legal systems meet the following standard:

When rule of law takes hold, it creates a reinforcing loop of stability, predictability, trust, and empowerment. First, rule of law stabilizes government and holds it accountable. Second, it sets a predictable environment in which other players can make plans over the long term. Third, it creates confidence in the public, which trusts that, when change is necessary, it will take place within a framework of continuity. Finally, it empowers those in civil society and the economy to take initiatives, form associations, create companies, and work within the confines of the state more broadly. It changes the nature of politics from a divisive to a collective endeavor 38

Globalization of the economy requires a process of co-production of rules involving the state, firms, and citizens to produce rules that are compatible across boundaries. When the life chances of individuals depend on their place within global corporate chains, the practices of these corporations, ranging from wages to environmental issues, become global, not national, concerns.

^{32.} *Id.* at 125-28.

^{33.} *Id.* at 131-35.

^{34.} Id. at 125.

^{35.} *Id.*

^{36.} Id. at 126.

^{37.} *Id*.

^{38.} *Id.* at 126-27. Indeed, the rule of law in a globalized economy is crucial:

Second, and related to the state function of the rule of law, is the function of administrative control. When a nation exhibits "dysfunctional administration," adverse consequences arise and a "sovereignty gap" emerges.40 "Unpredictable rules," whether they be "idiosyncratically interpreted" or arbitrarily "applied" may "generate a climate of distrust and contribute to a crisis in state legitimacy."41 Effective administrative control in the modern globalized economy requires "[c]ollaborative governance." Collaborative governing arrangements "require[] very different skills from previous types of administration, and a fundamental shift by bureaucracy from managing microrules to directing complex networks of knowledge, people, and resources."43 Furthermore, "accountabilities must be configured differently—overseeing networks is quite unlike administering rules."44 Electronic governance, or "E-governance," in administrative control demands that nations undergo a "revolution in information technology and ... human capital [with] far-reaching implications for organizing administration in terms of efficiency, transparency, and accountability." Both the United States' and Brazil's administrative control over criminal environmental enforcement at the national level raise important questions of whether the systems are optimally efficient, transparent, and accountable.

I suggest that both Brazil and the United States could profit in enhancing their respective rule of law and administrative control functions of sovereignty—"build[ing] trust... and thereby produc[ing] a 'sovereignty dividend'"⁴⁶ by undertaking a thorough, top-level review and reform of national environmental criminal law and enforcement in their respective countries. A series of key questions—focused on achieving a coherent national philosophy of criminal environmental law in a globalized setting—as part of a national review and assessment would include the following items:

1. Are criminal sanctions for environmental infractions balanced with less draconian law and policy tools like civil fines, administrative

^{39.} *Id.* at 133.

^{40.} *Id.* at 163.

^{41.} *Id.* at 133.

^{42.} *Id.* at 134.

^{43.} *Id.*

^{44.} *Id.*

^{45.} *Id.*

^{46.} *Id.* at 163.

- penalties, pollution prevention incentives, and technological assistance? $^{\!\!\!\!^{47}}$
- 2. Has criminal environmental law and enforcement become overcriminalized because either substantive crimes or criminal penalties have become excessive?
- 3. In cases where individuals or organizations deserve criminal punishment for infractions of important national environmental or natural resource laws, will punishment "bring about good consequences, such as deterrence of crime or the reform or incapacitation" of bad actors "with insufficient concern for the interest of others for which one is obligated to act with concern[,]" in a particularized, concrete case?
- 4. What should the measurement of negative desert for environmental crime consist of?⁵⁰
- 5. How does the culpability of an environmental crime compare with culpability of other "white collar" crimes like securities fraud, embezzlement, bribery, extortion, or racketeering?⁵¹

Moreover, Bruce Pasfield, the former head of the United States Department of Justice's Environmental Crimes Section, and now in private practice, has raised similar concerns. Pasfield observes:

There are pockets of over criminalization that are personality driven (over zealous [sic] prosecutors or agents) and several [United States] statutes that have too low a threshold for criminal prosecution (the Clean Water Act negligence provision which in some circuits has been interpreted as mere simple negligence. The Clean Air Act with a similar negligence provision that has yet to be interpreted. The Rivers and Harbors Act and the Migratory Bird Treaty Act that have strict liability provisions that can result in criminal penalties). The combination of a too low a threshold and too aggressive an agent or prosecutor can result in over criminalization in specific instances. In general though, the system is working as designed and deterring the most egregious conduct.

^{47.} See, e.g., Paying To Save Trees: Last Gasp for the Forest, ECONOMIST, Sept. 26, 2009, at 93 (discussing the Juma Sustainable Development Reserve in the southeastern corner of the Brazilian state of Amazonas where local people are paid by the government, subject to regular inspections, to prevent trees from being cut down).

^{48.} Larry Alexander, *The Philosophy of Criminal Law, in* The Oxford Handbook of Jurisprudence and Philosophy of Law 815, 816 (Jules Coleman & Scott Shapiro eds., 2002). This question assumes a "weak retributivist" approach, because of the imperative of maintaining an attractive business environment in a globalized world of commerce, instead of a "strong retributivist" approach under which "negative desert by itself provides a justification for punishment, and that punishment of wrongdoers to the extent of their negative desert is permissible in the absence of any predicted good consequences." *Id.*

^{49.} *Id.* at 815.

^{50.} See id. at 817-19.

^{51.} Under American environmental criminal law, some judicial opinions have, according to Walter D. James, a former environmental prosecutor and expert in American environmental law, construed environmental statutes as "'public welfare' statutes requiring no *mens rea* or a lesser *mens rea* for each element of the crime, even though a 'knowing' *mens rea* is statutorily required to impose criminal culpability." E-mail from Walter D. James, Attorney-at-Law, to author (June 7, 2010, 10:54 CDT) (on file with author). "Under the environmental laws [in the United States], apparently innocent conduct can and is criminalized." *Id.* (citing Liparota v. United States, 471 U.S. 419 (1985)).

- 6. Are unintended, non-reckless violations of environmental norms worth the social costs of punishing a non-culpable defendant?⁵²
- 7. Do the substantial social costs of detecting, convicting, and punishing environmental norm violators make sense when compared to the social benefits of imposing negative deserts on these violators?⁵³
- 8. How should individuation of environmental crimes be defined?⁵⁴ By discrete acts constituting spills, leaks, discharges, or emissions? By the number of hours or days of violations?
- 9. What should be the nature and extent of justification in environmental criminal law? "Is (the absence of) justification just part of the definition of a[n] [environmental] crime, or are justifications [in environmental criminal law] best conceptualized as distinct from the crimes they override?" 55

E-mail from Bruce Pasfield, Attorney-at-Law, to author (June 8, 2010, 10:44 CDT) (on file with author). Pasfield goes on to opine:

I think there is a great deal of confusion both by the [United States Supreme] Court, [the United States Department of Justice] and the regulatory community over the "knowing" standard in most of the [United States] environmental statutes. Congress did not define this term when they enacted these statutes preferring instead to allow courts to interpret what the term means. Predictably, judges have been all over the map in terms of its application. The most confusing piece of the interpretation is the application of the public welfare doctrine. Courts have mostly invoked this doctrine to claim that the knowing standard in the environmental statutes should somehow be [a] lesser intent standard. In reality, there is no need to rely on the public welfare doctrine to establish that knowing has a lesser standard tha[n] other intent standards. For example, the term "willfully" which is used in many criminal statutes outside the environmental crimes arena, has always been held to have a higher intent standard tha[n] knowingly. The confusion comes in when the prosecutor invokes concepts such as the public welfare doctrine or the responsible corporate officer doctrine to argue that an intent standard less than "knowing" should be applied. I said before that the area of simple negligence is one where an aggressive prosecutor may go too far to criminalize conduct. I'd add the concepts of public welfare doctrine and responsible corporate officers as legal concepts, if not applied correctly, can lead to over-criminalization as well.

Id.

- 52. Alexander, supra note 48, at 819.
- 53. *Id.* at 819-20; *see, e.g.*, Geraldine Szott Moohr, *Defining Overcriminalization Through Cost-Benefit Analysis: The Example of Criminal Copyright Laws*, 54 Am. U. L. Rev. 783, 808 (2005). According to Professor Moohr:

Widespread criminalization exacerbates almost every critical issue in the jurisprudence of white collar crime. The issues affected include federalism and the federal role in criminal law, prosecutorial discretion and the power of prosecutors to obtain expansive interpretations of existing criminal laws, vagueness concerns and the preference of Congress to enact open-ended criminal laws, and the use of civil standards in evaluating criminal conduct. Yet it is difficult to tell when Congress is relying too much on criminal law to control conduct. Using a uniform definition of the term "overcriminalization" based on cost-benefit analysis would facilitate discussion not only of overcriminalization but also of its consequences.

Id. at 808.

- 54. Alexander, *supra* note 48, at 841-42.
- 55. Id. at 842.

- 10. Are most environmental crimes, at their essence, norm violations by individuals or by enterprises or both?⁵⁶
- 11. In determining the appropriate and socially optimal punishments for individuals who are convicted of environmental crimes, what are the factors that should be considered in assessing punishments?
- 12. In determining the appropriate and socially optimal punishments for enterprises that are convicted of environmental crimes, what are the factors that should be considered in assessing punishments?
- 13. What type of punishments are appropriate for environmental crimes that are worthy of negative sanction? Shaming punishments? Monetary penalties? Forfeiture of property? Incarceration? Community service? Supplemental environmental projects that repair or enhance the environment or natural resources damaged by the environmental crime? Supplemental environmental projects that repair or enhance other environments or natural resources not damaged by the environmental crime? Debarment from bidding on government contracts? Corporate governance restructuring or monitoring by government?
- 14. What review and coordinating mechanisms should be instituted in assessing the appropriateness and quality of prosecutorial decisions to charge (or not to charge) environmental crimes?⁵⁷ Should investigative procedures of prosecutors be subject to greater public scrutiny?⁵⁸
- 15. How should national history and culture drive a nation's system of environmental criminal law and the enforcement of these laws?⁵⁹

^{56.} See ENVIRONMENTAL CRIME: A READER 1-265, 278-93, 392-98, 608-37 (Rob White ed., 2009) (compiling a fascinating assortment of essays on conceptualizing environmental crimes, corporate environmental crime and social inequality, environmental victimology, environmental crime in a global context, environmental genocide, and corporate self-policing and the environment among other topics); cf. Andy Pasztor & Daniel Michaels, Prosecutions Vex Aviation Industry, WALL St. J., Mar. 21, 2011, at B2 ("International air-safety experts are revving up a campaign against criminal treatment of airline accidents after a French magistrate threatened to prosecute Airbus and Air France over a fatal 2009 crash. The magistrate's move put both companies, and potentially some of their senior executives, under formal criminal investigation for involuntary manslaughter in the crash of an Airbus A330 operated by Air France as it flew through a violent storm en route to Paris from Rio de Janeiro, killing all 228 people aboard.").

^{57.} See, e.g., Michael G. Faure & Hao Zhang, Environmental Criminal Law in China: A Critical Analysis, 41 ENVTL. L. REP. 10,024 (2011) (explaining environmental criminal law in China as the result of a hodgepodge of norms found in multiple legal sources that are not precise or clear, which creates gaps and weaknesses and requiring a real need for reform).

^{58.} *Cf.* Editorial, *Obama's Political Oil Fund*, WALL ST. J., June 15, 2010, at A16 ("The BP oil spill is already a calamity for the Gulf Coast ecosystem and economy, but now that Washington is looking to deflect all political blame it could also became [sic] a disaster for the rule of law" because of the Attorney General's public announcement of a "criminal probe.").

^{59.} See, for example, Stephan C. Thaman, *Russia, in* The Handbook of Comparative Criminal Law 414, 446 (Kevin Jon Heller & Markus D. Dubber eds., 2011), describing seventeen Russian "ecological" crimes involving three main categories:

IV. CONCLUSION

In order to create a sovereignty dividend encompassing the rule of law and fair administrative control in the global setting of economic competition between nations, both the United States and Brazil should rethink and reform national environmental criminal law and enforcement within their respective countries. To do so, fifteen questions of legal philosophy need to be answered.

Id. Importantly:

The need for strong environmental protection laws in Russia stems from an acute awareness among the population and the legislature of the devastating effects of Soviet industrialization, which included not only the Chernobyl disaster in 1986 but a similar nuclear leak in Chelyabinsk region in 1957, massive oil spills in the Russian north, and the disappearance of the Aral Sea in Soviet central Asia, just to name a few. As of 1995, 40 percent of all Russian inland waters were polluted.

⁽¹⁾ violations of rules dealing with improper handling of dangerous substances, such as biological agents, toxins, and radioactive materials; (2) acts infringing on specific environmental resources: water, atmosphere, soil, forest, subsoil, continental shelf, and specially protected natural territories and objects; and (3) acts infringing on flora and fauna, biological diversity, and preservation of the biosphere.